

# Report on the International Coastal Cleanup

2013

Hong Kong



**GREEN COUNCIL**  
**環保促進會**

[www.greencouncil.org](http://www.greencouncil.org)

December 2013

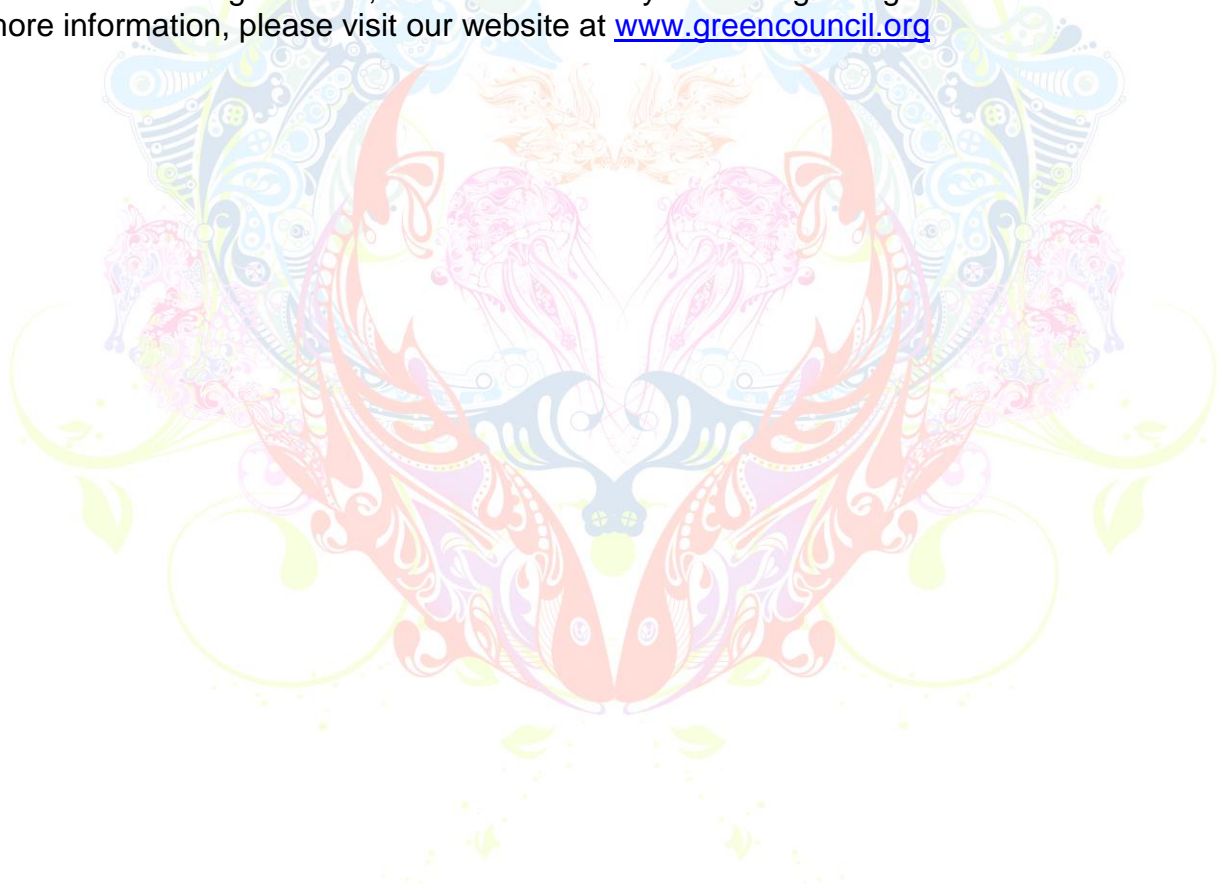


## Preface

### Green Council



Green Council is a non-profit organisation committed to promoting and assisting Hong Kong's commercial sector to include environmental practices within their production and management processes. It believes that 'Conservation begins with education' and provides its members with training and education on: green procurement; sustainable management concepts and practices; re-use, reduction and recycling; as well as renewable energy alternatives. It is funded by membership fees, public donations and sponsorships from corporations and individuals who share Green Council's vision. Since its inception in 2000, Green Council has launched a number of environmental programmes, including Hong Kong Green Label Scheme, Green Carnival, Hong Kong Green Purchasing Charter, and most recently the Hong Kong Green Awards. For more information, please visit our website at [www.greencouncil.org](http://www.greencouncil.org)



## Report Summary



Initiated by the Ocean Conservancy (OC) in 1986, the International Coastal Cleanup (ICC) engages the public in removing trash and debris from the world's beaches and waterways and recording the types of debris found. Data from cleanups is recorded through a network of local coordinators around the world and collated by OC, with the aim of identifying the major causes of marine debris.

This global volunteer project brings a large number of people from all walks of life together. Through their involvement, participants develop a sense of awareness of and responsibility for the marine pollution problem, and are encouraged to change behavioural patterns that cause pollution.

A total of 2,852 volunteers participated in the Hong Kong ICC 2013, collecting over 5353.39 kg of debris during 70 separate cleanups (among which 26 of them were held in gazetted beaches managed by the Leisure and Cultural Services Department) at 35 sites from 21 September to 9 November 2013.

The most commonly collected items this year were plastic foam (fragments), while broken glasses, and plastic bags were the second and third most abundant items. Plastic bottle caps, Cigarettes/cigarette filters, ranked fourth and fifth among all litters, had continued its robust contribution to the marine environment. By and large, all of the top ten types of debris originate from irresponsible shoreline and recreational activities.

Marine debris is an anthropogenic problem, and one that can only be solved by strong action to prevent it at the source. We hope that this report will contribute towards efforts to make Hong Kong's waters cleaner in the future.

**TABLE OF CONTENTS**

1 LIST OF APPENDICES..... 1

2 ACKNOWLEDGEMENTS.....2

3 INTRODUCTION..... 1

4 CLEANUPS IN HONG KONG ..... 1

    4.1 Cleanup Results..... 4

        4.1.1 The marine debris problem in Hong Kong..... 4

        4.1.2 Number and location of cleanups..... 5

        4.1.3 Top ten types of debris found..... 7

5 EVALUATION..... 12

    5.1 General Findings..... 12

6 RECOMMENDATIONS ..... 16

    6.1 For HKSARG Departments ..... 16

    6.2 For Cleanup Organisers ..... 17

7 CONCLUSION ..... 18

8 SOME HIGHLIGHTS FROM THE 2013 CLEANUP..... 19

9 TEN THINGS YOU CAN DO TO STOP MARINE DEBRIS ..... 20

APPENDIX I ..... 21

APPENDIX II ..... 22

APPENDIX III ..... 23

APPENDIX IV..... 25

## 1 List of Appendix

- I Summary of preparation and follow-up activities for ICC 2013
- II ICC data cards (English versions)
- III How to organise a cleanup
- IV Media coverage of the ICC 2013



## 2 Acknowledgements

### Special Thanks To:

#### Media Support

- Weekend Weekly

#### Gold Sponsor

- Konica Minolta Business Solutions (HK) Limited

#### Silver Sponsors

- Hong Kong International Airport
- Melco International Development Ltd.

#### Bronze Sponsors

- Shun Tak - China Travel Ship Management Limited (TurboJet)
- Power Assets Holdings Limited

#### Other Sponsors

- BANNERSHOP
- Coca Cola China Limited
- GreenSHOP
- Innovative Gift & Premium (HK) Limited

#### Acknowledgements

- Hong Kong Housing Society
- Lung Cheung Plaza
- Stanley Plaza
- Urban Group
- The Link Management Limited

Green Council is also grateful for the supports from different governmental departments and organizations, namely Agriculture, Fisheries and Conservation Department, Environmental Protection Department, Food and Environmental Hygiene Department (particularly Outlying Islands, Sai Kung, Southern, Tai Po, Shatin, Tsuen Wan, Kwun Tong and Tuen Mun districts), Leisure and Cultural Services Department (particularly Islands, Sai Kung, Southern, Tsuen Wan and Tuen Mun districts) and WWF – Hong Kong also.

Lastly and most importantly, Green Council sincerely thank to all the Cleanup Organisers and volunteers for their efforts and enthusiasm in participating in the ICC 2013. We hope to see you all again in the ICC 2014.

### 3 Introduction

Initiated by Ocean Conservancy (OC)<sup>1</sup>, the International Coastal Cleanup<sup>2</sup> (ICC) engages people to remove trash and debris from the world's beaches and waterways, identify the sources of debris, and change behavioural patterns that contribute to pollution. In addition to collecting and removing debris, volunteers record the types of debris they pick up. OC then compiles the data from all international ICC Coordinators and analyse it to identify the major sources of debris and activities that contribute to it. The final information is then used to educate the public, business, industry and government authorities about the problem, on the basis that understanding the problem is the key to finding long-lasting solutions.

As the official coordinator of ICC 2013 in Hong Kong and Macau, Green Council (GC) and its partners played an active role in this global project. The event brought together thousands of volunteers who kindly donated their time and energy to pick up, count and record large quantities of debris. Through their involvement in the campaign, volunteers witnessed the impact that modern lifestyles have on the environment.

Marine debris is a serious and deteriorating problem in marine and coastal environments worldwide, and Hong Kong's waters and coasts have not escaped this problem. *"Every year, countless marine mammals, sea turtles, seabirds, and other animals are sickened, injured, or killed because of dangerous items we allow into the sea"* said by Ocean Conservancy<sup>3</sup>. In accordance to the International Coastal Cleanup Event in 2011<sup>4</sup>, there was a total of 4 amphibians, 49 birds, 4 corals/sponges, 46 fish, 97 invertebrates, 27 mammals, and 18 reptiles found be entangled in debris worldwide, from floating plastic bags to empty beverages bottles to cast-off fishing line.

**Table 1: Marine Debris collected in the ICC 2012 by 97 countries<sup>5</sup>  
(in alphabetical order)**

Country or Location	Total		
	People	Pounds	Miles
Argentina	133	4,650	2.5
Aruba	7	22	28.0
Australia	58	216	2.0
Austria	35	33	-
Azerbaijan	157	2,669	5.0
Bahamas	998	10,110	17.2
Bahrain	74	595	0.1
Bangladesh	1,251	2,452	159.4
Barbados	407	1,517	1.4
Belgium	19	137	0.2
Belize	1,019	8,726	23.3
Bermuda	235	4,535	8.5
Bolivia	86	2,725	2.0

<sup>1</sup> Visit [www.oceanconservancy.org](http://www.oceanconservancy.org) for more details about the Ocean Conservancy.

<sup>2</sup> Visit [www.coastalcleanup.hk](http://www.coastalcleanup.hk) for more details about the ICC.

<sup>3</sup> International Coastal Cleanup: September 17, 2011

[http://www.oceanconservancy.org/site/PageServer?pagename=icc\\_about](http://www.oceanconservancy.org/site/PageServer?pagename=icc_about)

<sup>4</sup> The International Coastal Cleanup Event in 2012

<http://www.oceanconservancy.org/our-work/marine-debris/check-out-our-latest-trash.html>

<sup>5</sup> The Ocean Trash Index 2013

<http://www.oceanconservancy.org/our-work/international-coastal-cleanup/2013-trash-free-seas-report.pdf>

Bonaire	158	3,054	0.5
Brazil	8,422	72,063	78.8
British Virgin Islands	223	3,420	6.8
Brunei	104	1,001	2.5
Cambodia	54	176	0.6
Canada	30,723	286,628	1,774.2
Cayman Islands	107	1,363	5.3
Channel Islands	138	584	6.3
Chile	7,907	129,882	74.9
China	695	1,923	0.5
Colombia	2,987	69,666	78.0
Costa Rica	1,490	32,125	21.1
Croatia	164	14,112	1.6
Cuba	24	600	0.4
Curaçao	112	1,154	2.5
Dominican Republic	18,997	197,065	282.3
Ecuador	12,459	99,810	72.4
Egypt	154	1,327	42.5
England	2,146	15,492	57.2
Fiji	93	951	2.4
Finland	85	573	1.2
France	40	93	3.7
Germany	106	1,834	8.2
Ghana	210	11,023	0.9
Gibraltar	14	220	0.1
Greece	3,288	33,441	66.7
Grenada	32	1,510	0.8
Guam	3,513	20,816	60.0
Honduras	17	507	0.2
<b>Hong Kong</b>	<b>23,802</b>	<b>238,495</b>	<b>83.2</b>
India	16,756	147,281	275.4
Indonesia	845	4,107	9.3
Ireland	471	4,578	23.3
Israel	7,338	49,924	64.4
Italy	46	523	0.6
Jamaica	4,087	55,212	45.8
Japan	8,485	44,919	28.5
Kenya	60	6,614	4.4
Malaysia	87	882	1.4
Malta	30	864	0.6
Mexico	16,945	161,099	169.8
Mozambique	200	1,500	0.3
Netherlands	50	1,984	0.1
New Zealand	105	1,413	4.6
Nicaragua	5,136	115,379	587.9
Nigeria	264	1,191	12.4
Northern Ireland	157	1,302	1.3
Northern Mariana Islands	441	2,983	28.5
Norway	1,350	6,719	40.3

Panama	250	1,286	2.8
Papua New Guinea	2,041	10,988	71.5
Paraguay	11	110	0.2
Peru	83	55,916	3.8
Philippines	184	1,840	3.1
Poland	25	375	0.1
Portugal	12,913	476,862	252.3
Puerto Rico	143,946	2,960,723	444.0
Republic of Korea	22	265	0.1
Russia	10	66	0.1
Saba	8,945	115,380	217.2
Saint Kitts and Nevis	469	5,947	12.1
Saint Vincent and the Grenadines	32	200	1.0
Saudi Arabia	236	14,165	2.6
Scotland	448	4,741	10.9
Singapore	3,946	43,841	713.9
Sint Maarten, Dutch West Indies	567	5,094	6.0
Slovenia	65	2,646	0.9
South Africa	4,284	53,616	66.7
Spain	1,281	22,196	20.2
Sri Lanka	1,561	12,937	5.2
Sweden	4,056	18,314	1,012.0
Switzerland	2	11	0.6
Taiwan	6,945	49,223	17.7
Tanzania	158	2,844	4.4
Thailand	5,756	9,569	19.8
Trinidad and Tobago	230	2,058	1.3
Turkey	62	2,054	1.2
U.S. Virgin Islands	762	10,763	16.8
United Arab Emirates	372	1,352	10.0
United States	166,325	3,589,175	10,466.1
Uruguay	1,500	14,727	16.8
Venezuela	1,062	47,865	5.4
Vietnam	350	2,569	0.6
Wales	414	1,949	8.0
<b>Total</b>	<b>561,633</b>	<b>10,149,988</b>	<b>17,718.5</b>

## 4 Cleanups in Hong Kong

### ICC in Hong Kong

The ICC is the most extensive single day ocean-based volunteer global event of its kind. It is recognised for its detailed data collection processes whereby participants record the amount and nature of debris that they find.<sup>6</sup>

Green Council organized a School Cleanup Day and Kick-off Ceremony at the Stanley on 21<sup>st</sup> September 2013. On that day, many schools and corporations had joined the cleanup competition. 3 prizes had been awarded at the ceremony after the cleanup competition.

#### 4.1 Media/Advertising

In order to increase the awareness of this event, posters and emails, fax and invitation letters were sent to different groups of people/organizations in Hong Kong (including estates, shopping mall managed under MTR railway stations, Stanley Plaza, Urban Group and The Link Management Company Limited, all primary and secondary schools, companies, non-governmental organisations, government departments, and local political parties). Please see appendix 1, “Summary of preparation and follow-up activities for ICC 2013 - Preparation”.



Poster of the ICC 2013 Hong Kong

#### 4.2 Cleanup Results

##### 4.2.1 The marine debris problem in Hong Kong

Marine debris is still an existing problem in Hong Kong that has not been solved over the years. From 2009 to 2013 the total weight of marine litter collected from Victoria Harbour and typhoon shelters slightly decreased. Moreover there is a continuous decrease of floating refuse collected by Marine Department since 2008. However the weight of marine litter collected from Hong Kong is still unacceptable and indicated that the marine debris problem in Hong Kong needs to be solved.

<sup>6</sup> Although the official ICC 2013 was 21<sup>st</sup> September, cleanups in Hong Kong were organised from September to November. This was partially due to the prevailing weather in Hong Kong during this time and the timetable of the school semester.

**Table 2: Weight (metric tonnes) of marine litter collected from Victoria Harbour and typhoon shelters from 2000 to 2013**

Year	Weight (ton)		
	Victoria Harbour	Typhoon Shelter	Floating refuse collected by MD
2000	4,930.03	1,263.36	11,303.23
2001	5,510.51	1,226.34	12,054.09
2002	5,351.46	1,252.83	11,867.90
2003	6,158.99	1,290.64	13,926.25
2004	6,055.65	1,443.39	13,875.33
2005	6,165.37	1,627.36	14,984.28
2006	5,651.00	1,933.40	16,210.30
2007	5,763.50	1,916.60	16,549.80
2008	6,164.00	1,862.00	17,166.00
2009	5,520.00	2,027.00	16,195.00
2010	5,353.80	1,964.00	15,788.50
2011	4,773.00	1,839.00	15,391.00
2012	4,697.00	1,832.00	15,347.00
2013	4,943.00	1,811.00	15,248.00

Source: Marine Department (MD), the Government of Hong Kong Special Administrative Region.

#### 4.2.2 Number and location of cleanups

During the ICC 2013 in Hong Kong, held from 21<sup>st</sup> September to 9<sup>th</sup> November 2013, a total of 62 Cleanup Organisers<sup>7</sup> (COs) participated in the ICC, coordinating 2,852 volunteers and 70 cleanups at 35 cleanup sites. A total of 5,353.39 kg of debris was removed from 227.05 km of coastline (Table 3).

26 out of 70 cleanups were held at gazetted beaches managed by the Leisure and Cultural Services Department (LCSD), at which 753 volunteers removed 1,363.86 kg of debris from 108.19 km of shorelines.

**Table 3: List of Cleanup Organisers (in alphabetical order), with details of cleanup sites, number of participants, weight of debris collected and distance covered**

<u>Name of Cleanup Organizer</u>	<u>Location</u>	<u>Weight (kg)</u>	<u>Distance (km)</u>	<u>Number of participants</u>
20th Island Brownies	Sandy Bay Beach*	56.80	0.20	33
Airport Authority Hong Kong	Sha Lo Wan (Northwest Lantau)*	215.30	0.45	70
Alexander Mann Solutions	222 Nam Wai Road, Sai Kung (near Au Tsai Tsuen)*	281.40	0.40	9
Altruist Financial Group Limited	Tong Fuk Beach	46.50	0.30	12
Catholic Diocese of Hong Kong - Diocesan Youth Commission	Wu Kai Sha*	No Data submitted	0.40	30
Atkins China Ltd	Sha Ha*	11.00	0.17	11
Baptist Wing Lung Secondary School	Golden Beach	2.00	1.00	7
British American Tobacco Hong Kong	Nai Chung*	78.90	0.70	37
Cathay Pacific Airways Team	Shui Hau Wan*	No Data	0.40	50

<sup>7</sup> For further details as to how the cleanup organisers are identified and the other steps taken to find volunteers and organise the event, please refer to Appendix I.

		submitted		
Cathay Pacific Airways Team	Tong Fuk Beach	400.00	0.15	50
CCC Kei Yuen College	Lung Kwu Tan*	77.90	1.00	153
China Aircraft Services Limited	Cafeteria Old Beach	No Data submitted	0.15	30
Coca-Cola China Limited	Sha Ha*	107.27	0.50	65
Conpak CPA Limited	Rocky Bay Beach	52.62	1.00	37
Crown Worldwide (HK) Limited	Wu Kai Sha*	10.00	3.00	19
CSL	Lung Kwu Tan*	208.00	1.00	25
CSL	Lung Kwu Tan*	216.36	1.00	28
CSL	Lung Kwu Tan*	267.00	1.00	14
CSL	Lung Kwu Tan*	93.00	1.00	9
Forleda	Little Palm Beach*	32.00	0.10	7
Fourseasons	Sandy Bay (next to Stanley Main Beach)*	60.00	1.00	25
Friends of Green	Lei Yue Mun natural Rocky Shore*	No Data submitted	0.94	30
Fuji Xerox (Hong Kong) Limited	Wu Kai Sha*	67.00	0.38	200
Fiducia Management Consultants	Sandy Bay Beach*	No Data submitted	0.30	15
GoldmanSach	Po Chu Tam*	No Data submitted	1.00	20
Green Council	Stanley Main Beach	125.70	0.80	120
HHCKLA Buddhist Po Kwong School	Starfish Bay*	54.50	0.20	106
HKIE-YMC	Rocky Bay Beach	37.00	0.50	14
Hong Kong Baptist University	Lung Kwu Tan*	468.00	0.80	75
Hong Kong Disneyland Resort	Nim Shue Wan, Discovery Bay*	50.00	0.22	11
Hong Kong Jockey Club	Little Palm Beach*	120.00	1.00	63
Hong Kong Jockey Club	Po Chu Tam*	166.00	1.00	43
Hotels.com	Sandy Bay (next to Stanley Main Beach)*	111.00	90.00	41
Individual	Lido Beach	2.00	0.20	6
Individual	Stanley Main Beach	6.80	0.20	25
Japan Tobacco	Rocky Bay Beach	169.50	1.00	17
Kerry Property Management Services Limited	Sandy Bay Beach*	No Data submitted	0.20	30
Leighton Construction	Sha Ha*	72.70	0.17	58
Leung Kui Kau Lutheran Primary School	Nai Chung*	No Data submitted	0.70	28
Lung Kong WFSL Lau Wong Fat Secondary School	Butterfly Beach	8.00	0.60	20
Maeda Corporation	Lo So Shing Beach	No Data submitted	0.22	30
NBA Asia Limited	St. Stephen's Beach	17.30	90.00	32
Neonlite Electronic & Lighting (HK) Ltd./Megaman (HK) Electrical & Lighting Ltd.	Stanley Main Beach	6.14	0.70	37
Nishimatsu Construction Co. Ltd. (Hong Kong Branch)	Clear Water Bay Second Beach	280.00	0.40	130
Ocean Park Hong Kong	Beach below Dolphin	102.00	0.10	51

	University*			
Ocean Park Hong Kong	Cape D' Aguilar, beach next to The Swire Institute of Marine Science*	120.90	0.10	48
PAOC Ka Chi Secondary School	Butterfly Beach	12.00	2.00	16
S.K.H. Chu Oi Primary School (Lei Muk Shue)	Cafeteria New Beach	No Data submitted	0.38	50
S.K.H. Lee Shiu Keung Primary School	Shek O Beach	No Data submitted	1.02	25
Shatin Baptist Church	Wu Kai Sha*	No Data submitted	0.40	26
Shun Tak-China Travel Ship Management Ltd	Tung Chung Bay*	195.00	1.00	28
Society of Operations Engineers (Hong Kong Region)	Cafeteria Old Beach	26.80	2.50	38
Suga International Holdings Ltd.	Bayside*	204.00	0.70	10
The Mira Hong Kong	Golden Beach	5.70	0.27	19
TIACC Woo Hon Fai Secondary School	Lung Kwu Tan*	470.00	1.00	200
Tseung Kwan O Catholic Primary School	Silverstrand Beach	42.00	1.00	48
University of Hong Kong Hysan Hall Social Service Group	Ap Lei Chau Rocky Bay*	No Data submitted	0.25	30
W HONG KONG	Little Palm Beach*	No Data submitted	0.10	28
Weekend Weekly	Rocky Bay Beach	No Data submitted	1.00	40
保良局百週年李兆忠紀念中學家長教師會	Butterfly Beach	105.00	0.60	62
香港青馬青年獅子會	Wu Kai Sha*	11.50	0.30	50
香港宣教會恩霖社區服務中心	Wu kai Sha*	No Data submitted	0.30	15
香港宣教會恩霖社區服務中心	Wu Kai Sha*	No Data submitted	0.30	17
香港宣教會學校服務隊	Nai Chung*	18.00	1.00	18
康宏愛心義工隊	Rocky Bay Beach	30.90	0.51	30
港島第八十一旅童軍團	Turtle Cove Beach	2.00	3.00	4
新家園社會服務中心	Sui Lam Beach*	No Data submitted	0.20	30
聖公會西九龍教區	Butterfly Beach	11.80	0.67	20
聖若瑟小學(小童軍及幼童軍)	Deep Water Bay Beach	4.00	1.30	39
路德會賽馬會華明綜合服務中心	Starfish Bay*	14.10	0.50	23
	<b>Total:</b>	<b>5353.39</b>	<b>227.05</b>	<b>2852</b>

**N.B.:** An asterisk “\*” denotes a gazetted beach which is **NOT** managed by the Leisure and Cultural Services Department (LCSD)

#### 4.2.3 Top ten types of debris found

All the top ten marine debris items were originated from shoreline and recreational activities.

**Table 4: Top twenty types of debris in Hong Kong in 2013**

Rank	Number of Debris Items	Debris Items	Percentage
1	<b>13,664</b>	Foam Pieces	20.79%
2	<b>6,324</b>	Glass Pieces	9.62%
3	<b>3,993</b>	Bottle Caps (Plastic)	6.08%
4	<b>3,619</b>	Cigarette Butts	5.51%
5	<b>3,512</b>	Beverage Bottles (Plastic)	5.34%
6	<b>3,500</b>	Other Plastic/Foam Packaging	5.33%
7	<b>2,223</b>	Straws/Stirrers	3.38%
8	<b>2,180</b>	Other Plastic Bags	3.32%
9	<b>2,146</b>	Food Wrappers (candy, chips, etc.)	3.27%
10	<b>2,097</b>	Construction Materials	3.19%
11	<b>1,695</b>	Lids (Plastic)	2.58%
12	<b>1,458</b>	Take Out/Away Containers (Foam)	2.22%
13	<b>1,321</b>	Grocery Bags (Plastic)	2.01%
14	<b>1,300</b>	Cups & Plates (Plastic)	1.98%
15	<b>1,280</b>	Forks, Knives, Spoons	1.95%
16	<b>964</b>	Take Out/Away Containers (Plastic)	1.47%
17	<b>937</b>	Beverage Bottles (Glass)	1.43%
18	<b>835</b>	Rope (1 yard/meter = 1 piece)	1.27%
19	<b>708</b>	Cups & Plates (Foam)	1.08%
20	<b>553</b>	Strapping Bands	0.84%

**Table 5: Top twenty types of debris in Hong Kong in 2012**

Rank	Number of Debris Items	Debris Items	Percentage
1	<b>16,176</b>	Broken glass	23.20%
2	<b>7,251</b>	Foam Plastic (fragments)	10.40%
3	<b>6,738</b>	Bags (Plastic)	9.66%
4	<b>6,133</b>	Cigarettes/Cigarette Filters	8.80%
5	<b>4,355</b>	Caps, Lids	6.25%
6	<b>3,755</b>	Food Wrappers/Containers	5.39%
7	<b>3,627</b>	Candles	5.20%
8	<b>3,367</b>	Beverage Bottles (Plastic) < 2 liters	4.83%
9	<b>2,279</b>	Straws, Stirrers	3.27%
10	<b>2,234</b>	Cups, Plates, Forks, Knives, Spoons	3.20%
11	<b>1,912</b>	Bags (Paper)	2.74%
12	<b>1,851</b>	Building Materials	2.65%
13	<b>1,550</b>	Rope	2.22%
14	<b>849</b>	Beverage Cans	1.22%
15	<b>769</b>	Plastic Sheeting/Tarps	1.10%
16	<b>738</b>	Toys	1.06%
17	<b>635</b>	Fishing Lures/Light Sticks	0.91%
18	<b>622</b>	Clothing, Shoes	0.89%
19	<b>528</b>	Pull Tabs	0.76%
20	<b>522</b>	Strapping Bands	0.75%

**Table 6: Top twenty types of debris in Hong Kong in 2011**

Rank	Number of Debris Items	Debris Items	Percentage
1	<b>7,645</b>	Bags (Plastic)	12.50%
2	<b>5,883</b>	Foam Plastic (Fragments)	9.62%
3	<b>4,468</b>	Plastic Sheeting/Tarps	7.31%
4	<b>3,989</b>	Beverage Bottles (Plastic) < 2 liters	6.52%
5	<b>3,833</b>	Food Wrappers/Containers	6.27%
6	<b>3,424</b>	Caps, Lids	5.60%
7	<b>3,288</b>	Beverage Bottles (Glass)	5.38%
8	<b>3,036</b>	Cigarettes/Cigarette Filters	4.97%
9	<b>2,857</b>	Building- Materials	4.67%
10	<b>2,759</b>	Fishing Lures/Light Sticks	4.51%
11	<b>2,559</b>	Cutlery	4.19%
12	<b>2,015</b>	Straws, Stirrers	3.30%
13	<b>1,868</b>	Bags (Paper)	3.06%
14	<b>1,829</b>	Beverage Cans	2.99%
15	<b>1,578</b>	Rope	2.58%
16	<b>1,063</b>	Cigarette Lighters	1.74%
17	<b>925</b>	Cigar Tips	1.51%
18	<b>912</b>	Candles	1.49%
19	<b>883</b>	Clothing, Shoes	1.44%
20	<b>767</b>	Buoys/Floats	1.25%

**Table 7: Top twenty types of debris in Hong Kong in 2010**

Rank	Number of Debris Items	Debris Items	Percentage
1	<b>11,274</b>	Broken Glasses	18.49%
2	<b>5,682</b>	Bags (Plastic)	9.32%
3	<b>5,030</b>	Beverage Bottles (Plastic) £ 2 liters	8.25%
4	<b>4,984</b>	Foamed Plastic Boxes	8.17%
5	<b>4,483</b>	Food Wrappers/Containers	7.35%
6	<b>3,837</b>	Caps, Lids	6.29%
7	<b>3,639</b>	Cigarettes/Cigarette Filters	5.97%
8	<b>3,038</b>	Cutlery	4.98%
9	<b>1,976</b>	Straws, Stirrers	3.24%
10	<b>1,590</b>	Candles	2.61%
11	<b>1,379</b>	Beverage Bottles (Glass)	2.26%
12	<b>1,351</b>	Beverage Cans	2.22%
13	<b>1,237</b>	Building Materials	2.03%
14	<b>1,042</b>	Bags (Paper)	1.71%
15	<b>1,010</b>	Rope	1.66%
16	<b>935</b>	Clothing, Shoes	1.53%
17	<b>849</b>	Fishing Lures/Light Sticks	1.39%
18	<b>662</b>	Plastic Sheeting/Tarps	1.09%
19	<b>643</b>	Pull Tabs	1.05%
20	<b>621</b>	Cigarette Lighters	1.02%

**Table 8: Top twenty types of debris in Hong Kong in 2009**

Rank	Number of Debris Items	Debris Items	Percentage
1	16,178	Broken Glasses	24.23%
2	8,921	Foam Plastic (Fragments)	13.36%
3	4,459	Bags (Plastic)	6.68%
4	3,716	Cigarettes/Cigarette Filters	5.56%
5	3,094	Beverage Bottles (Glass)	4.63%
6	2,771	Candles	4.15%
7	2,769	Beverage Bottles (Plastic) < 2 liters	4.15%
8	2,718	Cutlery	4.07%
9	2,598	Food Wrappers/Containers	3.89%
10	2,560	Caps, Lids	3.83%
11	2,386	Building Materials	3.57%
12	1,715	Straws, Stirrers	2.57%
13	1,235	Rope	1.85%
14	1,185	Beverage Cans	1.77%
15	1,127	Plastic Sheeting/Tarps	1.69%
16	1,099	Bags (Paper)	1.65%
17	897	Fishing Lures/Light Sticks	1.34%
18	848	Clothing, Shoes	1.27%
19	760	Toys	1.14%
20	581	Pull Tabs	0.87%

**Table 9: Top twenty types of debris in Hong Kong in 2008**

Rank	Number of Debris Items	Debris Items	Percentage
1	55,650	Broken Glasses	64.76%
2	4,040	Bags (Plastic)	4.70%
3	3,043	Foam Plastic	3.54%
4	2,817	Cigarettes/Cigarette Filters	3.28%
5	2,794	Food Wrappers/Containers	3.25%
6	2,064	Caps, Lids	2.40%
7	1,882	Straws, Stirrers	2.19%
8	1,789	Cutlery	2.08%
9	1,649	Building Materials	1.92%
10	1,630	Beverage Bottles (Plastic) < 2 litres	1.90%
11	826	Rope	0.96%
12	646	Plastic Sheeting/Tarps	0.75%
13	613	Clothing, Shoes	0.71%
14	573	Cigarette Lighters	0.67%
15	571	Bags (Paper)	0.66%
16	507	Balloons	0.59%
17	448	Beverage Cans	0.52%
18	448	Strapping Bands	0.52%
19	420	Candles	0.49%
20	358	Fishing Line	0.42%

The shoreline & recreational activities contribute to over 63.65% of Hong Kong marine debris. Compared with last year's result, marine debris originated from the ocean/waterway activities has significantly decreased from 20.45% to 7.37%, which include debris from recreational / commercial fishing and boat / vessel operations. Besides, the marine debris from local item of concern has been slightly increased by 4.6%.

**Table 8: Source of Hong Kong Marine Debris in 2013**

Source	Percentage of debris type
Shoreline & recreational activities	85.81%
Ocean/waterway activities	2.02%
Smoking-related activities	6.10%
Medical/personal hygiene	3.17%
Local Item of Concern	2.89%

**Table 8: Source of Hong Kong Marine Debris in 2012**

Source	Percentage of debris type
Shoreline & recreational activities	63.65%
Ocean/waterway activities	7.37%
Smoking-related activities	9.79%
Dumping activities	3.09%
Medical/personal hygiene	0.09%
Local Item of Concern	16.01%

**Table 9: Source of Hong Kong Marine Debris in 2011**

Source	Percentage of debris type
Shoreline & recreational activities	54.09%
Ocean/waterway activities	20.45%
Smoking-related activities	8.57%
Dumping activities	5.31%
Medical/personal hygiene	0.19%
Local Item of Concern	11.39%

**Table 10: Source of Hong Kong Marine Debris in 2010**

Source	Percentage of debris type
Shoreline & recreational activities	62.23%
Ocean/waterway activities	10.84%
Smoking-related activities	9.35%
Dumping activities	3.21%
Medical/personal hygiene	0.57%
Local Item of Concern	13.80%

In short, the ICC 2012 in Hong Kong had a record-high number of COs and sites cleaned. It can be regarded as a success in continuous promotion and education to public and relevant stakeholders on the marine debris problems.

## 5 Evaluation

### 5.1 General Findings

Foam plastic box (mostly foam fragments) is one of the local items of concern, which is continuously found to be one of the most abundant marine debris from 2008 to 2012 and TOP ONE in this year in Hong Kong. Compared to 2012, there is a one-fold increase of the foam pieces, which holds nearly 21 per cent of the total marine debris collected. It has also been the highest record since 2008. Such debris with low biodegradability and buoyancy can disperse easily and freely by oceanic current. Especially in rainy and typhoon season, tonnes of debris were washed into the sea through the water stream. As a result, cross-border collaboration in waste management between Hong Kong and the neighbouring areas is essential.

Glass pieces/ broken glass (mostly from glass bottle) continues to be one of the top 5 marine debris in recent years. This year, Glass Pieces holds nearly 10 per cent of the total marine debris collected. It has been the second-concern among those debris and they are mostly found in the areas next to recreational facilities such tourist spot and some restaurants (particularly in Stanley, Lamma Island, Lantau Island etc). Although there is more than a half-fold decrease compared to 2012, the improper disposal of bottles from the tourists and restaurant operators nearby is still serious. One of the major reasons might belong to an incomprehensive and insufficient support on glassware and glass containers recycling in Hong Kong. Though the Environmental Protection Department (EPD) and Hong Kong Hotels Association launched the Voluntary Glass Container Recycling Programme for the Hotel Sector in November 2008<sup>8</sup> and the phase 2 stage 2 of the pilot programme was launched in October 2012 at all selected Public Residential Housing estates at East Kowloon (29 in total)<sup>9</sup>, the support provided for participants is insufficient. The programme was funded by the participating hotels, which does not provide enough economic incentive for glass recycling. In addition, there are only limited numbers of local glass recycling service providers and corresponding facilities for recycling process. From the report of "Monitoring of Solid Waste in Hong Kong – Waste Statistics for 2011" data<sup>10</sup>, there is nearly 3% of glass waste in both categories - domestic waste and commercial & industrial waste. Only 0.2 thousand tonnes of glasses were exported for recycling in Hong Kong and only 4,600 tonnes of glass were recycled. Broken glass had been staying on the top of the chart for the Top Ten Debris in Hong Kong since 2007. Glass is usually found as small broken pieces. Participants may pick several of the pieces up which come from the same item, such as glass containers and drinking bottles.

Plastic caps, bottles and packaging are other local items of concern. They were mostly found in the areas next to recreational facilities like snacks shops, restaurants and stores (particularly in Shek O, Tai O and Lantau Island). There were around 44,530 tonnes of plastics bottles disposed in 2011<sup>10</sup>. The light weight physical characteristic of plastic caps, bottles and packaging allow them easy to escape from the landfill to the ocean. Consequently, plastic marine debris can circulate and remain physically and biologically available in ocean waters and sediments for a long period of time. This evidence shows that there is still a lot of room for improvement to enhance citizens' awareness on waste disposal after recreational activities as well as to protect the clean shorelines. Public education and law enforcement on illegal waste disposal by the government is also not adequate.

<sup>8</sup> Glass Container Recycling Programme

[http://www.epd.gov.hk/epd/english/environmentinhk/waste/eco\\_responsibility/n\\_gcrp.html](http://www.epd.gov.hk/epd/english/environmentinhk/waste/eco_responsibility/n_gcrp.html)

<sup>9</sup> The Pilot Programme on Source Separation of Glass Bottles

[http://www.epd.gov.hk/epd/english/environmentinhk/waste/eco\\_responsibility/gcrp\\_pilot\\_ssp\\_ha.html](http://www.epd.gov.hk/epd/english/environmentinhk/waste/eco_responsibility/gcrp_pilot_ssp_ha.html)

<sup>10</sup> Monitoring of Solid Waste in Hong Kong – Waste Statistics for 2011

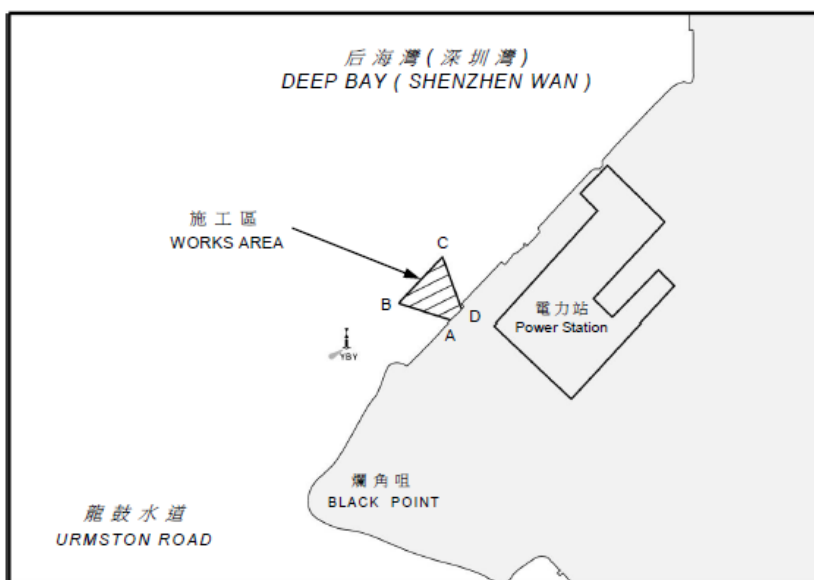
<https://www.wastereduction.gov.hk/en/materials/info/msw2011.pdf>

Same as last year, the shoreline and recreational activities (e.g. barbecue, celebration of Mid-Autumn Festival, Chinese National Day etc.) are continuing to become the major contribution to the overall marine debris collected, which increased up to 85.81% which is the highest since 2007. Furthermore, nine of the top ten marine debris items originate from shoreline and recreational activities. The insufficient environmental awareness of beachgoers, picnickers, participants at waterside sports and festival events washing down creeks and rivers, and litter carried from streets, drains, gutters, and culverts and the mind-set of “pick up after me” are the major cause. Many Cleanup activities were held during and after the Mid-Autumn Festival, thus the number of candles, one of the popular celebration items in the Mid - Autumn Festival, has been accounted for 90% of the total collected in marine debris, as well as others debris related to the recreational activities.

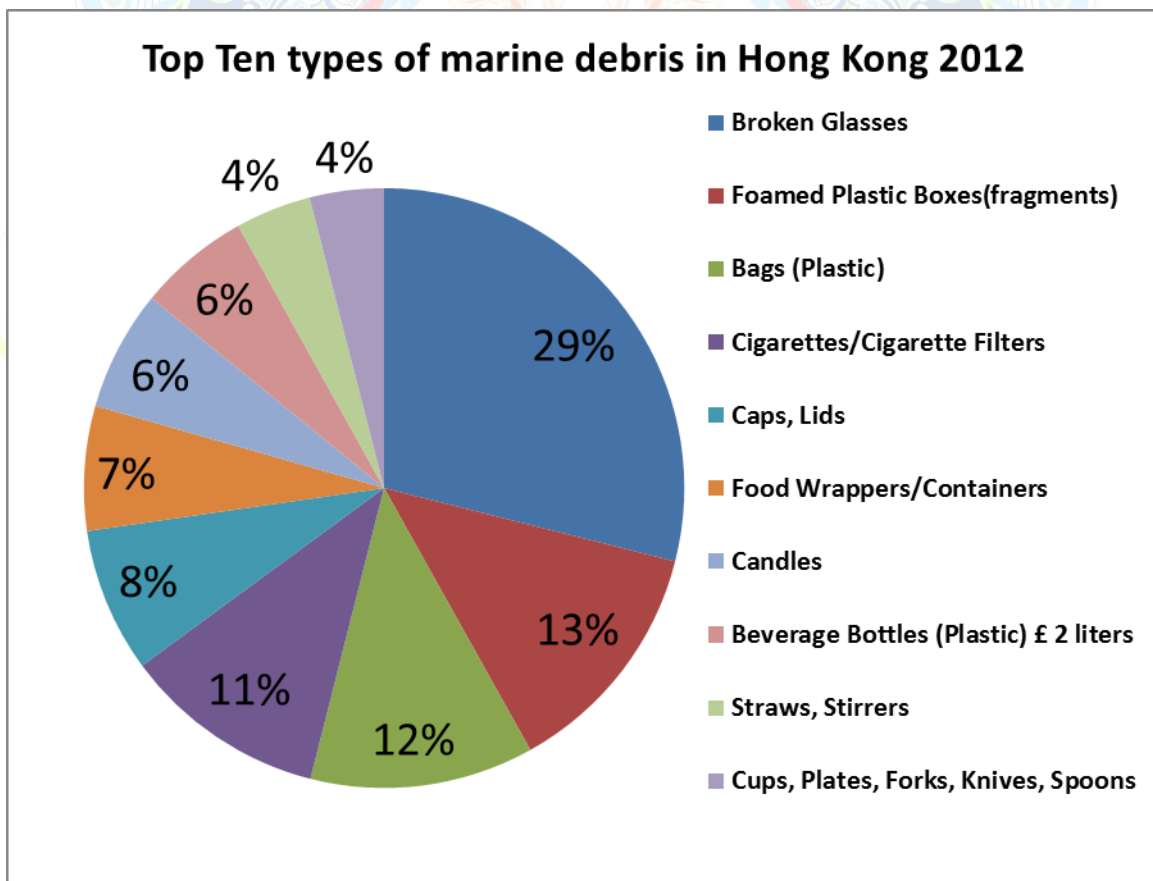
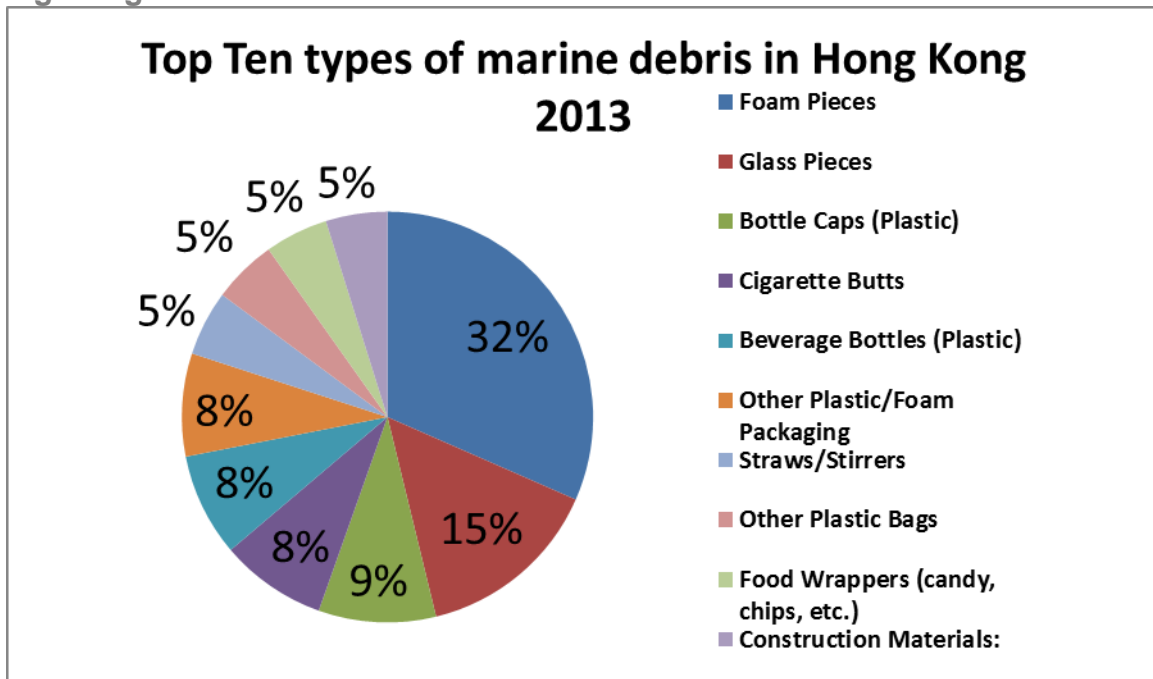
Cigarette Butts continues to be the one of the most abundant marine debris in previous years in Hong Kong. Although there is a half decrease from 6,133 in 2012 to 3,619 in 2013, it has been still in one of the Top Five in this year. The number of cigarette/cigarette filters collected beaches under LCSD is 1,658 which accounts for about 50% of total. Starting from 2007, beaches are designated as statutory no smoking areas under section 3 and Schedule 2 of the amended Smoking (Public Health) Ordinance (Cap. 371). The influence of the taxes induction and Statutory Non-Smoking Areas is not that effective, on the number of smokers, as well as the disposal of cigarette/ cigarette filters.

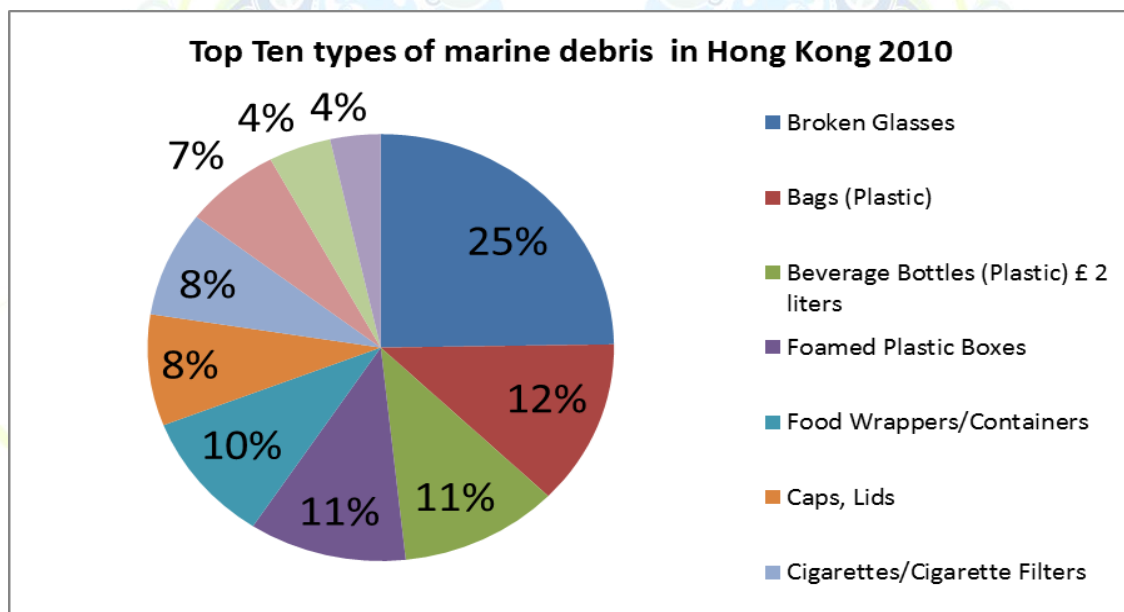
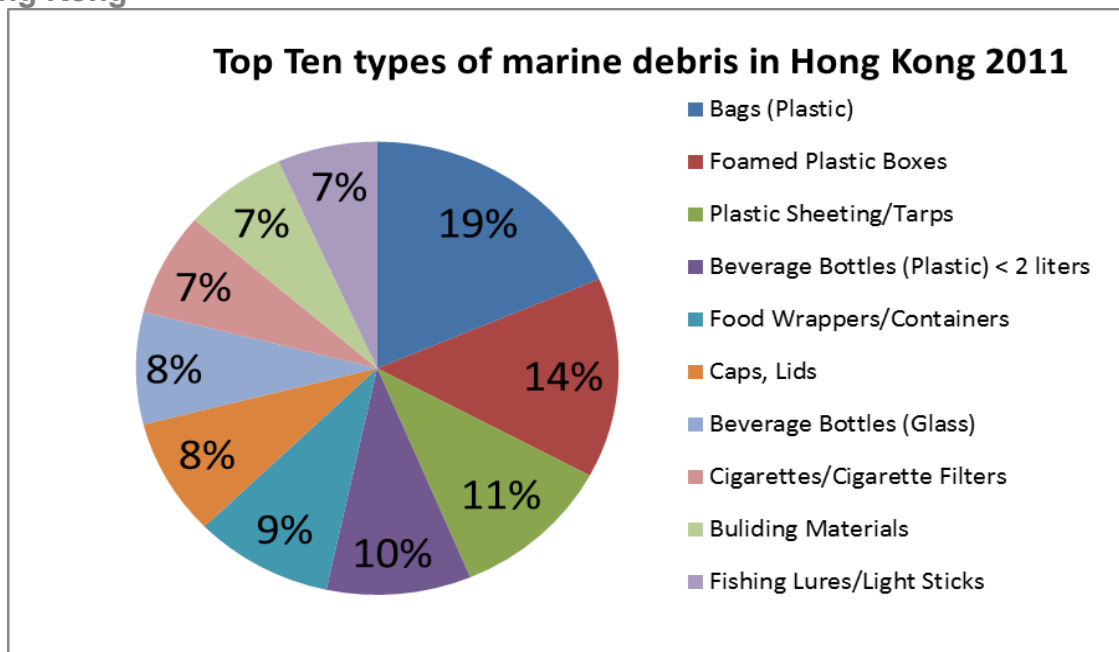
This year construction material is the top 10 marine debris in Hong Kong. Lung Kwu Tan and Lantau Island accounts for 29.9% and 31.1% of the total amount of construction materials collected in 2013 respectively. In 2013, construction has been conducted near Lung Kwu Tan area.<sup>11</sup> As the public refuse collection point may not be convenient in Lung Kwu Tan and Lantau Island, it is likely that some of the construction materials may be directly disposed along the coastal area.

Drawing Attached to Marine Department Notice No. 138 of 2013



<sup>11</sup> Marine Department Notice No. 7 of 2013  
<http://www.mardep.gov.hk/hk/notices/pdf/mdn13138c.pdf>





It could be expected that cleanups on gazetted beaches would collect relatively less marine debris compared to non-gazetted beaches. 44 cleanups took place on non-gazetted beaches, had removed approximately 4,000 kg of debris, whereas over 1,300kg of debris collected from 26 cleanups which took place on gazetted beaches. This evidence shows that there is an improvement on cleaning services provided by Food and Environmental Hygiene Department (FEHD) in those gazetted beaches.

The average weight of debris cleaned up of the participant (kg/p) is 1.88kg this year, which is similar to that of 2012, has been dropped from 3.16kg in 2011. The raising awareness of public on the coastal and marine pollution problem was observed. It might be contributed by a local issue in July 2012, Typhoon Vicente hit Hong Kong, 6 shipping containers containing over 150 tonnes of polypropylene pellets (plastic pellets) were released from a shipping vessel, they were then washed up to the beaches, and coastal areas of Hong Kong, threatening the marine lives and habitats. Besides, this year Environmental Protection Department has been put much effort in promoting to keep the shorelines clean, such as organizing Clean Shorelines Campaign. It has drawn much attention from the public and organisations to coordinate the cleanups.

## 6 Recommendations

### 6.1 For HKSAR Government Departments:

1. There needs to be better coordination between government departments to prevent rubbish from ending up in the sea. Currently, a range of different departments – the Food and Environmental Hygiene Department (FEHD), Leisure and Cultural Services Department (LCSD) and the Agriculture, Fisheries and Conservation Department (AFCD) – take responsibility for cleaning up litter in their own designated geographical areas. However, debris and litter flow through the environment from land to water and back again without regard for these jurisdictional boundaries. In order to prevent marine and coastal pollution, an overall strategy for minimising littering and dumping of waste, and for stemming the various land and vessel-based sources of marine debris, should be developed. In addition, the AFCD and Environmental Protection Department (EPD) should work together for educating and promoting the importance and relationship between waste management and marine conservation so as to raise the public awareness and avoid the problems worsen.
2. The relevant authorities, including AFCD, EPD, FEHD, Housing Department (HD), Hong Kong Police Force (HKPF), LCSD and Marine Department (MD) should ensure better enforcement of legislation on the “Fixed Penalty (Public Cleanliness Offences) Ordinance” (Cap.570) against litter in public place.
3. The relevant authorities, including The Government of Hong Kong Special Administrative Region (HKSAR), AFCD, EPD and HKPF should ensure better enforcement of legislation against dumping construction waste, with particular attention paid to construction sites that are close to natural waterways.
4. The relevant government authorities should ensure that any commissioned cleaners carry out their beach cleaning activities effectively especially but not limited to popular areas, hidden or unseen areas. Comprehensive frameworks and enforcement should be implemented for ensuring the cleaning activities are preceded in correct manner (e.g. recycled wastes are sorted and recycled before burying in the landfill).
5. The EPD, FEHD, LCSD and HKPF should collaborate to minimize the generation of wastes before, during and after any festivals, holidays or events. The EPD should educate the public on how to have a “green” festivals (e.g. avoid using disposable tableware, re-use decorations for Christmas and Chinese New Year, etc.). The FEHD, LCSD and HKPF should remind citizens to keep the area clean and prosecute any law-breakers on illegal and irresponsible littering.
6. The relevant government authorities including but not limited to the EPD, FEHD, LCSD and the HKPF should educate the public to be responsible for cleaning up their rubbish after any Mid-Autumn Festival or other festivals and public activities. Public education campaigns should highlight the consequences of littering (including the fact that litter dropped on land ends up in the sea and can harm marine life) and the personal responsibility of every Hong Kong citizen to care for the environment and their surroundings.
7. As large quantity of recyclable plastic products (e.g. plastic bottles, bags, cans, caps, etc.) has been collected during the cleanups, arrangements should be made by the appropriate authorities to recycle these materials.
8. Recycling programme for glass bottles should be developed and promoted, including but not limited to the establishment of glass collection boxes and funds provided to recyclers for facilitating the recycling industry.

## 6.2 For Cleanup Organisers:

1. COs should confirm their cleanup details (venue, date, timing, estimated number of participants and contact details of person-in-charge) at least one week before their cleanups to insure that arrangements for the provision of gloves, bags, and debris collection after the cleanup can be made with the FEHD.
2. Any cleanups carried out on gazetted beaches must apply for a permit from the LCSD at least 10 days before the cleanup.
3. COs should investigate the proposed site prior to the cleanup date.
4. COs should be aware that gazetted beaches are cleaner than other coastal areas under normal circumstances and should therefore try to identify beaches that are not otherwise supported.
5. COs should ask the authority (either the FEHD or the beach officer in charge) about the arrangement of debris collection after cleanup.
6. COs should instruct the volunteers to work in groups of 3 to 5 persons and check the completeness of the filled data cards.<sup>12</sup>
7. COs are encouraged to complete and return the softcopy of the data spread sheet provided within 10 days after their cleanups in order to facilitate data processing.

---

<sup>12</sup> The completed data card should record the weight of debris collected (using a bathroom scale or spring balance brought to the site), number of volunteers in the group, and the number of each item in **numeric value** (not a tick nor wordings like “lots of” or “a few”).

## CONCLUSION

The ICC is an activity that primarily focuses on raising awareness of the coastal and marine pollution problem in order to bring about changes for the benefit of the coastal and marine ecosystems. However, the data collected provides much more than statistics compiling the number of pieces of debris found and their origins. It reflects a society's level of understanding of its responsibility towards environmental protection and pollution control as well as the performance of Hong Kong waste management system. Pollution of the coasts and oceans mirrors general patterns of solid waste disposal on land and from ships. Therefore, the results obtained from the ICC can also be used as a barometer to measure a society's general behaviour towards nature.

Based on the data collected, we concluded that the major causes of marine debris problems including:

- Lack of environmental awareness to take social and personally responsibility for the waste generated;
- Insufficient HKSAR government supports to recycling industries in consequence of enormous amount of recyclable wastes disposed to landfill which makes the marine debris problems worsen;
- Incomprehensive strategic plan for cleaning Hong Kong coastlines where those hidden or unseen areas are usually ignored

In consequence, a lot more actions need to be done by interested groups and the government to help the Hong Kong public understand its role, impact and responsibility towards the environment both on collective and individual levels. Furthermore, the government should take the lead on monitoring and improving the coastline cleaning activities, as well as to initiate more collaboration works with neighbourhood countries to minimize the problem due to foreign negligence of waste.

Education can go a long way towards improving society's general behaviour towards the environment (e.g. green living, 4"R"s – reduce, reuse, recycle and replace, etc.). More targeted and specific public campaigns should be introduced and maintained for an extensive period.

The ICC is an essential and effective part of the global fight against coastal and marine pollution. The ICC in Hong Kong is growing each year in public profile and in the number of cleanup events held, but still more participation is necessary. More volunteers are needed to help with the often strenuous work of picking up the quantities of debris found every year. In addition, having more people involved would mean that more people could experience the seriousness of the issue. It is especially important for schools to see this activity as an opportunity to teach their students about social and environmental responsibility. More support from the media is also needed to raise the profile of the event further. The impact of this event highly depends on its exposure to the public, and we need to find more ways to reach out to a greater audience. On a logistical level, we need to help our COs follow our instructions, especially when it comes to submitting the data properly and promptly. Finally, we think the event would profit by finding new creative ways to raise the degree of enthusiasm among COs and volunteers.

## 7 SOME HIGHLIGHTS FROM THE 2013 CLEANUP<sup>13</sup>

More than two years have passed since the massive earthquake and subsequent tsunami that devastated Japan in March 2011, but debris from that disaster continues to wash ashore along the Pacific Coast of the United States and Canada. Some of it contains invasive species that have hitched a ride across the ocean and could threaten local wildlife and coastal ecosystems. While there's not much we can do to prevent this, Ocean Conservancy is working closely with the National Oceanic and Atmospheric Administration (NOAA) and Japan's Ministry of the Environment to help reduce the impacts and protect natural resources.

### **Japan:** Surveying tsunami debris and conducting cleanups

Nicholas Mallos, Ocean Conservancy's marine debris specialist, met with International Coastal Cleanup® Coordinators in Japan to learn about the coastal debris left in the wake of the earthquake and tsunami. He joined forces with members of Cleanup Gamo and Japan Environmental Action Network (JEAN) to conduct beach cleanups along the coast.

### **Alaska:** Removing debris from remote coastlines

Arctic Program Director Andrew Hartsig participated in beach cleanups near Sitka, Alaska. Lightweight foamed plastic and foam insulation were among the most common items found. The cleanups were organized by the Marine Conservation Alliance Foundation and Sitka Sound Science Center, with help from Holland America Line and Allen Marine. NOAA and Ocean Conservancy also funded a cleanup at Gore Point, Alaska, where the total weight of debris collected almost doubled the 2008-2011 average.

### **California:** Monitoring shorelines for debris

Jennifer Savage, Ocean Conservancy's North Coast program coordinator, is one of the many participants in NOAA's shoreline monitoring program. Her monthly surveys on one of approximately 60 marine debris monitoring sites that NOAA has established along the West Coast helps identify ocean trash baselines against which potential future tsunami debris can be measured.

Throughout 2013, Ocean Conservancy will be working with NOAA, JEAN, Bank of America and other partners to organize cleanups along the Pacific Coast and learn more about the full impacts of the tsunami debris that continues to wash ashore.

---

<sup>13</sup> Retrieved from the website of Ocean conservancy  
(<http://www.oceanconservancy.org/our-work/international-coastal-cleanup/2013-trash-free-seas-report.pdf>)

## 8 TEN THINGS YOU CAN DO TO STOP MARINE DEBRIS<sup>14</sup>

1. **Reduce your carbon "fin-print."** Our ocean is on the front lines of climate change — absorbing half the carbon dioxide we've pumped into the atmosphere. Use mass transit, carpool, and find other ways to reduce your carbon footprint.
2. **Take only pictures.** Choose vacation spots working to protect endangered sea animals. When snorkelling or diving, take pictures and tell stories but never stand on coral reefs or touch the marine life.
3. **Be a green boater.** Protect the boating experience along with the ocean. A little spill makes a big difference; be especially careful with oil, gasoline, solvents, and sewage. Bring your trash back to shore.
4. **Ask for sustainable seafood.** Let chefs, wait-staff, and the folks behind your fish counter know that sustainable seafood is important to you.
5. **Sign up for International Coastal Cleanup.** Volunteers remove trash from beaches and shorelines, and data collected by these citizen-scientists help inform solutions that keep trash out of our ocean in the first place.
6. **Reduce.** Since packaging materials account for much of the trash we generate, they provide a good opportunity for reducing waste consider items with less, reusable, or recyclable packaging.
7. **Reuse.** More than 60 percent of the litter collected during the 2009 International Coastal Cleanup consisted of disposable items. Choose reusable shopping bags, coffee mugs, and food containers.
8. **Recycle.** If you can't reuse it, recycle it. Check online with your local government to see what you can and can't give back, and recycle everything possible.
9. **Prevent contaminated runoff.** No matter where you live, the ocean is downstream. Don't use chemical fertilizers and pesticides on your lawn. On the driveway, avoid harmful cleaning products, and take proper care of spilled oil.
10. **Vote Blue.** Urge your elected representatives to support ocean-friendly policies that protect our ocean. Stay informed through e-alerts from Ocean Conservancy and shares your passion at [facebook.com/oceanconservancy](https://www.facebook.com/oceanconservancy) and [twitter.com/OurOcean](https://twitter.com/OurOcean).

---

<sup>14</sup> Retrieved from Ocean Conservancy's website ([http://www.oceanconservancy.org/our-work/marine-debris/icc\\_action.html](http://www.oceanconservancy.org/our-work/marine-debris/icc_action.html)).

## Summary of preparation and follow-up activities for ICC 2013

### Preparation

In end of July 2013, invitation letters were sent to over 100 companies in Hong Kong. And during late August, invitation letter ICC 2013 was sent by email and fax to more than 1,000 primary and secondary schools. And also in the same period, invitation emails were sent to companies, non-governmental organisations, government departments, local political parties using a comprehensive contact list based on invitees to previous ICCs.

Poster of ICC2013 was displayed at the estates and shopping malls under Stanley Plaza , Urban Group, Hong Kong Housing Society and The Link Management Company Limited (total 500 posters), so as to increase publicity and facilitate access to the ICC materials.

A kick-off cleanup at the Stanley Plaza of ICC 2013 had been organized on 21<sup>th</sup> September by Green Council.

Once the Cleanup Organisers (COs) had confirmed the cleanup venue, date, time, estimated number of participants and contact details of the person-in-charge, GC prepared the ICC package, which included the data cards, souvenirs, posters and leaflets for the CO. At the same time, GC made arrangements directly with the corresponding district officers of the FEHD for the provision of gloves, garbage bags, and debris collection after cleanup. If the cleanups were going to be held on gazetted beaches, GC helped the CO to send an application for the approval of entry to the corresponding LCSD district office, which had to be made by email in advance. Then GC followed up with the LCSD to ensure the CO had the approvals and made arrangements with the beach-in-charge for debris collection after the cleanup.

### Follow-up

After the cleanup, GC received the results<sup>15</sup> from the COs either by an electronic data sheet or by post or fax. For the COs who had not returned the filled data cards two weeks after their cleanups or after the submission date of the data (16<sup>th</sup> November 2013), reminder emails and phone calls were made accordingly<sup>16</sup>. Data received was input, validated<sup>17</sup> and processed using the ICC results spread sheet, which modified by GC base on the spread sheet provided by the OC. A summary of results, list of media information, and photographs taken by the participants were submitted to OC by email on 1<sup>st</sup> December, 2013, while the lists of cleanup sites and sponsors were sent to OC by email on 1<sup>st</sup> December 2013. A press conference was also organized on 15<sup>th</sup> December 2013 to release the ICC findings by Green Council. (Refer to Appendix IV)

---

<sup>15</sup> In the form of a summary or raw data cards.

<sup>16</sup> Last 1 set of data were received on 16th November 2012

<sup>17</sup> Especially for the correctness of the estimation of the distance cleaned weight of debris collected and the abnormal existence of a particular item.

Hong Kong  
APPENDIX II

2013 DATA CARD

**INTERNATIONAL COASTAL CLEANUP™  
VOLUNTEER OCEAN TRASH DATA CARD**



Ocean and waterway trash ranks as one of the most serious pollution problems choking our planet. Far more than an eyesore, a rising tide of marine debris threatens human health, wildlife, communities and economies around the world. The ocean faces many challenges, but trash should not be one of them. Ocean trash is entirely preventable, and data you collect are part of the solution. The International Coastal Cleanup is the world's largest volunteer effort on behalf of ocean and waterway health.

**SITE INFORMATION**

Cleanup Site Name:			
State or Province:	HK SAR	Number of Volunteers work on this card:	
Country		Adults	Children(under 12)

**MOST UNUSUAL ITEM COLLECTED:**

--

**TYPE OF CLEANUP**

Land / Underwater / Watercraft:
---------------------------------

**CLEANUP SUMMARY (circle units)**

Number of Trash Bags Filled:	
Weight of Trash Collected (lbs / kgs) :	
Distance Cleaned (miles / km) :	



Please return this card to the ICC coordinator:

**Green Council**

Room 710, New World Tower 1,  
18 Queen's Road Central, Central;  
Website: [www.greencouncil.org](http://www.greencouncil.org)  
Email: [info@greencouncil.org](mailto:info@greencouncil.org)  
Tel: 2810 1122  
Fax: 2810 1998



## TRASH COLLECTED

### TRASH COLLECTED

Citizen scientist: Pick up all trash and record all items you find below. No matter how small the items, the data you collect are important for Trash Free Seas.®



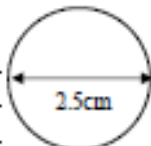
**Example:** Plastic Bags 11111- 111 #TOTAL ↓ = 8 Please **DO NOT** use words or check marks. Only NUMBERS are useful data

MOST LIKELY TO FIND ITEMS:		#TOTAL ↓
Cigarette Butts:	=	Beverage Bottles (Plastic): =
Food Wrappers (candy, chips, etc.):	=	Beverage Bottles (Glass): =
Take Out/Away Containers (Plastic):	=	Beverage Cans: =
Take Out/Away Containers (Foam):	=	Grocery Bags (Plastic): =
Bottle Caps (Plastic)	=	Other Plastic Bags: =
Bottle Caps (Metal)	=	Paper Bags: =
Lids (Plastic) :	=	Cups & Plates (Paper): =
Straws/Stirrers:	=	Cups & Plates (Plastic): =
Forks, Knives, Spoons:	=	Cups & Plates (Foam): =

FISHING GEAR:	#TOTAL ↓	PACKAGING MATERIALS:	#TOTAL ↓
Fishing Buoys, Pots & Traps:	=	6-Pack Holders	=
Fishing Net & Pieces:	=	Other Plastic/Foam Packaging:	=
Rope (1 yard/meter = 1 piece):	=	Other Plastic Bottles (oil, bleach, etc.):	=
Fishing Line (1 yard/meter = 1 piece):	=	Strapping Bands:	=
	=	Tobacco Packaging/Wrap:	=

OTHER TRASH:	#TOTAL ↓	PERSONAL HYGIENE:	#TOTAL ↓
Appliances (refrigerators, washers, etc.):	=	Condoms:	=
Balloons:	=	Diapers:	=
Cigar Tips:	=	Syringes:	=
Cigarette Lighters:	=	Tampons/Tampon Applicators:	=
Construction Materials:	=		=
Fireworks:	=		=
Tires:	=		=

TINY TRASH LESS THAN 2.5CM:	#TOTAL ↓
Foam Pieces	=
Glass Pieces	=
Plastic Pieces	=



DEAD/ INJURED ANIMAL	STATUS	ENTANGLED	TYPE OF ENTANGLEMENT ITEM
	Dead or Injured	Yes or No	

ITEMS OF LOCAL CONCERN:		
1.	2.	3.

## HOW TO ORGANIZE A CLEANUP

### BEFORE THE CLEANUP

- ✧ Select a cleanup location, ensuring beforehand that it is both safe and accessible to volunteers;
- ✧ Confirm with Green Council the date, timing and location of your proposed cleanup;
- ✧ Recruit cleanup volunteers;
- ✧ Arrange for someone to take photos and/or video of the event;
- ✧ Contact the Food and Environmental Hygiene Department (FEHD) regarding the provision of plastic gloves, bags and debris collection;
- ✧ Consult with the FEHD on recyclable materials;
- ✧ Print out the ICC data cards for your volunteers and bring along a scale with which to weigh the rubbish bags;
- ✧ Ensure procedures are in place concerning the correct handling of:
  - ◆ medical waste (syringes, etc.) and sewage waste (condoms, tampons etc.)
  - ◆ dead, entangled, or injured animals
  - ◆ medical emergencies

### ON THE DAY OF THE CLEANUP

- ✧ Set up your volunteer check-in point & have the gloves, bags, data cards and pencils ready;
- ✧ Brief the volunteers on the division of labour and the importance of accurate data collection;
- ✧ As the volunteers return, collect & check their data cards, then weigh the rubbish.
- ✧ Oversee the sorting of recyclable debris (if necessary);
- ✧ Make sure that all the rubbish is taken away by the FEHD.

### IMMEDIATELY AFTER THE CLEANUP

- ✧ Congratulate yourselves, your site coordinators, and all the volunteers for an job well done;
- ✧ Total the number of people, weight and distance covered in your cleanup and report to Green Council;
- ✧ Gather all the used data cards and send them or an electronic file back to CE within 2 weeks of your cleanup; &
- ✧ Please send a copy of any photos, newspaper clippings, information or media announcements to Green Council.

B e s t o f a l l , h a v e f u n !

# APPENDIX IV

## Media Coverage of the ICC 2013

Media Date	Media Type	Publication
2013-12-16	Newspaper	Apple Daily
2013-12-16	Newspaper	Hong Kong Commercial Daily
2013-12-16	Newspaper	Hong Kong Daily News
2013-12-16	Newspaper	Hong Kong Economic Times
2013-12-16	Newspaper	Hong Kong Headline
2013-12-16	Newspaper	Metro Daily
2013-12-16	Newspaper	Oriental Daily
2013-12-16	Newspaper	Sing Tao Daily
2013-12-16	Newspaper	Sky Post
2013-12-16	Newspaper	South China Morning Post
2013-12-16	Newspaper	The Standard
2013-12-16	Newspaper	The Sun

### (Press Conference Media Coverage)

16-12-2013\_Hong Kong Daily News A15

A15 2013年12月16日 星期一 責任編輯：鄧明 尚文 **香港新聞** Hong Kong Commercial Daily **香港商報** <http://www.hkcd.com.hk>

## 香港海岸清潔運動統計

# 十大海洋垃圾 發泡膠最多



【香港商報訊】實習記者王卓軒報

道：由環保促進會統籌的「香港國際海岸清潔運動2013」已於上月完成，近3000名義工總共為香港海岸清理了超過5300公斤垃圾。大會公布的「香港2013十大海洋垃圾」統計資料顯示，發泡膠碎片成為香港海灘垃圾之首，數量較去年上升一倍，創本港歷年新高。大會亦指出，86%海洋垃圾的來源是「岸邊及康樂活動」，表明港人的環保意識有待提高，期待政府能夠加強執法，防止大眾亂拋垃圾，並進一步推動廢物循環再產業的發展，實施可持續的長遠廢物策置策略。

### 2851義工檢5353公斤垃圾

一年一度的「香港國際海岸清潔運動」已於2013年9月21日至11月9日舉行。來自14間學校、51間企業及非政府機構、社區團體及個人組成的2851名義工，分別在35個地點進行了70次清潔活動，為長達227公里的海岸線清理了5353公斤的垃圾。大會公布了2013年度「香港國際海岸清潔運

動」的十大海洋垃圾。數據顯示，連續多年位列十大海洋垃圾三甲的發泡膠碎片成為今年榜首，佔所有垃圾的20.79%之多，達到13664件，比去年的數量上升一倍，創本港歷年新高。至於去年的冠軍玻璃碎片，數量顯著下降。另外十大海洋垃圾當中九項的來源是「岸邊及康樂活動」，包括煙蒂、膠樽、飲管及膠袋等。由此可見，仍有很多海灘使用者不關他人，沒有清理自身製作的垃圾，也沒有意識到

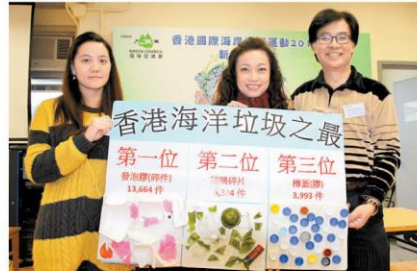
### 2013年十大海洋垃圾排名榜

排名	垃圾種類	檢拾數量 (件)	所佔比重
1	發泡膠碎片(碎件)	13664	20.79%
2	玻璃碎片	6324	9.62%
3	瓶蓋(膠)	3993	6.08%
4	香煙/煙蒂	3619	5.51%
5	膠品膠樽(2公升或以上)	3512	5.34%
6	塑膠/發泡膠包裝	3500	5.33%
7	飲管/蔗片樽	2223	3.38%
8	膠袋	2180	3.32%
9	食物包裝紙/盛器	2146	3.27%
10	建築廢料	2097	3.19%

海洋垃圾會對海洋生態乃至人類健康都會帶來嚴重威脅

### 須加強執法防岸邊拋垃圾

環保促進會行政總幹事何惠萍表示，非常滿



香港國際海岸清潔運動2013「香港十大海洋垃圾」頒獎禮(中)公布十大海洋垃圾頒獎禮(右)一環保促進會行政總幹事何惠萍(中)與獲獎者合影(左)王卓軒攝

意本屆義工的參加人數，但從本屆活動檢獲的垃圾數量來看，各界還需繼續努力保持海岸清潔。她代表大會提出了建議，希望包括海關、環保署、食環署、房屋署、警務處及海事處在內的相關政府部門加強執法，防止市民在岸邊拋棄垃圾，並進一步推動廢物循環再產業的發展。與此同時，希望本地非政府環保組織在教育及勸喻香港市民保護海洋環境方面負起責任，讓大眾明白到保護海洋環境，人人有責。

# 10大海洋垃圾 發泡膠最多

**愛** 護海港人人有責，但海洋垃圾卻隨處可見。有環團列出本港10大海洋垃圾，發泡膠碎片、玻璃碎片、膠製瓶蓋依序列為三甲。

去年第二位的發泡膠碎片，更較去年激增88%，躍居首位。團體更發現，近9成海洋垃圾來自市民岸邊及康樂活動。

■本報記者 李俊謙



表示，在清潔活動中拾獲的發泡膠碎片較去年上升。

**海洋垃圾排名**

2013年排名	2012年排名	垃圾種類	數量(件)	(與2012年變幅)
1	2	發泡膠(碎片)	13,664	(+88%)
2	1	玻璃碎片	6,324	(-61%)
3	5	膠瓶蓋	3,993	(-6%)
4	4	香煙或煙蒂	3,619	(-41%)
5	8	飲品膠樽(2公斤或以下)	3,512	(+4%)

資料來源：環保促進會

## 玻璃碎片膠瓶蓋 同列三甲

環保促進會於9月21日至11月9日期間，進行國際海岸清潔活動，來自11間學校、61間公司機構以及個人共2,852名義工，於35個地點進行70次清潔活動，共清理出5,353公斤海洋垃圾。

團體按收集回來的垃圾，排列本港10大海洋垃圾，發現發泡膠碎片居榜首，共檢到13,664件，較去年上升88%。至於去年排榜首的玻璃碎片則下跌至第2位，共檢到6,324件，其次為膠製瓶蓋及煙頭（詳見表）。另更檢起多種「奇

異」海洋垃圾，如馬桶、舊式電視機、貨車防撞桿及石油氣樽等。

**水上活動增導致 損生態**

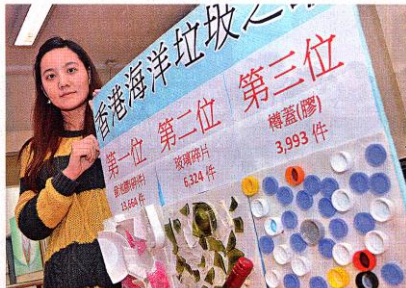
促進會行政總幹事何惠萍指，發泡膠碎片上升原因與市民水上康樂活動有關，但不涉及去年膠粒事故之膠粒。公開大學科技學院院長何建家則指，發泡膠會釋放出毒物質影響海洋生態，團體亦發現，86%的海洋垃圾源自岸邊及

康樂活動，包括煙頭、膠樽瓶蓋及食物包裝紙等，較去年上升22%，反映使用海灘的市民照顧他人，未有妥善清理自身製造的垃圾。

促進會高級項目主任陳嘉麗舉例指，政府轄下的泳灘本應屬禁煙地區，但仍檢獲1,658件煙頭，而玻璃碎片則常見於赤柱等旅遊景點的附近海域，認為政府就泳灘清潔管理的監管力度仍不足，建議當局加派人員巡視及執法，增設分類回收設施。

## 拾獲碎片倍增 疑因中港貿易頻繁

# 發泡膠登海洋垃圾榜首



環保促進會公佈今年度拾獲的十大海洋垃圾排名，由一萬三千六百件的發泡膠碎件登上榜首。

環保促進會兩個月前動員三千名義工，於全港三十五個海灘發起香港區「國際清潔運動」，昨日公布今年度拾獲的十大海洋垃圾排名，由一萬三千六百件的發泡膠碎件登上榜首，拾獲數目比去年上升接近一倍，相信與中港海洋貿易活動增加有關；排名第二及第三位的分別是玻璃碎片及膠製瓶蓋；排名第四的煙頭數目超過三千件，約半數來自禁止吸煙的康文署沙灘。

記者 黃雅茹

今年度香港區「國際清潔運動」今年九月二十一日至十一月九日的七星期舉行，共有來自六十二家機構組成的三千名義工，分別在全港三十五個地點進行七十次清潔活動，今年共清理出五萬三千五百公斤的垃圾，數字比往年較低。

不過，今年發現的垃圾中，發泡膠碎件是本港十大海洋垃圾之首，共有二萬三千六百件，比去年上升一倍，佔所有海洋垃圾的兩成，創歷年新高。公開大學科技學院院長何建家表示，發泡膠碎件與去年的膠粒事故無關，相信原因是中港海洋貿易活動頻繁，例如水上康樂活動、購物、運輸等，由於發泡膠碎件較輕和脆，亦不易分解，容易隨洋流、潮汐退沖到岸邊。

### 煙民亂棄煙頭

至於玻璃碎片的垃圾件數，較去年一萬六千多件，顯著下降至六千多件，不過仍居垃圾排行榜第二位，環保促進會高級項目主任陳嘉麗表示，玻璃碎件在實質數量較減少，不過由於分類如赤柱、大嶼山等仍有不少玻璃垃圾，可能是餐廳棄置的玻璃垃圾，可見政府仍須加強措施。

今年執到的香煙及煙頭垃圾數目共有三千六百多件，其中較前一年（一千六百多件）在康文署轄下泳灘拾獲，陳嘉麗表示，可見仍有相當多吸煙人士未有適當處理煙頭，甚至亂倒於沙灘這些禁煙區吸煙。她又指當日清潔時，義工未有發現沙灘上有吸煙者，亦未有吸煙人員執行禁煙的巡邏。何建家表示，煙蒂會於海洋中寄生魚類，香煙中的尼古丁也會影響魚類發育，又會污染海水，減少海洋中的含氧量。

建築廢料亦上升一位，成為今年十大海洋垃圾第十位，其主要分布於屯門龍鼓灘及大嶼山的泳灘。各站檢獲建築廢料的三成，有職會最近附近的大型工程填海置業所致，反映回收再造業缺乏支援，回收率高不足，以及運輸成本高等因素。

### 2013年十大海洋垃圾

1. 發泡膠(碎件)	13,700件	20.8%
2. 玻璃碎片	6,300件	9.6%
3. 瓶蓋(膠)	4,000件	6.0%
4. 香煙/煙蒂	3,600件	5.5%
5. 飲品膠樽	3,500件	5.3%
6. 膠樽/膠樽包裝	3,500件	5.3%
7. 飲品膠樽	2,200件	3.3%
8. 膠袋	2,200件	3.3%
9. 食物包裝紙/廢器	2,100件	3.2%
10. 建築廢料	2,100件	3.2%

資料來源：環保促進會

# Report on the International Coastal Cleanup 2013 Hong Kong

## Others:

1. [http://orientaldaily.on.cc/cnt/news/20131216/00176\\_046.html](http://orientaldaily.on.cc/cnt/news/20131216/00176_046.html)
2. [http://the-sun.on.cc/cnt/news/20131216/00407\\_078.html](http://the-sun.on.cc/cnt/news/20131216/00407_078.html)
3. <http://hk.apple.nextmedia.com/realtime/news/20131215/51996213>
4. <http://www.skypost.hk/%e6%b8%af%e8%81%9e/%e6%96%b0%e8%81%9e/20131216/001/%E5%8D%81%E5%A4%A7%E6%B5%B7%E6%B4%8B%E5%9E%83%E5%9C%BE%20%E7%99%BC%E6%B3%A1%E8%86%A0%E7%A2%8E%E7%89%87%E5%B1%85%E9%A6%96/121968>
5. <http://www.metrohk.com.hk/index.php?cmd=detail&id=224994>
6. <http://www.scmp.com/news/hong-kong/article/1381334/polystyrene-proves-be-beach-enemy-no-1>
7. [http://news.stheadline.com/dailynews/content\\_hk/2013/12/16/266885.asp](http://news.stheadline.com/dailynews/content_hk/2013/12/16/266885.asp)
8. [http://www.thestandard.com.hk/news\\_detail.asp?we\\_cat=4&art\\_id=140607&sid=41138988&con\\_type=1&d\\_str=20131216&fc=10](http://www.thestandard.com.hk/news_detail.asp?we_cat=4&art_id=140607&sid=41138988&con_type=1&d_str=20131216&fc=10)
9. <http://www.hkdailynews.com.hk/news.php?id=309198>



**[END]**