

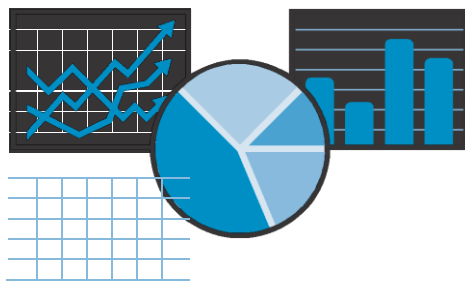
SUMMARY

3rd HALONG BAY CLEANUP DATA ANALYSIS



1 CLEAN UP TRASH & COLLECT DATA

3 PUBLISH RESULTS



2 ORGANIZE & ANALYZE DATA

4 REDUCE OUR IMPACT

1. SITE AND CAMPAIGN INFORMATION

Name of campaign	“Action for a Green Ha Long” Programme Slogan: Join the flight for a healthy ocean
Campaign time	29 September 2017
Cleanup Sites	Ang Du area, Ha Long Bay (04 Cleanup beach, details in photo) Province: Quảng Ninh Country: Vietnam
Type of cleanup:	Beach/islands (04 location/sites)
Number of Volunteers working in this campaign	112 participants including 33 Male and 79 Female (Children: No)

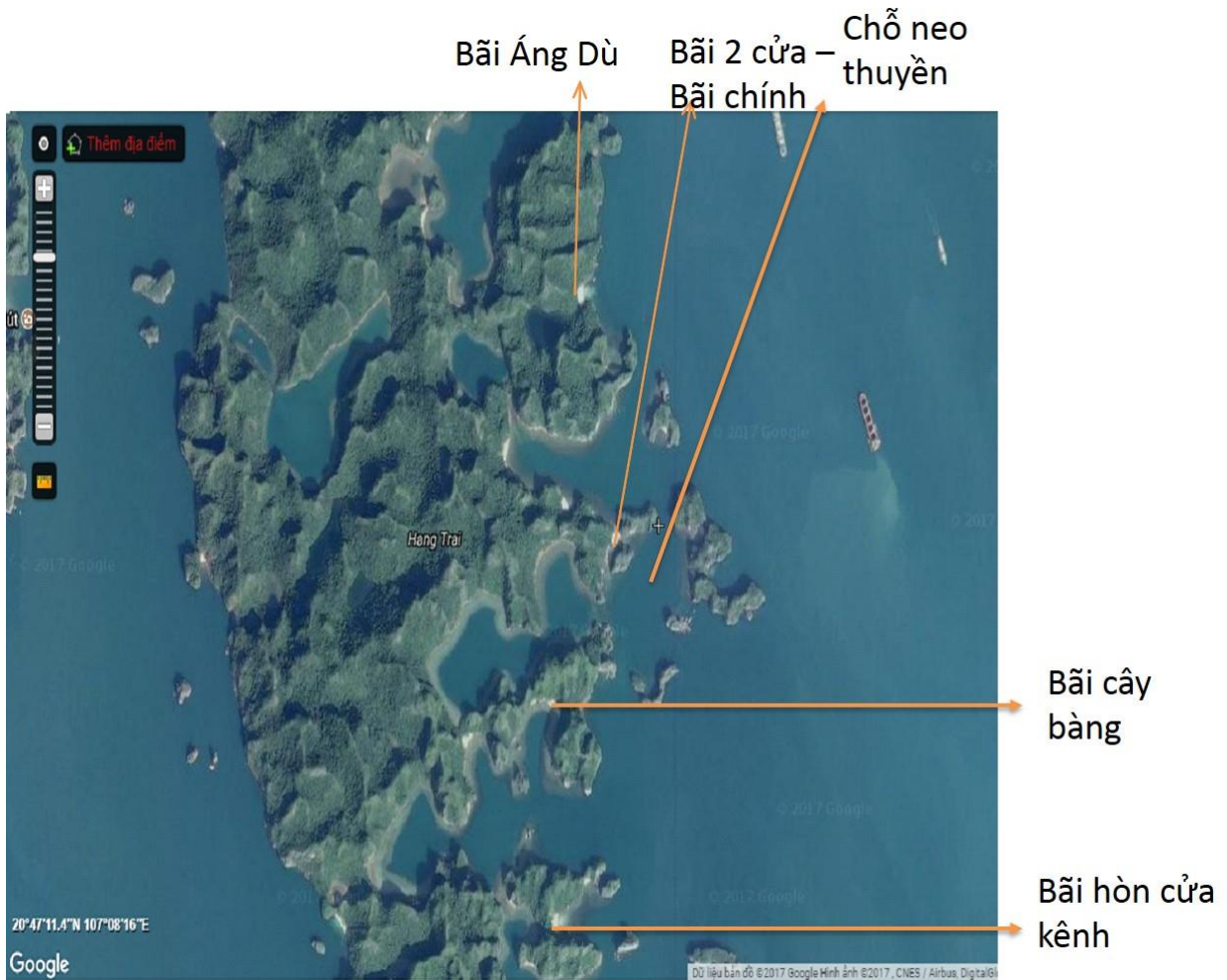


Photo: Map of Ang Du area, Ha Long Bay

2. DATA ANALYSIS FROM COLLECTED TRASH

Summary the collected trash



112 volunteers



315 bags



1.7 km

Number of items: **13,504 items**

Weight of collected gabbages: **2,423 kg** within 3.5 hours

Percentage of Non-recyclable 83% and recyclable items **17%**, the clean-up helped to recycle **1051** items that would not have been recycled.

Weird things found around Ang Du, Ha Long Bay: significantly large amount of hazardous waste including hypodermic needles, medicine, Blister packs, Cigarette Lighters

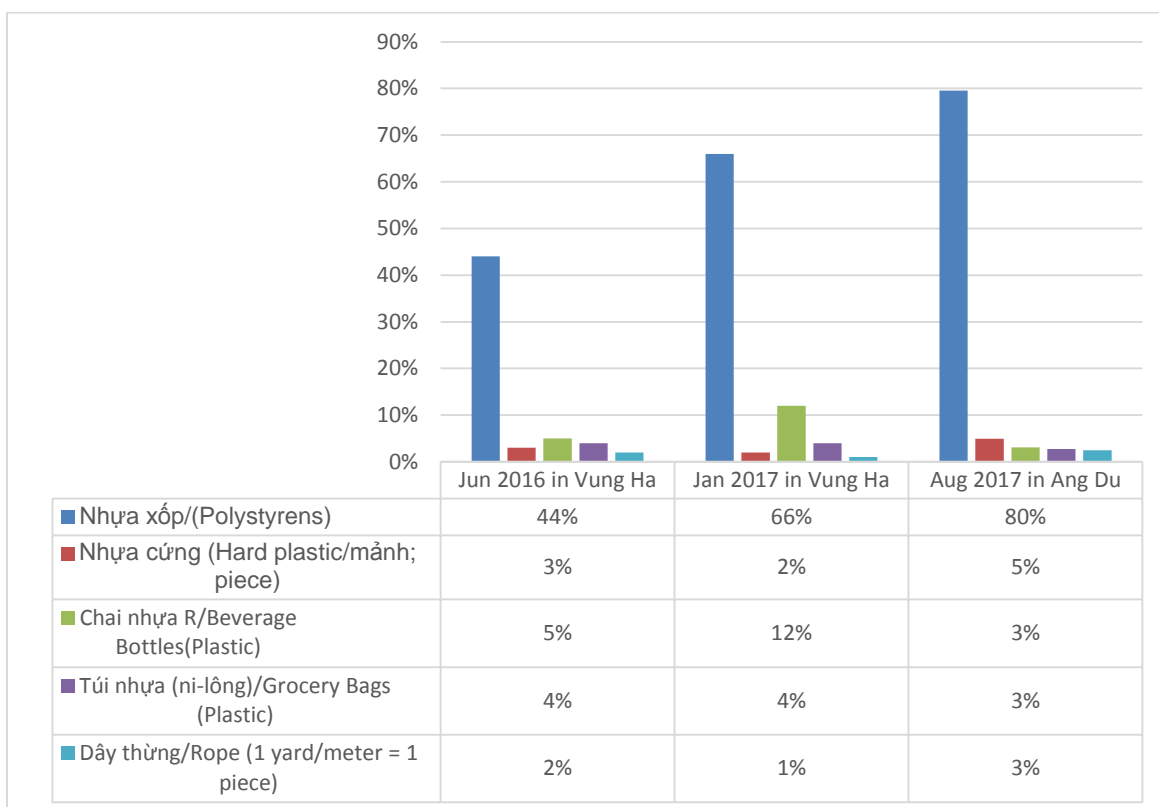
Dead or injured animal: No.

Highlighted: Polystyrene foam is dominant trash found in cleanup site; and second item found is small pieces of hard plastic

Most likely to be found items in Ang Du, Ha Long Bay compared with other collection sites in previous campaigns

	Counted by items	Number of items	Percentage
1	Nhựa, dẻo, xốp (NR)/Polystyrens (hard plastic)	10746	80%
2	Nhựa cứng (mảnh)	664	5%
3	Chai nhựa R/Beverage Bottles(Plastic)	419	3%
4	Túi nhựa (ni-lông)/Grocery Bags (Plastic)	374	3%
5	Dây thừng/Rope (1 yard/meter = 1 piece)	338	3%
6	Dép cao su, dép tông/Rubber sandals/Flip-flops, Giày da/Leather shoes	257	2%
7	Bật lửa (NR)/Cigarette Lighters	169	1%
8	Vỉ thuốc/Blister packs	133	1%
9	Chai thủy tinh/Beverage Bottles (Glass)	89	1%
10	Bóng đèn (H)/Flashbulb	57	0%
11	Other	258	2%

Top 5 most found items in three clean-up campaigns under Ha Long – Cat Ba Alliance framework



3. DISCUSSION, RECOMMENDATIONS FROM RESULTS AND UPCOMING ACTION

- After three campaigns, plastics in different forms including polystyrene, plastic bottles, plastic bags are the dominant trash. Among them, polystyrene is still the most commonly found in Ha Long Bay and the number of styrofoam collected in the third campaign in Ang Du – 10,746 items was more than 1.5 times higher than in the Vung Ha – 6,560 items (Jan 2017). This increase can be attributed to longer duration of collection activities and more volunteers involved. On the other hand, it also raises a question of policy impacts. In July 2016, Ha Long City People’s Committee issued Decision No. 349/TB-UBND of to ban the use of polystyrene in floating structures on Ha Long Bay in an effort to reduce pollution from polystyrenes. However, both Ang Du and Vung Ha areas are close to the border between Hai Phong and Quang Ninh Province and in the case of Ang Du, it is adjacent to Lan Ha Bay, Cat Hai District, Hai Phong City. While mollusk floating farms in Lan Ha Bay continue to use polystyrene for buoyancy and discharge broken pieces of styrofoam to the sea, a single action from Quang Ninh side could not address the problem. Recently, Cat Hai District People’s Committee had a plan to reduce the total floating farms to 152 by 2020 and ensure only sustainable farms that meet certain environmental criteria, including the use of environmentally friendly floats are allowed to stay. Yet, it is critical to have collaboration and coordination between two provinces to manage pollution sources to Ha Long Bay and Cat Ba Archipelago. More support for aquaculture farmers and local communities are also needed to improve their awareness, change farming practices and the use of polystyrene for buoyancy towards less impact on environment.
- The presence of hazardous waste including hypodermic needles, broken light bulb, cigarette lighters will not only create negative impacts on the water but also pose threats to the safety of visitors and local people. That might result in a bad reputation for a tourist attraction destination. It also raises the need to have interventions towards efficient and safe waste and plastic separation. Increasing application of science-based solutions, promoting business innovation and entrepreneurship, effective community empowerment in waste management, especially the involvement of poor women and youth in reuse and recycle plastic waste products can help.
- The campaign again put a strong emphasis on the importance of data collection in clean-up events and regular monitoring of wastes and pollution sources to inform decision making. We noticed the rising interest and attention of donors, NGOs and other stakeholders in the issue of marine debris. In order to have a common understanding of the problems for proper solutions, it is necessary to have a standard methodology for monitoring and reporting to track changes in term of marine debris sources, abundance, and distribution, movement, and impacts on regional, national scales. Experiences from three “Action for A Green Ha Long” programmes should be upscaled, replicated and if possible, adopted to be a protocol for Vietnam. The network of volunteers interested in data gather and environment protection such as Ocean Saver should be promoted and expanded to monitor marine debris and apply standardized methodology and reporting.
- Changing behaviors and practices require a long-term, coordinated, education-based program in parallel with enforcement of regulations and policies. The participation of private sector such as Bhaya – HG Holdings, Coca-Cola can help mobilize resources to

invest in nature protection and encourage green practices towards sustainable development.

- In the next clean-up activities, we recommend to find suitable equipment/tools to collect the small pieces of plastic and polystyrene. Sieves could be used that can allow the sand to fall through but retain the larger particles for collection