



#HALONGCLEANUP

# JOIN THE FIGHT FOR A HEALTHY OCEAN

## HALONG CLEANUP DATA ANALYSIS SUMMARY

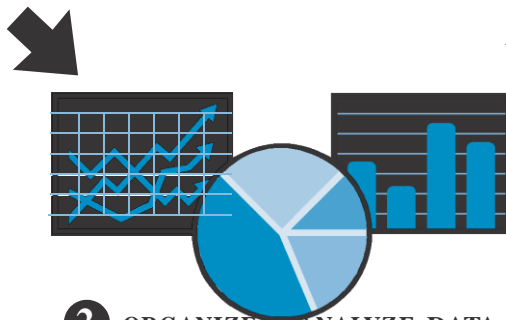


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**1** CLEAN UP TRASH & COLLECT DATA  
THU GOM RÁC THẢI VÀ THU THẬP THÔNG TIN



**3** PUBLISH RESULTS  
CHIA SẺ KẾT QUẢ



**2** ORGANIZE & ANALYZE DATA  
PHÂN TÍCH THÔNG TIN



**4** REDUCE OUR IMPACT  
GIẢM THIỂU TÁC ĐỘNG

# 1. SITE AND CAMPAIGN INFORMATION

Name of campaign	“Action for a Green Ha Long” Programme <b>Slogan: Join the fight for a healthy ocean</b>
Campaign time	10 January 2017
Cleanup Sites	Vụng Hà area, Ha Long Bay (03 Cleanup beach, details in photo)  Province: Quảng Ninh Country: Vietnam
Type of cleanup:	<b>Beach/island</b>
Number of Volunteers working in this campaign	106 participants (Children: No)

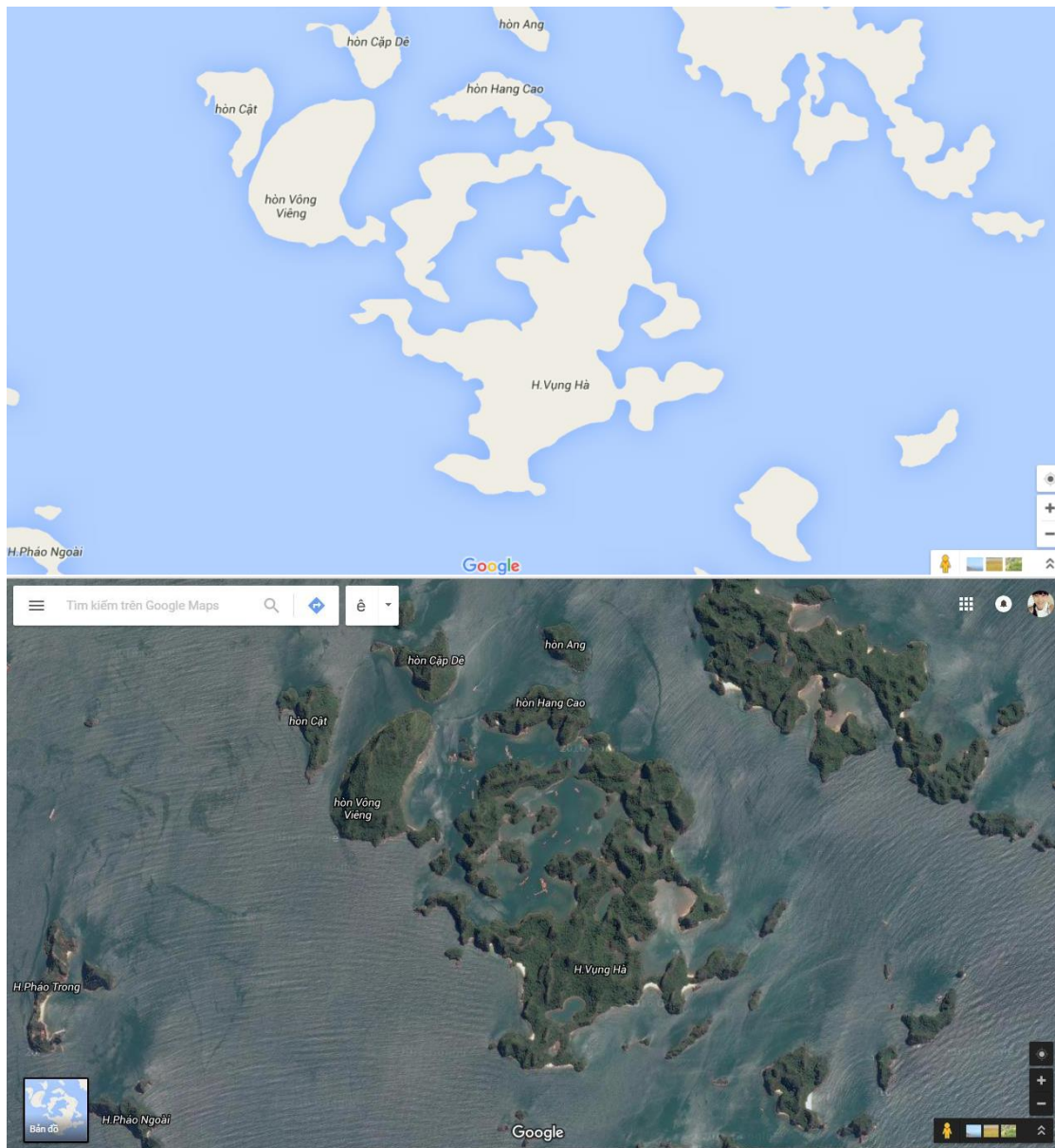


Photo: map of Vụng Hà area, Ha Long Bay

## 2. DATA ANALYSIS FROM COLLECTED TRASH

### Summary the collected trash



106 volunteers



244 bags



1.1 km

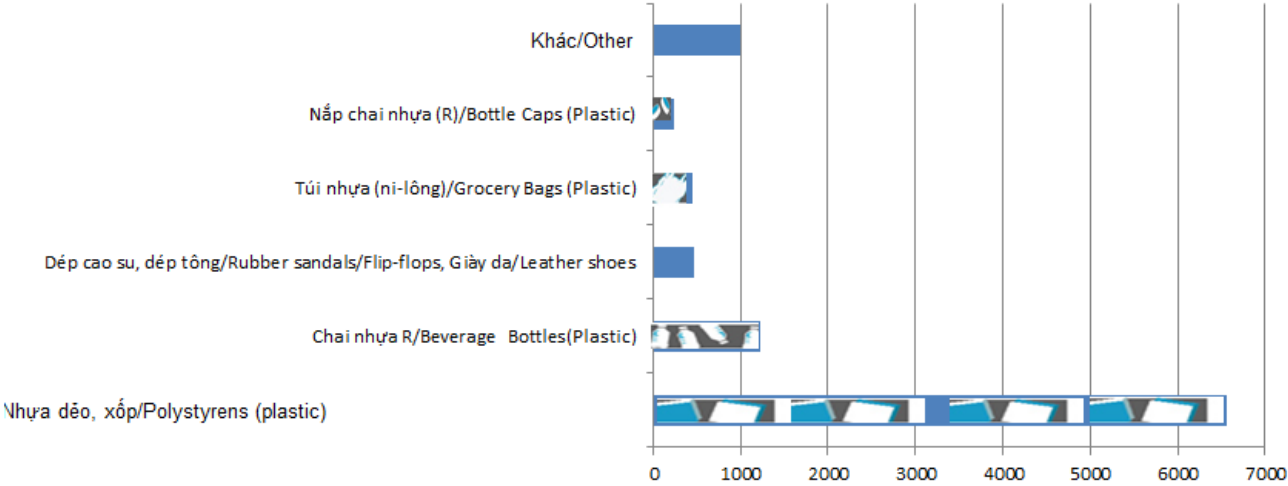
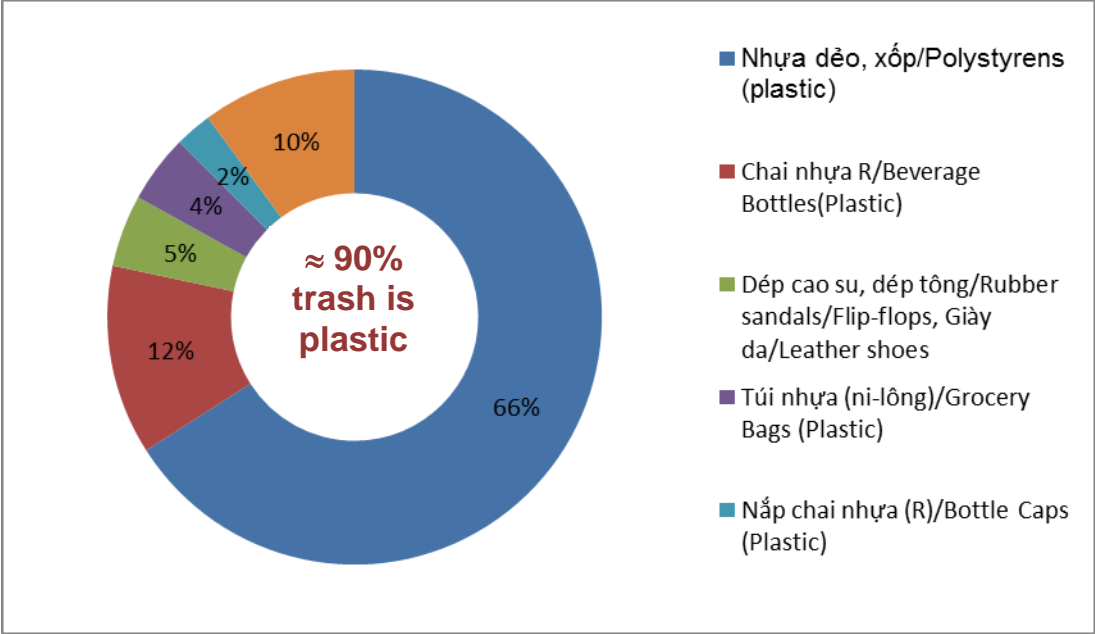
Number of items: **9948 items**

Percentage of Non-recyclable 83% and recyclable items **17%**, the clean-up helped to recycle **1688** items that would not have been recycled

### Most likely to find items

#### Top 05 items found in Vung Ha area, Ha Long Bay

	Items found	#	%
	Total	<b>9948</b>	
1	Nhựa dẻo, xốp (NR)/Polystyrenes (plastic)	6560	<b>66%</b>
2	Chai nhựa (R)/Beverage Bottles(Plastic)	1232	12%
3	Dép cao su, dép tông/Rubber sandals/Flip-flops, Giày da/Leather shoes	468	5%
4	Túi nhựa (ni-lông)/Grocery Bags (Plastic)	442	4%
5	Nắp chai nhựa (R)/Bottle Caps (Plastic)	241	2%
	Khác/ Other	1005	10%



*Highlighted: Polystyrene foam is dominant trash found in cleanup site; and second item found is plastic bottle.*

**Weird things found around Vung Ha, Ha Long Bay:** Skull of animal (diameter 20cm),

**Dead or injured animal:** No.

### **3. DISCUSSION, RECOMMENDATIONS FROM RESULTS AND UPCOMING ACTION**

- ✓ Polystyrene is one of many types of plastics but presents a particular environmental concern. Production requires significant energy and use of non-renewable resources. There are also limited recycling services available due to its unique properties and polystyrene is likely to escape from landfill and become rubbish again. Polystyrene foam is a derivative of polystyrene known as styrofoam or expanded polystyrene (EPS). It is used in protective packaging for appliances and in such products as insulated disposable cups, meat trays and panel insulation. We saw the polystyrene broken into smaller pieces. The ingestion of polystyrene fragments/pieces in marine species is a big concern. In Ha Long Bay, the polystyrene represents the most common item found. It can come from fishing and aquaculture activities in the bay or from the Cat Ba Archipelagos and nearby areas. Similar to the first campaign in June of 2016, Polystyrene foam is dominant trash found in the cleanup site. On 26 July 2016, the Ha Long City People's Committee officially announced the decision to ban the usage of polystyrene in the floating villages of Ha Long Bay and also began working with communities to replace the material with more sustainable alternatives. This announcement represents a significant stride forward in combatting Ha Long's high levels of polystyrene pollution. After 06 months the situation still needs to improve. The program should conduct regular waste monitoring in the collection sites for comparison as well as finding out the sources of those items to support the implementation and enforcement of the decision to ban the usage of polystyrenes in the bay. With next clean-up activity, we also recommend getting some additional equipment to collect the small pieces of plastic and polystyrenes. Sieves could be used that can allow the sand to fall through but retain the larger particles for collection.
- ✓ For the last few years, cleanup and research efforts have significantly increased knowledge of the topic of marine debris. To effectively manage and thereby mitigate the impacts from marine litter, there is a need to develop a good understanding of the problem and specifically to understand the principle types and sources of litter in the marine environment. To achieve this aim there is a need to ensure that relevant, quality data are available that allow a comprehensive analysis of the nature and sources of litter and how these are changing through time and in response to management interventions. However, the field as a whole has not adopted standardized monitoring procedures or debris item categories. Standard methodology and reporting are necessary in order to compare marine debris source, abundance, and distribution, movement, and impact data on regional, national scales. For the Ha Long Bay, a pilot project based on the 02 organized clean-up campaigns could be used to adopt a protocol for Vietnam.

- ✓ Dialogues for regular monitoring and cleanups among relevant stakeholders should be facilitated for more engagement.
- ✓ Bhaya, as well as other local businesses, should expand and replicate green practices to join the fight for a green Ha Long.
- ✓ Changing behaviors and practices require a long-term, coordinated, education-based program in parallel with enforcement of regulations, policies. Youth engagement is important of the program. There is a demand for establishing a volunteer network in order to monitor marine debris as well as share standard methodology and reporting.
- ✓ *Technical experiences from 02 clean-up campaign:*
  - Separation of recyclable items during trash collection should be improved and kept up with having regular vendors to take the trash and send it to recycling premises (such as plastic bottle). It is necessary to develop further in-depth training contents with what to do with hazardous wastes and safety guidelines
  - Clean-up and data collection: if there is a short time for clean-up activity, it seemed quite difficult and time consuming to classify and count all of the pieces of rubbish found. There are 2 options recommended that might be able to make this process easier, and therefore more rubbish can be picked up, as well as making sure accurate data can be collected. These might also be simpler for the new volunteer network to monitor data. (1) Option 1: Get the volunteers to put all of the rubbish (you can get them to separate the recyclables and non-recyclables if needed) into bags without counting or separating). Then, wastes from some sample bags are taken out to be counted in order to estimate the quantity of all the bags). For example, if there are 100 bags, 10 bags can be taken as samples and then multiply the results for the total number of the bags, with the assumption that you get an overall representation of what was collected; (2) Option 2: Get the volunteers to separate the rubbish into the different types (but not count individual items) and into different bags. The weight of these bags can be determined. There is also a different option of calculating the weight of the bags – you could use a scale to measure, or if there is no scale, then convert the volume of the rubbish in the bag into a weight. There are guides that can be used for this. For example, if a 1m<sup>3</sup> bag is half filled with glass bottles, 0.5 can be multiplied by a standard conversion factor for glass bottles (0.174) to get 0.087 tonnes (or 87 kg).



## ANNEX PHOTOS OF HALONG CLEANUP



Photo 1: Preparation meeting in IUCN office





Photo 2-3-4: Trainings for core group/team leaders of volunteers

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**USAID**  
FROM THE AMERICAN PEOPLE

**Bhaya**  
THE CRISSE COMPANY

**Coca-Cola**

**IUCN**

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FOR A HEALTHY OCEAN**

Photo 5-6-7-8-9-10-11-12-13: Clean-ups campaign on 10 Jan 2017