

## TERM OF REFERENCE

### Consulting firm to support solid waste segregation activity at source in Hanoi city

#### 1. Background

Centre for Supporting Green Development (GreenHub) is a Vietnamese, science-technology organization under the Vietnam Union of Science and Technology Associations (Vusta) with oversight by the Ministry of Science & Technology, and with an CSO Registration Number A-1555. GreenHub was legally established on March 15, 2016, by Vietnamese experts with significant CSO experience in biodiversity conservation, community development, capacity building, and networking projects.

In 2019, the amount of domestic plastic waste discharged nationwide was 64,658 tons/ day, an increase of 46% compared to 44,000 tons/ day in 2010 (MoNRE, 2019). Nonetheless, only 15% of the country's generated plastic waste is recycled or reused (NPAP, 2020). The rest ends up mainly in landfills, open dumpsites, incinerators, or in the environment.

To tackle issues related to waste management, the Vietnam government has adopted the National Strategy on Integrated Solid Waste Management up to 2025, with the goal to minimize solid waste, strengthen integrated management of solid waste, and simultaneously implement solutions to promote waste management. GreenHub leveraged this momentum to be a pioneer in fostering Zero Waste practices in Vietnam by evaluating waste management, designing and implementing Zero Waste model (models for the collection, sorting, reuse, and recycling of domestic waste, organic waste,...) in communities, business, education and tourism enterprises. GreenHub strives to strengthen Zero Waste networks, develop professional staff, database systems related to Zero Waste, and promote advocacy.

To get a better understanding on composition of solid waste generated and solid waste management situation in three districts in Hanoi, GreenHub is looking for a consulting firm to facilitate activities of the solid waste segregation in Hanoi.

#### 2. Scope of work

The consulting firm will support GreenHub in solid waste segregation in three districts in Ha Noi: Tay Ho, Dong Da and Dong Anh districts:

- Support on the identification of suitable locations and the coordination on waste collection for conducting the waste characterization study.
- Provide a list of household information (Name of owner; address; number of family's member, phone number)
- Determine the waste collection routes and provide transport, collection of waste and **use the “coning and quartering” method**
- Facilitate workers and transportation of the waste

#### 3. Location and time

- Location: three districts in Hanoi: Dong Anh, Dong Da and Tay Ho districts
- Time: in July and September 2022.

#### 4. Submission Requirements

- Interested organisations/ teams should submit the Quotations with following information/ documents via the link: <https://smrtr.io/9-ssG>
- **Deadline for Quotation Submissions: By 17:00 on July 28th, 2022**

#### 5. Detail of work

No.	District	Activity	Time	
			Jul 2022	Sep 2022
1	Household level	Suggest and provide a list of 1250 household in 05 wards in Dong Anh, 1250 household in Dong Da and 500 household in Tay Ho with basic information (Name of owner; address; number of family's member, phone number)		
		Select the collection routes (alleys, streets, etc.);		
		Plan for allocation and dispatch of collection vehicles;		
		Carry the garbage to the collection points and mix as required		
		Facilitate and support GreenHub team to do waste audit		
2	Business level	Provide the list of units (02 restaurants, 02 hotels, 02 markets, 01 office and 02 schools) in Dong Da district with time information.		School will do later in Sep
		Support communication and exchange of information for GreenHub to work with the selected units		
		Facilitate and support GreenHub team to do waste audit		
3	End-point level	Provide a location list of the generation sources, collection points, transfer station, landfill.		
		Coordinate workers and vehicles to transport solid waste to the generation sources, collection points, transfer station, landfill.		
		Facilitate and support GreenHub team to do waste audit at each location		
		Weighing garbage (total weight of the vehicle) at the collection point		
4	Street waste	Select the collection routes (alleys, streets, etc.);		
		Carry the garbage to the collection point and mix as required		
		Facilitate and support GreenHub team to do waste audit		
5	Transfer stations	Select locations		
		Carry the garbage from the generation sources to the transfer stations and mix as required		
6	Support to clean up the waste after the audit at each level			

## 6. The consulting firm quotes prices in the following form:

REQUEST FOR QUOTATION MẪU YÊU CẦU BÁO GIÁ					
Company information:					
Thông tin công ty					
Date:					
Ngày					
No.	Description	Quantity	Unit	Company's Name	
STT	Mô tả hàng hóa/dịch vụ	Số lượng	Đơn Vị	Tên công ty	
				Unit Price	Total Price
				Đơn Giá (VNĐ bao gồm VAT)	Thành Tiền
1	Fee for workers to collect garbage from household x 3 districts x 7 days	378	workdays		
2	Fee for driver assistants for garbage truck to pick up garbage x 3 districts (for household) x 7 days	168	workdays		
3	Fee for workers to mix garbage and take out the required amount in three districts x 7 days	140	workdays		
4	Fee for workers to take street waste	10	workdays		
5	Incentives for coordinators of garbage trucks in three districts x 7 days, at transfer station and landfill	48	people		
6	Incentive for supervisors at the collection point in 03 districts (household) and at street, collection points, transfer stations and landfill 8 x 9 days	67	workdays		
7	Fee for renting dump trucks for carrying garbage to transfer station in three district x 7 days	84	car		
8	Cost for renting wheel loaders to do the mixing at transfer stations (3 districts in 9 days) and landfill	56	car		
9	Electronic scale to weigh garbage in the process of mixing and dividing samples.	5	pcs		
10	Gloves	20	pair		
11	Rubber boots	20	pair		

12	Broom	20	pcs		
13	Shovel	20	pcs		
14	Rake	20	pcs		
15	Masks	110	pcs		
16	Tarpaulin 200m <sup>2</sup> x 3 places for mixing garbage	600	m <sup>2</sup>		
17	Tarpaulin 30 m <sup>2</sup> x 3 places for waste audit	90	m <sup>2</sup>		
18	Cost of industrial cleaning after garbage removal at transfer stations in three districts	2800	m <sup>2</sup>		
19	Garbage bag to contain garbage sample	10	kg		
20	The cost of spraying disinfection at transfer stations at three districts	28	liter		
21	Cost for renting hook-lift to carry garbage from transfer station to landfill	100	ton		
22	Tent for garbage mixing and sorting	2	lumsump		
Total Cost Value in VNĐ _____					
Tổng Giá Trị/ Chi Phí bằng đồng Việt Nam _____					