

# EWB DK/ SDU student project

# Garbage collection technology and business



EWB DK/ SDU Student project

# Garbage collection technology and business

---

In the West African country of Sierra Leone, there is no proper waste management system. The capital, Freetown has been severely challenged by the growing amount of plastic, especially disposable packaging. The local waste infrastructure is extremely deficient and often not present, which means that the waste is dumped in illegal places.

The problem of the enormous amounts of waste seems difficult to solve, and to avoid that the waste ends up in the city's rivers and seeps into the sea.



In some areas local organizations has demonstrated that cleaning up the community improves experienced quality of life.

- What is the unsolved matter or issue?

# Garbage collection technology and business

---

## *Initial problem statement*

There is a need for establishing clean living conditions in large cities in Sierra Leone. How can a system/process be developed that helps people maintain and clean their communities to be free of garbage?

Initial suggested Constraints:

- The system can be built locally
- The system can be operated and serviced by the local producers/ users and or local service providers
- The system fits into the existing means of transportation

Examples of questions to look into:

- What kind of waste is being produced and dumped today?
- How can a system be designed and how shall it be financed and operated?
- Could a system be shared between several communities (business model)?
- How can a “business model” that provides sufficient incentive structure be created?
- Is there any operational (business) value gained in the introduction of a local system – what kind of infrastructure around the system is needed?



Rivers are used as garbage dumps

---

## Example of an uncleaned coastal area



A cleaned  
area – now  
with  
vegetables

---

