Recycling Barge Pilot Project in Stockholm

Lena Youhanan works as a technical investigator at Stockholm Vatten och Avafall (SVOA), which is the department responsible for all matters related to water and waste in the city. She oversees the implementation of an innovative urban logistics solution within the Awaken Sleeping Asset Project. This "Clean floating recycling collection service" pilot project SVOA analyses and evaluates the possibility of reducing the transport trips to the main recycling center. The aim of the pilot is to consolidate recyclables on a barge and not on land, making use of waterborne recycling facilities. Not only are Stockholm's numerous waterways currently underused, the use of containers placed on barges instead of streets or squares also has great potential to relieve the streets of traffic generated by trips to waste collection points and also to conserve scarce public space.

The Pop-up recycling is a mini recycling centre created on a barge that visits different locations at the Stockholm waterfront. So far these Pop-up recycling centers were implemented in different squares of the city. Citizens can bring their waste, including hazardous waste to the barge. For visitors without a car a free cargo bike is available at the barge and can be borrowed for the transport. You can also drop off your waste and pick up items that others no longer need. There are many municipal staff available on the barge to help visitors unload their waste and find their way around.

The barge hosts two containers, one with recycling where people can leave waste or broken items. Everything like metal, electronics, porcelain, glass and hazardous waste can be dropped off. The second container is called "bargain corner" because visitors can pick up a maximum of 10 items per person for free. Anything from porcelain, books, paintings to children's toys can be found. Everything that is not picked up by someone is sent to the Roslagstull' recycling centre where other staff members sort the materials. Some of these items are then handed in to second-hand shops or disposed of in the usual way for residual waste.

With this project SVOA wants to validate if the barge makes it possible to get closer to the residents and to increase customer value and service at the same time. It is also important for them to find out if higher environmental benefits can be achieved by reducing transport trips. On the first two test days the feedback from the customers was very positive, particularly from the residents of the Old town who normally have difficulties to get to a recycling centre.

The barge itself is towed by a boat running on environmental diesel from one location to the next and the transport of the waste from the barge to the large recycling center is done by electric vans or a truck that runs on biofuels. Evaluation is focused on benefits to the environment and the customers as well as cost-effectiveness. In addition, a simulation is currently run on this project by the colleagues from BOKU that look for improvements that could be done on different levels. There is also a short <u>video</u> available about this project.



