



WASTE SEPERATION THOUGH PASSANGER NUDGING BIN SYSTEMS

Graduation project for circular airports

Background

This graduation thesis will be part of Tulips. Tulips is a European H2020 project on demonstrating lower polluting solutions for sustainable airports across Europe and will run for 4 years. As part of the approach, it will demonstrate how 'zero-waste' can be achieved in an encapsulated airport environment, based on the following three principles: 1) Circular design principles, 2) Closed loop, and 3) Reuse and upcycle. By designing out waste and pollution, keeping products and materials in use, and regenerating rather than degrading natural systems, the circular economy represents a powerful contribution to achieving global climate targets.

For more information on Tulips visit the website: <https://tulips-greenairports.eu> or reach out to e.tschavgova@tudelft.nl

Assignment

Separating waste can be a challenging task not only at home but especially in a public space where all kinds of cultures come together.

Your assignment is on the one hand to analyze the current state of the bin system at Schiphol (FF3 containers). And on the other hand, to introduce and test passenger nudging strategies, which lead to improved waste separation and reduced contamination of waste. The aim is to understand the causes of incorrect waste separation and develop a bin system to resolve these difficulties. In the bigger picture, your work will contribute to our knowledge of waste separation in public spaces and get us a step closer to a circular airport.

First, you zoom into the current bin system with the aim have an initial analysis based on passenger observation regarding waste disposal, as well as assessing what can be learned from the current state of the bin system and waste streams. The commercial team of Schiphol can provide you with tools to conduct surveys (e.g perception of icons, colors, etc.). This will help you to gain a deeper understanding of cultural differences and create a base to identify opportunities for nudging strategies. Next to that, you will conduct literature research and develop interventions and strategies to improve waste separation. In consideration of feasibility from Schiphol's side and your graduation timeline, one nudging change strategy will be tested and the impact evaluated.

Conduction of interviews, observations, and evaluations of your ideas will be essential during this project.

We are looking for

We look for a Master's student, preferably DFI, who has an explicit interest in circular economy and sustainable behavior change. It is important to be open-minded and curious. Familiarity with the Dutch language is not required but can be of advantage.

We are offering

The position will be a collaboration between Schiphol and TU Delft. Since it is required to test nudging strategies at Schiphol, there will be support from the Schiphol facilities to conduct your research and tests.

Contact and more information

Start: January/February

If you are interested, please send us a short motivation e-mail and your curriculum vitae. You can send this to Elisabeth Tschavgova (e.tschavgova@tudelft.nl) and Sonja van Dam (S.S.vanDam@tudelft.nl)

For more information on the project, you can contact Elisabeth Tschavgova.