



TULIPS



Schiphol

DEVELOPING A ZERO-WASTE COFFEE CUP SYSTEM AT SCHIPHOL AIRPORT

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

The end of the era of disposable coffee-to-go cups is coming to end. New EU and Dutch regulations require businesses to rethink not only coffee cups but single use plastics in general. Your assignment is to suggest a large-scale systemic solution for the Schiphol gastronomic area regarding disposables based on the case study of coffee cups. Therefore, the goal of your graduation is to introduce a coffee cup system, which allows passengers to consume coffee while contributing to the reduction of waste at Schiphol. Your graduation project should consider that coffee cups are part of a larger group of single use plastics used within Schiphol food and beverages. These items will also need to be reconsidered in the future, to which your proposed design should also contribute.

First, you will conduct stakeholder interviews regarding the problem of disposable coffee cups, as well as their and their brand's needs and limitations for the implementation of a new coffee cup system. Second, at Schiphol, you zoom into the current state of disposable cups and passengers' needs. By that, you will assess what can be learned from the current state, map a customer journey and conduct the needed literature research. This will be your base to develop a solution for disposable coffee cups, which you will prototype, test, and evaluate at Schiphol. The generated insights can then be used to propose a concept for a large-scale solution for the whole Schiphol gastronomic area.

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 SPD, 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 your coffee cup system 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.