

# Project Proposal

For the Degree Program in Sustainability Studies

## Sustainability analysis of food storage systems in refrigerators



**Duration:** 5-6 Months (27,5 ECTS = 825 h)

**Location:** Remote / Sigmaringen, Lab Performance & Hygiene / Food Processing & Sensory analysis – G 109 – 924/926)

**Possibilities for a follow-up Master's Thesis:**  yes

**Potential Cooperation Partners** (if applicable): **BSH Hausgeräte GmbH**, Product area refrigeration, Giengen

**Supervisor / Contact:** Simone Wiedemann (simone.wiedemann@bshg.com) / Hanna Strehle (hanna.strehle@bshg.com)

**Aim of the project:** Profound analysis of sustainability benefits of chill compartments (storage zones with a temperature close to 0°C), with a special focus on food waste reduction, overall CO<sub>2</sub> reduction (food waste savings, shelf life extension,..) and overall economic savings.

### Project description:

1. Conducting global research on food waste on private household level to identify the types of food wasted and the quantities involved.
2. Conducting market research to understand consumer habits and behaviors related to food waste.
3. Calculating potential savings achieved through the implementation of effective food storage technology.
4. Set-up of relevant KPIs (e.g. CO<sub>2</sub> savings) related to the usage of chill compartments.

### Suitable for / Requirements for the student:

Students are required to have knowledge in consumer behavior, food technology, and sustainability metrics for project application.