

# Characterisation and Quantification of Food Waste in the Greek Hospitality Sector

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## Abstract

The management of food waste is a significant environmental problem. In Greece, approximately 2 million tonnes of food waste are generated each year, from which about 80% is generated by households, and the hospitality and food service sector, with 97% being disposed of in landfills. Food waste generation from commercial activities and services amounts to over 400 thousand tonnes annually. Hospitality and Food Service Sector food waste is just under 300 thousand tonnes and Wholesale and Retail food waste is just above 100 thousand tonnes. The intensified requirement for food waste diversion from landfill disposal and the current policy which requires its separate collection and treatment, necessitate an extensive accounting of food waste in order to acquire the relevant information regarding food waste management improvements. This study aims at presenting a methodology developed for conducting food waste compositional analysis with the use of a state-of-the-art Waste Analysis Campaign (WAC) methodology. Furthermore, the results of the compositional analysis of the hospitality sector's food waste in the intervention area of Heraklion and Hersonissos in the Region of Crete, Greece, are presented. The compositional analysis was executed using WACs. The waste collection and analysis campaigns (compositional analysis and microbiological investigation) took place between November 2017 and September 2018. During this period, food residues from four hotels in the area of Heraklion and Hersonissos in Crete were collected and the seasonal composition of the food residues was determined.

**Keywords:** food waste, foodservice, hospitality sector, compositional analysis, Greece

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