

What kind of wastes passengers produce when they travel with airlines

Niki Ttofali¹, Irene Voukkali^{1,2}, Pantelitsa Loizia², Antonis A. Zorpas¹

¹ Cyprus Open University, Faculty of Pure and Applied Sciences, Environmental Conservation and Management, Laboratory of Chemical Engineering and Engineering Sustainability P.O.Box 12794, 2252, Latsia, Nicosia, Cyprus; +357-22411936, antonis.zorpas@ouc.ac.cy, antoniszorpas@yahoo.com

² ENVITECH (Environmental Technology) Ltd, Institute of Environmental Technology and Sustainable Development, Department of Research – Development, P.O.Box 34073, 5309, Paralimni, Cyprus, pantelitsaloiza@envitech.org, pantelitsa-loizia@hotmail.com, www.envitech.org
Presenting Authors email: nicolhon1@hotmail.com

Abstract

The number of manufactured aircraft has been continuously increasing worldwide because of the high demand for airline transportation. At this moment, there are more than 8500 known flights per hour/day in the entire world as indicated from the smart application of Flightradar24. Air transport is considered to be one of the world's fastest-growing industries and without aircrafts many services (tourism transportations, exchange of goods etc.) would not be possible. Hence, airports are typically associated with detrimental environmental effects. They are seen to have substantial influences in terms of air pollution, energy consumption, noise pollution, waste production and hydrological damage. Regarding solid waste production airports seems to received significant pressure for the airlines which used as final destination or connected destinations any airports in the World. It is assumed that any airlines deliver their solid waste which are produced in the airport that they used for landing which typically means that they transferred from one destination to the other significant solid waste which are produced during flights and this phenomenon is presented either in normal flights either in low cost flights.

The present research investigates whether the airlines have environmental policy, how do they manage their waste which produced during the flights and how they react with the EU policies. Moreover, this research focuses on the composition analysis of the airlines waste during the flights as well as and how a zero waste approach could be implemented.

This study is one of the few research projects on the waste composition and quantification analysis of inflight services in the airline industry. During the project, a waste composition analysis was conducted for in-flight service waste, and potential waste minimization measures were evaluated. The compositional analysis took place for 27 flights of 4 different airlines that used International Airport of Larnaka as final destination. The results indicated that during the flights the main waste production is consider to be paper followed from plastics, PMD and food waste. Furthermore the only waste stream that is separated during flights is the paper which is forwarded for recycling while the other waste are delivered mix and the airport manage d those waste among the others that are produced which typically means that are collected and delivered to landfills. During the survey audit were identified that there is a gap regarding the treatment of the waste that are produced from airlines in National level as well as there is no any specific policy from those how operated the airports

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