

Environmental Assessment in Local Level in the framework of the targets set on Waste Framework Directive

Loizia Pantelista¹, Vassilis Inglezakis², Antonis Zorpas¹

¹Cyprus 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

²Nazarbayev University, School of Engineering, Chemical Engineering Department, Environmental Science & Technology Group (ESTg), Astana, Kazakhstan
Presenting Author email: antonis.zorpas@ouc.ac.cy, antoniszorpas@yahoo.com

Abstract

Today Local Authorities receive huge pressure due to the limited resources that they have in order to solve their actual environmental problems. At the same time environmental protection and economic development are two concepts that are inextricably linked and have prompted the interest of both the scientific community and policy makers. Human activities are proven to pose a threat to the environment, as it contributes, to air and water pollution, the uncontrolled use of natural resources, the decrease of biodiversity, the increase of waste and climate change affects.

The main aim of this research is the evaluation of the environmental performance of the Municipality of Sotira, a small newly established Municipality in the Famagusta District of Cyprus, through the management of municipal waste and comparing its results with the objectives of the Waste Framework Directive (98/2008).

The study was based on a qualitative and quantitative compositional analysis of the municipal solid waste, the analysis of existing environmental methods that are in place, and the propose of a new, more efficient and effective waste management plan and waste prevention activities. The results of the compositional analysis highlighted the need to develop actions to divert specific waste streams such as recyclable, green and food waste, as well as the development of awareness activities. Household composting, the development of a green point, the implementation of the pay as you throw system and the public awareness actions are the main pillars of the proposed management plan in order to optimized the environmental performance of the Municipality.

Also, a SWOT analysis was carried out to identified the strengths and the weaknesses of the proposed system as well as identify opportunities and threats that may arise.

Key words: SWOT analysis, strategy development, environmental performance