

## ANALYSIS OF THE FACTORS INFLUENCING THE DECISION ABOUT SEGREGATION BY PEOPLE NOT SEGREGATING THE MUNICIPAL WASTE WITH USING THE AHP METHOD

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### ABSTRACT

Waste management is one of the most important problems concerning contemporary civilization. The increase of the number of population and consumerism, cause producing different kinds of waste. Along with the economic progress and the technical progress, humanity became the largest producer of waste in nature. Segregation is still the biggest problem of selective collection of waste. The awareness and the knowledge of people in caring about the natural environment is growing. Unfortunately, many of them are not convinced to sort municipal waste. However, in making a decision about segregation, each of them could be influenced by other factors. The aim of this study was to collect detailed criteria which influence the decision about waste segregation among people not segregating the municipal waste. Then the main criteria were grouped and their influence on the global decision was shown. In this paper a method of the Analytical Hierarchization of the Process was used. Research was conducted among 50 randomly chosen respondents from Poland. The results of the research showed that the financial penalties and the possibility of reducing the payment for sorted municipal waste could increase the amount of people who segregate the municipal waste. Increasing the awareness of reducing the natural resources consuming is not as important criterion as two mentioned before.

**Keywords:** waste segregation, municipal waste, determinants of decision-making process, the AHP method

### INTRODUCTION

The environment in which we live at present is encumbered with pollutants coming from the inappropriate waste management. It is important to search for methods of relieving the influence of waste on the environment and aspire to segregate the municipal waste [Jamróz and Generowicz 2012, Kempa 2001]. The population and the consumerism are increasing, causing producing different kinds of waste [Iżykowska-Kujawa 2013, Jamróz and Generowicz 2012, Kuboń 2013]. The households and the public buildings are basic sources of the municipal waste associated with the everyday life of human population

[Bień and Bień 2010]. The increasing amount of the municipal waste from the households and industrial buildings degraded natural environment. Growing costs of the recycling of the municipal waste cause coming into existence of illegal land-fill sites [Bieniek et al. 2014], which as a result of physicochemical transformations can directly influence the air pollution [Miaśkiewicz-Pęska and Szyłak-Szydłowski 2015, Białowiec et al. 2008] and pollute water and the soil [Wójcik 2010, Szyłak-Szydłowski and Grabińska-Łoniewska 2009]. In the well designed system of the management of the municipal waste, a waste segregation is a basic component. It can be carried out through the system of selective collection from

















