

# **A study of Greek university student attitudes and behavior towards waste prevention, re-use and recycling**

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## **EXTENDED ABSTRACT**

At a global scale, the waste management sector makes a relatively minor contribution to greenhouse gas (GHG) emissions, estimated at approximately 3-5% of total anthropogenic emissions in 2005. However, the waste sector is in a unique position to move from being a minor source of global emissions to becoming a major saver of emissions. Although minor levels of emissions are released through waste treatment and disposal, the prevention and recovery of wastes (i.e. as secondary materials or energy) avoids emissions in all other sectors of the economy. A holistic approach to waste management has positive consequences for GHG emissions from the energy, forestry, agriculture, mining, transport, and manufacturing sectors.

European Union (EU) member states, under the pressure from the European Landfill Directive (1999), are seeking alternative solutions in order to minimize disposal of biodegradable municipal waste, while increasing citizens' participation in recycling programs has been central in the environmental policies of the European Community, as part of its strategy to manage the problem of excessive solid waste production.

The success of current waste minimization programs and the development of efficient future ones may be gauged by the recycling behavior, and the underlying attitudes and motivations of the younger generation towards them. Of the over seven billion people that are on earth today, all those aged 24 years and younger account for nearly 40% of the world's population. Business leaders have been quick to grasp that roughly half of the world's population will be, or in some cases already are, consumers of services and goods for at least the next half century and are increasingly concentrating their efforts on this target group. Arguably, environmental leaders should strive to show the same foresight.

Although research regarding environmental attitudes is relatively abundant in the current catalog of literature, it is less so on waste prevention, re-use and recycling, and especially when it comes to research relating to attitudes of university students towards these issues. However, of such bodies present different characteristics in comparison to the general population, as they are highly educated, but low income public members.

This contribution will consider the attitudes and behavior of the student population in a middle sized Greek university, both on campus and at home. A survey of approximately 200 - 300 students will be conducted via a written questionnaire and face to face interviews. The data gathered from the survey will be used to determine (a) the students attitudes and knowledge about waste and recycling, (b) the extent that students are involved in recycling in their daily lives both on and off campus, (c) differences between Greek vs. international, or female vs. male students, concerning their attitude and self-reported behavior toward waste and recycling, (d) the main difficulties currently preventing students from recycling, and (e) ways to improve the current recycling system in order to increase the recycling rate, and at the same time reduce the biodegradable waste going into landfills. To delve deep into these questions, the study will apply the *Theory of Planned Behavior* model to explain students' waste management and recycling intentions. In addition, the study will apply a relatively new theory *Behavior Model for Persuasive Design* to explain how the three elements 'motivation', 'ability' and 'trigger' influence the students to change their behaviors towards waste management and recycling.