

Title: **Life Cycle Assessment (LCA) of plastics related to mountain tourism.**

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This research project is aiming to go deep in the field of the environment, for this reason I have been working in a project that in a near future will be encompassed in a bigger research project made by some other research groups. Targeting the Pyrenees area, this project is a testing part just focused in three villages located in the Catalan Pyrenees (Ripoll, Sant Joan de les Abadesses and Vallfogona del Ripollès). During the research, some habits of population have been analysed and the data have been quantified in an approximate way, to have a general idea of the impact that the citizens' one-use waste can affect the near environment. The characterization of some common plastic objects have been realised by FTIR-ATR and the most common types or used polymers have been determined. Finally, a Life Cycle Assessment (LCA) has been done, thanks to the data obtained in the questionnaires, in order to know in a quantitative way, the impact of the most used polymers in common objects.

Keywords: recycling, plastic, polymers, environment, processes, waste, PET, PP, PE, LCA