



Bio-based plastics Case study SME#4 PLACE CONSULTING

PLACE CONSULTING, a company located Valencia (Spain) and specialized in logistics, has applied LCA to go tool to analyze the environmental impact of a packaging system.

The company **PLACE CONSULTING** has decided to join the training program of LCA to go with the support of ITENE in order to enhance their cooperation with their customers across the packaging sector. The motivation to join this training was their continuous cooperation with various packaging enterprises.

Indeed, they wanted to learn about basic LCA analysis to check and control internally the impact of their products. The most useful impact inside the tool for this sort of analysis was carbon footprint comparison.

The strategy of the company was to modify the material of the package made of extruded PP by a bio-based plastic. The material bio-based plastic selected was polylactic acid. The Ecodesign was focused on optimize the quantity of material by using Ashby comparative index. Such index, in that case study based on Flexural Modulus data, allowed to minimize the thickness and consequently the weight of the package.



The results led to a reduced impact of the 28 liter box made of PLA in terms of the carbon footprint. Results were calculated for a functional unit of 1000 units of boxes.

Mr. Alberto Moreno, Managing Partner of **PLACE CONSULTING**, pointed out the usefulness and the clarity of the LCA to go bio-based plastics tool.

