



Bio-based plastics Case study SME#3 CIPASI S.A

CIPASI S.A, a company located in Massamagrell, Valencia (Spain) and specialized in sheet extrusion and box forming has applied LCA to go tool for the environmental improvement of 28 liters PP-sheet box.

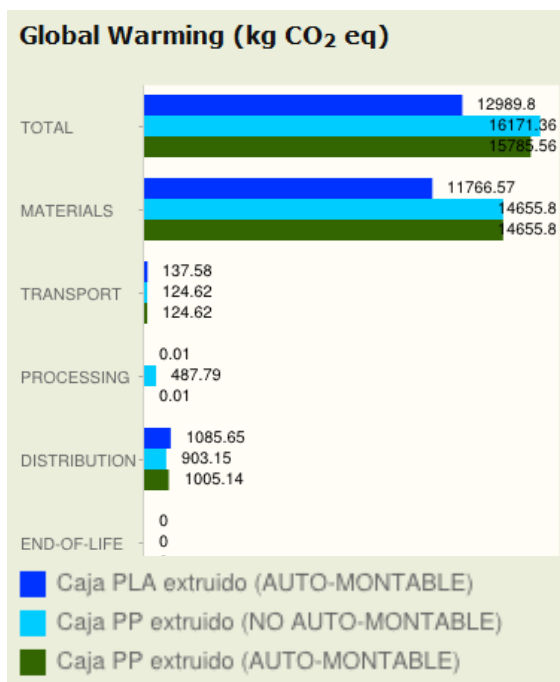
The company, **CIPASI S.A.**, decided to join the training program of LCA to go with the support of ITENE in order to seek for options for a minimized impact of their packaging references.

More specifically, they wanted to check the environmental impact of their current products and analyze to what extent the implementation of improvements over the product could modify the final impact.



The LCA to go tool was used in order to check the main environmental improvement actions applied over the selected box.

The most relevant interest for CIPASI was the carbon footprint. Based on different strategies for environmental improvement recommended by ITENE, as well as the results of the LCA to go tool, it was estimated a potential carbon footprint reduction of about 2.5% for the non-glued unassembled box.



The best results on environmental performance were achieved with changes on the base materials. Material reduction for the ecodesign made of PLA was taken from experimental characterization of PLA sheet, reported from an industrial test in CIPASI installations.

These results led to the best option for an improvement of environmental profile of the 28l box, using a bio-based Polylactic acid polymer. Results were calculated for a functional unit of 1000 units of boxes.

PhD. Gabriel Vivas, R+D+i Manager at CIPASI S.A said “LCA to go tool for bio-based plastics is a powerful way to compare their own products and to check product improvements”.