Bio-based plastics Case study SME PONS QUIMICAS S.L.







PONS QUIMICAS S.L, is company located in Javea, Alicante (Spain) specialized in the production & development of detergents, cleaning products and insecticides since 1960. PONS QUIMICAS S.L has applied LCA to go tool to evaluate the environmental improvement of a new package design for a liquid cleaning soap.



The company, **PONS QUIMICAS S.L** decided to be part of the program LCA to go encouraged by ITENE. The most relevant aspects for the company were their general interest on global warming analysis of their packaging formats. Moreover, there was a need to examine the improvements they had achieved with their new designs of the bottle

The LCA to go tool was used in order to assess the main environmental improvement strategies of the new prototypes of PET bottles.

Based on different strategies for environmental improvement recommended by ITENE, it was valued a potential carbon footprint minimization of about 7.35 % if it is considered the actual bottle weight reduction. Moreover, it was considered a possible carbon footprint minimization of about 10.69% if it is achieved the expected reduction.

Furthermore, if it is considered the same product produced from bio-based PET, it is considered the following improvement. The Bio-based polymer achieve a potential carbon footprint minimization of about 23%.



After the successfully finishing of the case, QUIMICAS PONS S.L concluded that the tool had an intuitive interface, and made it easy to generate comparisons between packaging design alternatives.



