



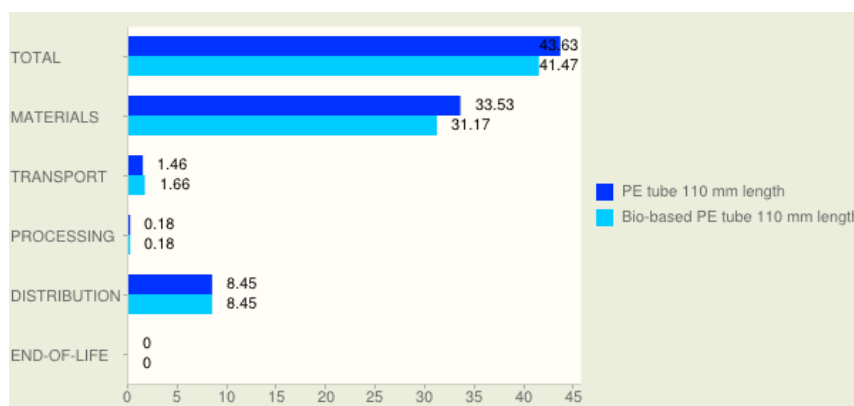
## Bio-based plastics

### CTL-TH Packaging, S.L.

CTL-TH Packaging, S.L., is a company located in Miñano (Álava, Spain) and specialized in the manufacturing of plastic packaging tubes for cosmetics, pharma and food. This company has used the LCA to go tool for the environmental improvement of the current plastic packaging tubes with Positop 50 cap made of oil-based PE of 110 mm length. An alternative made of bio-based PE was analysed with the LCA to go bio-based plastics tool.



CTL-TH Packaging, S.L., decided to join the training programme of LCA to go with the support of ITENE. The main drivers to join this training were the current customer & market needs. Indeed, there was a special interest in learning more about the environmental behaviour of bio-based PE, because of the increasing number of enquiries of the customers about this material. The company also was interested in the analysis of the carbon and water footprint of their product lines, as well as in the full implementation of such indicators as a part of the product development & improvement strategy.



The LCA to go tool was used in order to assess the environmental behaviour of new products to be launched to the market, in terms of carbon & water footprint. The main challenge for CTL-TH Packaging, S.L.

was how to carry out an analysis of different types of raw materials, specifically bio-based plastics. It was also important to know to what extent the processing of the material affects the environmental results. Based on the results of the bio-based plastics LCA to go tool as well as the strategies for environmental improvement suggested by ITENE, it was found that bio-based PE plastic tubes show an estimated improvement of 4.95% as an alternative to oil-based resin (PE).

Jorge Ezkurra & Nicolas Winand, Quality, EMS and OHS managers at CTL-TH Packaging, S.L. said, *“With the LCA to go training and mentoring programme we have improved our knowledge about product environmental improvement strategies. The tool is very useful for us, since we can enter our own processing data for a more accurate analysis of our production lines and product portfolio”.*