



SMaRT ECO NOW



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Comparative analysis on carbon footprint of the packaging film by the printing frequency

The packaging market is increasing day by day, as packaging containers become more luxurious and more expensive, the cost and environmental burden of packing containers are increasing at the same time. In recent years, however, some companies have shifted toward lowering the number of prints while lowering the carbon footprint of products and reducing costs as a means of reducing the weight of containers or making packaging designs more simplified. In this study, the method of printing on packaging containers by using LCA and the comparative analysis of the carbon footprint according to the change of printing frequency and the appropriate alternative for reducing the carbon footprint of product. This study analyzes how the contribution of the carbon footprint according to the printing frequency of packaging containers using LCA. As a result, the total amount of the carbon footprint of one packaging container accounts for 67.5% of the total production process and 32.2% emissions from the production of packaging film. And the result of analyzing the carbon footprint from the production process by frequency, it is found that as the number of prints increases, the contribution from printing in the production process increases. We also assumed the situation of converting the fuel source from LNG to wood pellet boiler and compared the contribution of the carbon footprint of the printing process.