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# Acc4<sup>th</sup> Academic

## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

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## LCA as Support for P+L in the Lighting Industry

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### Abstract

The emergence of concerns about the environmental sustainability of economic activities eventually leveraging the use of the approach of Cleaner Production - P + L for production processes and techniques of Life Cycle Assessment - LCA to evaluate the environmental performance of products and services. The present study sought to identify key indicators of the LCA that could support the implementation of the P + L for the lighting industry. In the first stage there was a structured survey of published papers dealing with LCA studies in lighting. In the second step, we carried out a search in journals to identify studies published among those that address the application of LCA to the development of products for lighting and found what the major parameters that potencializariam the approach of P + L. In the third phase proposes a comprehensive model for the application of criteria for P + L with technical support from the LCA. The authors conducted an analysis of published papers that use LCA for design and product development that provided the possible indicators for use in decision-making approach of P + L. From the survey was conducted a mapping of interrelations between the processes of the LCA and the sequence P + L and identified himself as the flow of information could occur in a complementary way. It is concluded by the complementarity between process P + L and ACV technique, with the advantage of leveraging the desempenho environmental analysis on the production process.

**Keywords:** *LCA of lighting products, comparative LCA..*

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