This paper presents a methodology and corresponding results how interdependencies in-between lifecycle phases deriving from the application of Eco-Design strategies can be identified to support engineering management. Thereby, interdependencies among the phases ‘Product Planning’, ‘Product Development’, ‘Production Planning’, ‘Production’, ‘Distribution’, ‘Utilization’, ‘Maintenance’, ‘Modernization’ and ‘Product Disposal’ are analysed based on ecological check items. To support a respective systems understanding of the lifecycle, a MDM (Multiple Domain Matrix) approach is carried out. Gained results are interpreted in order to measure the criticality of singular lifecycle phases and Eco-Design activities. The presented approach thereby shows how different perspectives on the lifecycle can be combined in order to allow a more sophisticated eco-oriented planning of future products. In addition, the presented methodology can be expanded to further Design for X-guidelines to support a lifecycle-oriented planning from further perspectives.

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