

Strategic guidance model for product development in relation with recycling aspects for automotive products

Abstract

This paper discusses a strategic guidance model for the product development process of automotive components in order to fulfil the requirements of the recycling aspects in End-of-Life Vehicle (ELV) Directive. This proposed model will enable automotive designers to assess products for their technical and economic viability at end-of-life. The paper presents an example of the whole vehicle as a case study in order to demonstrate and validate the proposed framework. It argues that indicators from the analysis can be used to inform the strategic development plans of the vehicles, infrastructures and spare part businesses. Based on this concept, a design guidance model is presented in order to help the designer make a right decision in the product development process so that value can be maximised at a product's end-of-life.