



Optimized ELV-disassembly

This pre study has aimed at mapping the process to dismantle and recycle completely End of Life Vehicles in an environmentally sound manner.

With the raw-material prizes of today it is very difficult to get a dismantling business profitable only working with End of Life Vehicles, ELV. The results from this project illustrates this and the dismantling companies participating have other activities to support the ELV-business.

On top of fluctuation in material prices the business is disturbed by a high number of non-certified ELV-dismantlers and the project concludes that the authority supervision has to be improved.

The work-process of dismantling has been analyzed at the three dismantlers and around 40 ELV:s has been measured in cooperation with Chalmers Industriteknik, CIT. From these measurements including direct time, waiting time and output of different material-fractions, according to "Bilskrotningsförrdningen", i.e. Swedish Regulation, financial data has been calculated.

Important to keep many collection points

This financial analysis has been performed for three optimized examples located in two areas of Sweden and with volumes of 500 ELV/year and 5000 ELV/year.

The project indicates that only at a volume of about 5000 ELV annually you can reach a profitable business with todays material-prices. However since the EU-regulation requires a network of ELV-collection points with high density it is important for our nation to support also a number of the existing certified 500-units.

Suggests increased supervision

In short term the project propose san improved authority supervision of the dismantling busi-

ness and have developed a proposal for control of pyrotechnic units, PU, as well as a check-list to support this supervision. These proposals will make it difficult for non-certified dismantlers to operate and end up in higher volumes to the certified companies working according to the regulation.

The control system is based on the existing computer-based activation systems for PU and for the certified dismantlers that follow existing regulation it will not require any extra time.

Compensation based on dismantling

Finally the project group concludes that some type of compensation for ELV dismantling to reach profitability if material prices will decrease under a certain level should be considered.

A compensation system must be based on performed quality assured dismantling where the most important activities like activating of PU should be included.

Project facts

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