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# Recycling plastics from Automotive Shredder Residues

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## Abstract

*Automotive Shredder Residue (ASR) is an inevitable by-product of car recycling, i.e. shredding and sorting, aiming at the recovery of steel, iron, and non-ferrous scrap after removal of all liquids and hazardous components from the car and shredding of the hulk. EU Directives require a steep reduction of such residues going to landfill. The most plausible methods to achieve a considerable reduction are: dismantling of bulky parts, such as bumpers, dashboards, front and rear windows, and cushions, or else separation of the commingled and size-reduced materials resulting from shredding. After a brief comparison of the actual situation in the E.U., the USA, Switzerland and Japan, the characteristics of actual ASR are reviewed, as well as the most prominent efforts made to separate and recycle specific fractions, such as ABS, polyolefins, or polyurethane. Attention is paid to the major players in the E.U. (e.g. Galloo, Vicon...) and to some of the pitfalls that besiege these ventures. Since part of the plastics is not really recoverable, the option of thermal recycling combined with supplemental recycling of plastics is briefly discussed also, with emphasis on emissions and how to control these.*

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