



THE FACTS

The European Union End-of Life Vehicles (ELV) Directive

The End-of-Life Vehicles Directive (2000/53/EC) came into force on 21 October 2000 and Member States should have enacted legislation to comply with the Directive by 21 April 2002. The Directive will require EU Member States (including the UK) to:

- Ensure that all ELVs are only treated by authorised dismantlers
- Provide free take-back of all ELVs for new vehicles put on the market after 2002; from 2007 provide free take-back for all vehicles including those put on market before 2002
- Restrict the use of heavy metals in vehicles from July 2003
- Ensure that a minimum of 85% of vehicles are reused or recovered (including energy recovery) and at least 80% must be reused or recycled from 2006, increasing to a 95% reused or recovered (including energy recovery) and 85% reused or recycled by 2015

It also requires the 'de-pollution' of vehicles before being recycled. This involves extracting petrol, diesel, brake fluid, engine oil, antifreeze, batteries, airbags, mercury-bearing components and catalysts.

OVER 2 MILLION TONNES.....

The quantity of used vehicles that are not resold equates to over 2 million tonnes of material to be recovered or disposed of. 1.85 million cars are recycled every year in the UK, and approximately 80% of waste automotive materials (mainly metal) are recycled. As car ownership continues to increase it is important that the proportion of each end-of-life vehicle (ELV) being recycled is maximised, so that the environmental impact is reduced.

Approximately 76% by weight of the average car is metal. The overall metal content of cars has declined rapidly during the past 20 years. Currently about 98% of the metals in a car are recycled. These metals are recovered by the vehicle shredding industry and subsequently utilised by the steel industry and re-smelting plants.

OVER 20,000 TONNES WASTE OIL.....

It is estimated that up to 50% of the 20,000 tonnes of oil removed from vehicles by motorists is handled improperly. If oil finds its way into sewers and water courses it can cause significant contamination -

one litre of waste oil is sufficient to contaminate one million litres of water and oil poured onto the ground will affect soil fertility.

This is one of the areas of greatest concern regarding motor vehicles. Although the disposal of fluids from ELVs is a major issue, however less than a third of waste oil produced by the DIY motorist is recycled. Lubricating oil has the greatest pollution potential.

Much of the waste oil collected for recovery in the UK is processed (by removing excess water and filtering out particulates) and used as a fuel burnt in heavy industry and power stations. However, The preferred option for lubricating oils is re-refining for reuse as a base lubricant, although this doesn't currently occur on a large scale in the UK.

Waste oil from nearly 3 million car oil changes in Britain is not collected. If collected properly, this could meet the annual energy needs of 1.5 million people.

TYRES

Tyres account for around 3.5% of the weight of an average ELV, and as a controlled waste under the Environmental Protection Act 1990, a Duty of Care is placed upon waste producers to ensure that waste material is disposed of safely through registered carriers to licensed sites.

BATTERIES

There is a well-established system for the recovery of lead acid car batteries with many local authorities and garages having collection points. The recycling rate for car batteries is estimated to exceed 90%. However, a significant number of batteries are still not recovered and recycled (for example, many scrap cars still contain batteries when they are shredded).

Secondary Restraint Systems

Secondary restraint systems used in vehicles consist of airbags and seat belt pretensioners. Air bags became standard components in UK-produced vehicles in 1993.

Air bags do not contain high value materials, so reclamation is not a viable option. In addition, because of the high product specifications and specialist installation procedures required to fulfil their safety purpose, reuse is not currently an option either.