The CARE manufacturers are:

BMW
Citroen
Colt Cars
DaimlerChrysler
Fiat
Ford
Honda
Jaguar
Nissan
Peugeot
Porsche
Renault
Rover Group
Toyota
Vauxhall
Volkswagen Group
Volvo

Dismantlers who are currently associated with CARE are:

Overton Dismantlers Ltd
D.A. Autoparts Ltd
North East Motor Salvage Ltd
Simpson Bros. (York) Ltd
Willingham Car Spares
Hills Motors (Ormskirk) Ltd
Albert Looms Ltd
T.L. Harvey Ltd
Tanygroes Car Dismantlers
Universal Salvage plc (Bedford)
Universal Salvage plc (Staughton Moor)
Charlton Recycled Autoparts Ltd
Mitchell Vehicle Dismantling
Charles Trent Ltd (Poole)
Doncaster Motor Spares Ltd
Charles Trent Ltd. (Heathfield, Devon)
White Horse Car Breakers
Chris Davey Used Car Parts
Combellack Motor Spares
Delmo Services Ltd
W.J. Furber Ltd
Car Transplants Ltd
W. Jay & Sons Ltd
Aylesbury Auto Salvage Ltd
Chase Autos
Down Salvage
Automotive Recycling Ltd
Universal Salvage plc (Paddock Wood)
Paddock Wood Car Breakers
SCB Vehicle Dismantlers
G.W. & G. Bridges Ltd
Universal Salvage plc (Bedford & Corby)

Shredders associated with CARE are:

Sims Metal UK Ltd
EMR Ltd

CARE

For further information about CARE and it's activities go to the CARE website at: CAREGROUP.ORG.UK

C A R E

CONSORTIUM FOR

AUTOMOTIVE ***RE***CYCLING

MOTOR SHOW 2000

What is CARE?

CARE (Consortium for Automotive Recycling) was formed in 1995. It is a consortium of seventeen major motor manufacturers working with vehicle dismantlers, shredding companies, material recyclers and academia throughout the UK.

The aims of the consortium are to examine the technical and economic impacts of an improved end of life vehicle disposal process and to develop new processes to improve material recycling / reuse and energy recovery.

CARE is working closely together with ACORD (Automotive Consortium On Recycling and Disposal) and its members including DTI and DETR on the national implementation of the European ELV (End of Life Vehicle) Directive into national UK legislation.

ACORD is a cross-sector consortium comprising representatives of Motor Vehicle Manufacturers, the Vehicle Dismantling and Shredding Industries, and the Plastic and Rubber Manufacturing Industries. In addition , ACORD has the support and participation of Component Suppliers, the Steel and Glass Industries and UK Government Departments.

Further information about ACORD and its activities can be obtained from the ACORD secretariat at SMMT Ltd.

What are the issues ?

Cars that reach the end of their useful lives either through accident damage or by the fact that they are old and worn out (MOT failures, etc) have traditionally been passed on to a vehicle dismantler or shredder operator. In the past, the last owner at this point could have reasonably expected a payment of £20-30 in scrap value.

However, in the last couple of years the market for scrap metal has reduced within the UK due to lower demand as a result of a shrinking manufacturing base. Coupled with this has been stronger competition from overseas that has resulted in the ELV having little or no 'scrap' value.

Quite correctly, dismantler operations have had to comply with increased environmental requirements in the way that their businesses are run. This has meant an increase in capital and site investment and additional labour time spent on depolluting the ELV prior to disposal.

All of the above factors have come together to the effect that end of life vehicles rarely have a significant scrap value to their last owners and in a significant number of cases the last owner has to pay to dispose of the vehicle.

The result is that more and more cars are being dumped in lay-bys, fields and inner city streets.

This dumping creates not only an unsightly mess but gives rise to hazards of pollution and safety.

European Directive on ELVs.

In the autumn of this year the European Union will officially pass into law a Directive concerning End of Life Vehicles.

Within eighteen months of this adoption the UK, as a member state, will have to introduce legislation and policy that will enable the UK to comply with the contents of the Directive.

The objective of the Directive is to minimise the waste generated from ELV disposal process and to improve the recycling and reuse levels from their current level of 75%, whilst significantly reducing any adverse environmental impact.

It will require the Member State to:

- Ensure that all ELVs are only treated by authorised treatment centres who will issue a 'Certificate of Destruction' to the last owner.
- Implement new environmental treatment standards for the ELV disposal process.
- Ensure that there is no cost to the last owner when handing over their vehicle for disposal at an authorised treatment centre.
- Increase the reuse and recovery of ELVs to a minimum of 85% by weight per average vehicle by 2006, with reuse and recycling at 80%. These targets to increase to 95% and 85% respectively by the year 2015.
- Ensure producers design vehicles with recyclability as a key criterion.
- Implement measures to restrict the use of heavy metals.

The outcome has to be a complete change in attitude and culture in the way in which cars are disposed of at the end of their useful lives.

The last owner will have to be more responsible.

The manufacturers will have to change the design and construction of new cars.

The dismantlers and treatment operations will have to become more professional and quality conscious.

The consumer has to demand and accept more recycled materials and products to generate the essential markets for the additional material that have to be recycled.

Solutions – What is happening?

Manufacturers:

Long before the first draft of the ELV Directive appeared in the mid nineties, motor manufacturers throughout Europe have been working on the issues that would improve the ELV disposal process.
CARE is one example of manufacturers within the UK working together to promote improved depollution of ELVs and to evaluate technically the mechanical recycling of non-metallic materials used in automotive construction – that currently ends up in landfill.

Other significant developments include:

IDIS –
International Dismantling Information System

This is a CD-ROM based system available to all dismantlers that provides information on depollution and treatment activities. It also identifies materials suitable for recovery and recycling. The current version provides data from 20 manufacturers covering in excess of 440 vehicles. IDIS will be the primary source of information from the manufacturers to the dismantling industry and will be updated on a frequent basis.

Vehicle producers have adopted the " Design for Recyclability" (DFR) concept for all newly designed vehicles – in fact many have used the principle since the mid- nineties.

DFR focuses on:

- Reduced complexity of material types used
- Improved fixing technologies that aid dismantling (e.g. reduced number of clips, etc.)
- Reduced 'contamination' of potentially recyclable plastic parts (e.g. sound insulation no longer stuck on with adhesives)
- All significant plastic components now carry an identification mark, which indicates the material used to manufacture the part, making segregation of materials for recycling easier.
- The use of heavy metals such as cadmium, lead, mercury and hexavalent chromium has been significantly reduced and in many cases eliminated.

Most importantly manufacturers have increasingly specified recycled materials for use in constructing new vehicles. Typical examples are the inclusion of 10% post consumer recycled material in certain plastic components.

The use of an increased recycled content is essential to create new markets for the additional material that has to be diverted from landfill when ELVs are disposed of.

In order to promote even greater use, CARE, supported by the British Plastics Federation, has been successful in gaining funding from the recent DTI Recycling Programme to develop standards for engineering quality plastics containing recyclate.

At the end of the project, valued at £300,000, a portfolio of validated standards will be issued covering a wide range of plastics used in the automotive sector. In addition each plastic type will be supported by a demonstration component fully tested against 'fit for purpose' criteria.

International Dismantling Information System

It is anticipated that the successful completion of the programme will remove many of the barriers that currently restrict the further usage of recycled material and that the recycling industry will become more conversant with supplying to the automotive industry.

Dismantlers:

The dismantling sector has a key role to play in developing an infrastructure of professionally run facilities throughout the UK, offering the last owner of an ELV a service that meets best environmental practice.

A great deal has already been accomplished by some of the major operators by way of investment in site infrastructure and equipment.


Vehicle drainage

New vehicle drainage equipment, costing in the order of £100,000 has been purchased and installed at a number of key dismantlers. These drainage rigs have already demonstrated improved efficiency and are a sign that many in the industry have a desire to develop and move forward.

The sale of second hand parts (reuse) has also been enhanced by the introduction of computerised warehousing and the sales of many of the components are backed by warranty.

The image of the dismantler is changing for the better and these efforts, of predominantly CARE dismantlers, are to be applauded.

However, there still needs to be a significant improvement within the bulk of the industry in order to meet the aspirations of both the motor industry and the goverment whilst offering a viable professional network to the service user.

Shredding Industry:

The shredding industry, which operates fragmentisers throughout the UK, takes in the bulk of the 1,800,000 vehicles disposed of each year in order to recover the metallic content. Many of these vehicles have been 'treated' by the dismantler prior to delivery to the fragmentiser.

The shredding industry is an extremely capital intensive business with each site costing several million pounds to set up and operate. However, they do offer an efficient recovery system for both ferrous and non-ferrous metals, which enables the achievement of an impressive 75% recycling figure for current ELVs.

After recovering the metal there remains as a consequence the 25% by weight of shredder residue that currently goes to landfill. As such the shredder operators are set to play a major role in supporting the motor manufacturers efforts to achieve a reduction in this residual level of waste.

Work is underway in developing technologies for separating 'useful' recyclable materials from this waste stream. A focus for this work is a CARE sponsored project at the University of Brighton, which is supported under the ENTRUST programme. This project, valued at £300,000, has a team dedicated to evaluating non-metallic materials that can be recovered from the shredder residues and identifying potential markets for them.

In addition, diversion of suitable materials from the residue stream to an incineration route with associated energy recovery is another option permissible under the Directive.
Efforts by the shredding industry, supported by CARE, are ensuring that this environmentally sound option is developed fully.


Shredder residue