

ANNEX 9 FULL BIBLIOGRAPHY AND STAKEHOLDERS

CONTENTS

1	BIBLIOGRAPHY	1
1.1	Arisings and Treatment of End of Life Vehicles.....	1
1.2	Post-Shredder Technologies – Review of the Technologies and Costs.....	1
1.3	Case Studies.....	2
1.4	Environmental Impacts analysed and Characterisation Factors	8
2	STAKEHOLDERS	10

1 BIBLIOGRAPHY

1.1 Arisings and Treatment of End of Life Vehicles

ACEA www.acea.org.uk/

ANFAC, Austrian Institute for Economic Research (2004)

BDSV (2002)“ Nachteil für den Mittelstand? Entsorgung von Altautos neugeordnet“, press release 25 January 2002

BVDE (2005), „Die Sekundärrohstoffmärkte 2005“, press release 5 July 2005

Eurostat europa.eu.int/comm/eurostat/

Kanari N et al (2003), End-of Life Vehicle Recycling in the European Union

R. Zoboli et al., “Regulation and Innovation in the Area of End-of-Life Vehicles,” EUR 19598 EN, ed. F. Leone (Milan, Italy: IDSE-CNR, March 2000)

Reinhardt T & Richers U (2004), Entsorgung von Schredderrückständen – Ein aktueller Überblick, Wissenschaftliche Berichte, Forschungszentrum Karlsruhe

Review of Technologies, Knibb Gormezano and Partners for the ACEA, “Recycling Infrastructure & Post Shredder Technologies”

Technology Review www.technologyreview.com/

TRL (2003)

VKE (no date), Kunststoff im Automobil: Einsatz und Verwertung Langfassung, Frankfurt/Main

Woidasky J & Stolzenberg A (2003), Verwertungspotenzial für Kunststoffteile aus Altfahrzeugen in Deutschland, Fraunhofer Institut Chemische Technologie

www.adac.de

1.2 Post-Shredder Technologies – Review of the Technologies and Costs

Guenther, C., Economical Aspects of Automobile Recycling - Citron's solution for ASR no date, ca. 2001.

Steel Business Briefing www.steelbb.com

Knibb Gormenzano & Partners, for the ACEA, Recycling Infrastructure and Post Shredder Technologies, Final Report, June 2002.

SVZ, Tecpol & Plastics Europe, Full Scale Industrial Recovery trials of shredder residue in a high temperature slagging-bed-gasifier in Germany, June 2005.

Swiss Auto Recycling Foundation, The Reshment Process in Info newsletter no. 7, April 2002

Economical Aspects of Automobile Recycling – CITRON solution's for ASR, Christoph Guenther, no date (post 2000).

1.3 Case Studies

1.3.1 Australia

Auto Parts Recyclers Association of Australia www.apraa.com

Department of the Environment and Heritage, *Environmental Impact of End-of-Life Vehicles: An Information Paper*, 2002

Mazda, *Social and Environmental Report*, 2004

Nissan, *Sustainability Report*, 2005

Plastics and Chemicals Industry Association www.pacia.org.au,

The Auto Channel www.theautochannel.com.

1.3.2 France

Comité des Constructeurs Français d'Automobiles, <http://www.ccfa.fr/> , September 2005

Eric Lecointre, ADEME –Waste and Soil Direction – *Prevention and Recycling* Department, September 2005 – Tel : +33 (0)2 41 91 40 31 – eric.lecointre@ademe.fr

Etude économique sur la filière de traitement des véhicules hors d'usage, Ernst&Young pour l'ADEME, September 2003, <http://www.ademe.fr/htdocs/publications/publipdf/vhu.htm>

Mass Balance in post-shredding technology: results of a trial based on the shredding of 201 ELVs – a joint work of Galloo, PSA and Renault, paper and powerpoint presentation by Olivier François, Environmental Manager, Group GALLOO Recycling, 2003

Note relative à l'impact de la réglementation sur les véhicules hors d'usages (VHU), Eric Lecointre de l'ADEME, July 2005

Transposition of the ELV Directive in the other EU member states, Perchards for the UK government, November 2004, http://www.arge-altauto.de/docs/DTI_ELIV.pdf

1.3.3 Germany

Abschlussbericht des Arbeitskreises 16 „Kfz-Recycling“ KOMMISSION DER NIEDERSÄCHSISCHEN LANDESREGIERUNG „Umweltmanagement und Kreislaufwirtschaft“ (4. Regierungskommission)

Altautoverwertung zwischen Staat und Markt: Bedingungen und Potenziale zur Lagerhaltung und Marketing gebrauchter Autoteile

Begründung zum Gesetzentwurf der Bundesregierung über ein Gesetz zur Entsorgung von Altfahrzeugen (Altfahrzeug-Gesetz – AltfahrzeugG) - Entwurf -

BMU (2005), Sustainable Waste Management in Germany, BMU Berlin

BMU Waste Management; End-of-Life vehicles, accessed on
www.bmu.de/english/waste_management/doc/3443.php

Deutschen Kraftfahrzeuggewerbes Zentralverband, Zahlen und fakten 2004

Duales System Deutschland AG (undated) "The Future of Municipal Landfilling in Germany", Vol 2, DS-Documents, accessed at [www.gruene-punkt.de]

Eyerer P et al (2000), "Kreislauffähigkeit von Werkstoffen" in ATZ Automobiltechnische Zeitschrift 102 (2000)

Fraunhofer 2002, Kreislaufführung von Kunststoffen aus dem Motorraum

Gebrauchtgüterexporte und Technologietransfer, Rat für nachhaltige Entwicklung

Jenseit W et al (2003) Recovery Options for Plastic Parts from End-of-Life Vehicles: An EcoEfficiency Assessment, Ökoinstitut, 2003-039-en

Kanari N, Pineau JL, Shallari S (2003), End-of-Life Vehicle Recycling in the European Union, TMS, August 2003

Lander S (2004), Strategische Planung von Kreislaufwirtschaftssystemen, Fakultät III – Prozesswissenschaften der Technischen Universität Berlin, Berlin 2005, D 83

Lehmann M (2001), Zur Implementation der Produktverantwortung bei der Altautoentsorgung: Kostenerstattung statt Rücknahmeverpflichtung? Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, Bonn 2001/7

Lippe S & Striegel K (2005) Der aktuelle Stand der Verwertung von Altfahrzeugen in Nordrhein-Westfalen zeigt Lücken bei der Entsorgung der Shredderleichtfraktion auf, Müllmagazin 1/2005

Lucas R (2001), End-of-Life vehicle regulation in Germany and Europe – problems and perspectives, Wuppertal Papers No. 113, Wuppertal Institute for Climate, Environment and Energy

Ökopol (2000) Stellungnahme zum ersten Monitoringbericht der ARGE Altauto, December 2000

Reinhardt T & Richers U (2004), Entsorgung von Schredderrückständen – Ein aktueller Überblick, Wissenschaftliche Berichte, Forschungszentrum Karlsruhe (Abstract in English)

Reinhardt T (2004), Entsorgung von Schredderrückständen – Stand der Technik und Tendenzen, Forschungszentrum Karlsruhe in der Helmholtz Gesellschaft, on behalf of Citron AG

Röbke T (2002), 'Wie aus Schrott Geld wird' Die Zeit, 36/2002

Tec4U (2002). Beschreibung des Standes der Technik bei der Vorbehandlung, insbesondere der Trockenlegung von Altautos gemäß AltautoV, tec4U Ingenieurgesellschaft mbH Im Auftrag des Umweltbundesamtes, September 2002

Umweltdaten Deutschland Online

VDA Annual Reports 1999-2005

VKE (no date), Kunststoff im Automobil: Einsatz und Verwertung Langfassung, Frankfurt/Main

Vom Neuwagen zum Altauto, Yahoo!Autos accessed on 6 September 2005

Woidasky J & Stolzenberg A (2003), Verwertungspotenzial für Kunststoffteile aus Altfahrzeugen in Deutschland, Fraunhofer Institut Chemische Technologie (summary available in English)

Woidasky J, Braunmiller U, Hirth T (1999), „ Shredder-oriented dismantling and shredder lightweight fraction, paper presented to the R'99 Congress

ZDK, Arbeitsanweisung für Annahme, Bereitstellung und Weiterleitung von Altfahrzeugen

1.3.4 Hungary

CAR-REC, <http://www.carrec.hu/>, September 2005

Executive briefing: Hungary, Economist Intelligence Unit, from articles originally published on 28 June 2005 and 9 December 2004, http://eb.eiu.com/index.asp?layout=oneclick&country_id=1710000171

News item, October 2005, Auto Recycling Nederland, <http://www.arn.nl/engels/5pers/521.php#2>

Organisation Internationale des Constructeurs d'Automobiles, <http://www.oica.net/> , September 2005

Transposition of the ELV Directive in the other EU member states, Perchards for the UK government, November 2004, http://www.arge-altauto.de/docs/DTI_ELV.pdf

1.3.5 Netherlands

Transposition of the ELV Directive in the other EU member states, Perchards for the UK government, November 2004

Auto Recycling Nederland, <http://www.arn.nl/engels/index.php>, September 2005

Environmental report 2004, KPMG for Auto & Recycling Foundation and Auto Recycling Nederland BV

Etude économique sur la filière de traitement des véhicules hors d'usage, pp.136-140, Ernst&Young for ADEME, September 2003

Decree on Management of End-of-Life Vehicles adopted by the Dutch government

Technical Support to the extended Impact Assessment on the Thematic Strategy on the Prevention and Recycling of waste

Organisation Internationale des Constructeurs d'Automobiles, <http://www.oica.net/>,
September 2005

1.3.6 Poland

EEA ETC/WMF, 2001: United Nations Statistics

FORS association forum of vehicles' recycling. <http://www.fors.pl>

<http://eng.flota.com.pl/cms/?id=5082>

http://themes.eea.eu.int/Sectors_and_activities/transport/indicators/consequences/TERM11,2002/TERM_2002_11_AC_Waste_from_road_vehicles_elv.pdf

<http://www.getf.org/file/toolmanager/O50F24282.htm>

http://www.piap.pl/piap/oferta/recykling/projekty_stacji_demontazu_samochodow.php

http://www.resol.com.br/curiosidades2_ing.asp?id=1803

Industrial Research Institute for Automation and Measurements – PIAP
http://www.piap.pl/piap/english_version/about_us/general_information.php

Polska Izba Motoryzacji (Polish Chamber of Automotive Industry – PIM)
<http://pim.org.pl/pub/english/automotive.html>

The ministry of Environment <http://www.mos.gov.pl/>

The national fund for environmental protection and water management
<http://www.nfosigw.gov.pl/site/>

The Polish Automobile & Motorcycle Federation http://www.pzm.pl/index_en.asp

1.3.7 Spain

Auto Recycling Nederland, <http://www.arn.nl/engels/index.php>, September 2005

Decree on Management of End-of-Life Vehicles adopted by the Dutch government

Environmental report 2004, KPMG for Auto & Recycling Foundation and Auto Recycling Nederland BV

Etude économique sur la filière de traitement des véhicules hors d'usage, pp.136-140, Ernst&Young for ADEME, September 2003

Organisation Internationale des Constructeurs d'Automobiles, <http://www.oica.net/>,
September 2005

Technical Support to the extended Impact Assessment on the Thematic Strategy on the Prevention and Recycling of waste

Transposition of the ELV Directive in the other EU member states, Perchards for the UK government, November 2004

1.3.8 UK

ACORD (2001) 2001 report on vehicle recycling. www.smmmt.co.uk

BMRA (2003) Advice on the ELV Regulations.

<http://www.recyclemetals.org/news.php3?artid=232>

BMRA (2004) ELV Regulations – 2004 Update.

<http://www.recyclemetals.org/news.php3?artid=238>

British Metals Recycling Association (2001) Memorandum to House of Commons Trade and Industry Committee on End of Life Vehicles.

<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/299/11023a01.htm>

CARE (2000) Glass Recycling: An Automotive Perspective. 1999.

www.caregroup.org.uk

CARE (2004) CARE Report on Automotive Glass recycling. 2004 Update.

www.caregroup.org.uk

CARE (2005) Newsletter. Volume 1, Issue 1, January 2005. www.caregroup.org.uk

Charles Trent Ltd Memorandum to House of Commons Trade and Industry Committee on End of Life Vehicles.

<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/299/11023a01.htm>

CIWM (undated) End of Life Vehicles. <http://www.ciwm.co.uk/pma/1489>

Cleaner Vehicles Task Force (2000) The Environmental Impacts of Motor Manufacturing and Disposal of End of Life Vehicles. Moving Towards Sustainability. DTI, London

Defra (2005) Producer Responsibility: End of Life Vehicles (ELVs).

www.defra.gov.uk/environment/waste/topics/vehicledir.htm

Defra (undated) Guidance on Part VII of ELV Regulations. Defra, London

DTI (2002) End of Life Vehicles. Factsheet.

<http://www.dti.gov.uk/sustainability/downloads/elv.pdf>

DTI (2003) Full Regulatory Impact Assessment (RIA) for the DTI's Statutory Instrument Transposing Articles 4, 5, 6, 8 and 9 and Annexes I and II of Directive 2000/53/EC of the European Parliament and of the Council on End of Life Vehicles (The "ELV" Directive) in the UK. DTI, London

DTI (2005) Full Regulatory Impact Assessment (RIA) for the DTI's Statutory Instrument Transposing Articles 5 and 7 of Directive 2000/53/EC of the European Parliament and of the Council on End of Life Vehicles (The "ELV" Directive) in the UK. DTI, London

House of Commons Trade and Industry Committee (2001) End of Life Vehicles Directive. First Report.

<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/cmtrdind.htm#reports>

House of Commons Trade and Industry Committee (2002) End of Life Vehicles Directive. Second Report.
<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/cmtrdind.htm#reports>

JEMA Associates (2005) PROVE 2: Plastics Reprocessing Validation Exercise.
www.prove-recycling.org

PROVE (2003) PROVE Recycling Project – Plastics Reprocessing Validation Exercise.
www.prove-recycling.org

R. Hooper, A. K. N. Potter, & M. M. Singh, (2001) "Diversion from landfill: mechanical recycling of plastics from materials recovery facilities and from shredder residue". Green Chemistry, 3 (2001) 57-60.

Recoup (2002) Plastics from End of Life Vehicles. Fact Sheet. www.recoup.org

Retail Motor Industry Federation (2001) Memorandum to House of Commons Trade and Industry Committee on End of Life Vehicles.
<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/299/11023a01.htm>

Society of Motor Manufacturers and Traders (2001) Memorandum to House of Commons Trade and Industry Committee on End of Life Vehicles.
<http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtrdind/299/11023a01.htm>

TRL Ltd (2003) Data Required to Monitor Compliance with End of Life Vehicle Directive. Report for Defra.
<http://www.defra.gov.uk/environment/waste/topics/elvehicles/trlstudy-one.pdf>

University of Brighton and Escape Ltd (undated) Pyrolysis of Shredder Residue (Fines).
<http://www.brighton.ac.uk/environment/research/sustainability/werg/Pyrolysis%20report.pdf>

Waste and Energy Research Group (undated) Automotive Plastic. Factsheet.
<http://www.brighton.ac.uk/environment/research/sustainability/werg/Automotive%20plastic.pdf>

Waste and Energy Research Group (undated) Polymer Processing, B: Towards Processing Polymers from ASR.
<http://www.brighton.ac.uk/environment/research/sustainability/werg/P2bFinal4.pdf>

Waste and Energy Research Group (undated) Shredder Residue - Pyrolysis. Factsheet.
<http://www.brighton.ac.uk/environment/research/sustainability/werg/Pyro.pdf>

Waste and Energy Research Group (undated) Shredder Residue. Factsheet.
<http://www.brighton.ac.uk/environment/research/sustainability/werg/Shredder%20residue.pdf>

Waste Online (2004) End of Life Vehicle and Tyre Recycling Information Sheet.
www.wastonline.org.uk

1.4 Environmental Impacts analysed and Characterisation Factors

ADEME (Enc Lecointre), 85% de valorization d'ici : un objectif realizable ? Element de cadrage, 2006

ADEME (Eric Lecointre), Note relative a l'impact de reglementation sure les vehicules hors d' usage (VHU), 2005,

Coordinated by Mr. Shin-ichi Sakai (Japan) and Ms. Heidelore Fiedler (United Nations Environment Program), Section VI. K. Guidance by source category: Annex C, Part III Source Categories, Shredder plants for treatment of end of life vehicles, 2004

Dr A. Kicherer (BASF AG in cooperation with APME), Eco-effluent recycling of plastics from ELVS (presentation of the APME study "Recovery options for plastics parts from ELVs: an eco-efficiency assessment") , 2003

Dr. Wuif-Peter Schmidt de Ford-Weelce GmbH for LIRECAR Study, Environmental comparison between lightweight design & recovery options, 2005

Ernst&Young for ADEME, Etude économique sur la filière de traitement des véhicules hors d'usage, 2003

European Aluminium Association (EEA), Environmental Profile report for the European Aluminium Industry, 2000

For Department for Transport (UK gov), Review of work on whole-life environmental impacts of vehicles

Fraunhofer Institut für Verfahrenstechnik und Verpackung (Till Nurrenbach, Dr. Gertraud Godhan, Alexandra Wokock), Verwertung von Kunststoffbauteilen aus Altautos – Analyse des Umwelteffekte nach dem LCA-Prinzip und ökonomische Analyse, 2002

Georg W. Schweimer Research, Environment and Transport, Volkswagen AG Marcel Levin Center of Environmental Systems Research, University of Kassel, Life Cycle Inventory for the Golf A4, no date but 2000 or 2001 according to text

Groupe d'experts Intergouvernemental sur l'Evolution du Climat (GIEC, Bilan 2001 des changements climatiques: les elements scientifiques, 2001

Jonathan G. Overly, Rajive Dhingra and Garry A. Davis, The Center for Clean Products and Clean Technologies at the University of Tennessee in Knoxville, and Sujit Das, Energy Division, Oak Ridge National Laboratory, Environmental Evaluation of Lightweight exterior body panels in new generation vehicles, 2002

Kurt Buxmann, Alusuisse Technology & Management AG, and Johannes Gediga, Institut für Kunststoffkunde und Kunststoffprüfung der Technischen Universität Stuttgart, LCA of different recycling Scenarios Of Aluminium Body Sheet, 1998

LIRECAR, Life Cycle Assessment of Lightweight and End-of-Life Scenarios for Generic Compact Class Passenger Vehicles, 2004

Neil Kirkpatrick and David Dowell (Ecobalance UK), Brian Glazebrook (Econbalance Inc), A life cycle assessment of the implications of implementing the proposed end of life vehicles directive in the UK. 2000

Oko-Instytut e.V. for APME flow PlaSt,cSEurOpe), Recovery Options for Plastic Parts from End-Of-Life Vehicles: an EGO-Efficiency Assessment, 2000

Olivier Francois (GALLOO), Mass-balance in post-shredding technology: results of a trial based on the shredding of 201 ELVs – a joint work of Galloo, PSA, and Renault, 2003

Osamu Kobayashi, Japan Automobile Manufacturers Association, and Helene Teulon and Philippe Osset, Ecobilan France, and Yasuhiko Morita, Ecobilan Japan, LCA of a complex product, application of ISO 14040 to a complete car, 1998

Perchards, Transposition of the ELV Directive in other EU member states, 2004

PreConsultants B.V. Environmental LifeCycle Assessment of an average European car tyre, 2001

Susan S. Sawyer-Beaulieu and Edwin K.L. Tam, University of Windsor, Applying LCA to North American ELV Management Process, 2005

Volkswagen AG, Executive summary, LCA of ELV Treatment, Comparison of the VW0SiCon process and the dismantling of plastic components followed by mechanical recycling, 2005

Wolf-Peter Schmidt and Hans-Martin Beyer de Ford-Werke GmbH, life cycle study on a natural fibre reinforced component, 1998

2 STAKEHOLDERS

Rozenn Le Borgne	ACEA (European Automobile Manufacturers Association)
Peter Schmitt & Bernd Gottselig	ACEA (European Automobile Manufacturers Association)
Eric Lecointre	Ademe (French Environment Agency)
Janet Kes	ARN (NL)
Ross Bartley	BIR (Bureau of International Recycling)
F Cinaral	BLIC (European Association of the Rubber Industry)
Kristina Szép	Car-rec (Hu)
Dorothee Giffard & Christiane Blut	CNPA (Conseil National des Professions de l'Automobile – Dismantlers department)
Dorothee Giffard & Christiane Blut	CNPA (Conseil National des Professions de l'Automobile – Dismantlers department)
Matt Hampshire	DEFRA (UK)
Grace Barrasso & Karl-Heinz von Zengen	EAA (European Aluminium Association)
Lennart Scharff	EGARA – EDA (European Dismantling Association)
Adrian Harding	Environment Agency (UK)
Eric Mugnier	Ernst & Young
Olivier François	Galloo (dismantler in Belgium and France)
Norbert Prum	IISI (International Iron & Steel Institute)
Bernard Degen	KAMA (Hyundai-Platz)
Wolfgang J Siebourg & Aafko Schanssema	Plastics Europe (ex APME)
Robert Lassartesses	Renault
Louis Leruse	Saint Gobain Automobiles

Manuel Kindelan

Sigrauto (Sp)

Karcher

UBA (German Ministry of Environment)

Klaus Bosse

UBA (German Ministry of Environment)