



Sustainability Report 2009

ARN Sustainability Report 2009

ARN
P.O. Box 12252
1100 AG Amsterdam ZO
The Netherlands
info@arn.nl
www.arn.nl

Colophon

Published by

Stichting Auto & Recycling en ARN
P.O. Box 12252, 1100 AG Amsterdam zo

Text

ARN, Janet Kes
Total Identity, Yvonne van de Wal

Translation

Sonja Brouwer Vertalingen

Photography

Jack Tillmans

Concept and design

Total Identity, Julius van der Woude and Erik olde Hanhof

Print

Aeroprint, Ouderkerk/Amstel

Papier

Cocoon, 100% FSC recycled out of pulp; ECF



Mixed Sources

Product group from well-managed
forests, controlled sources and
recycled wood or fiber
www.fsc.org Cert no. CU-COC-806275
© 1996 Forest Stewardship Council

The 2009 Sustainability Report is available in Dutch and English. Should different interpretations arise, the Dutch language version prevails.

Contents

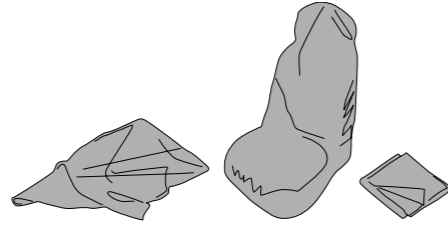
Foreword	2
ARN's vision	4
ARN's profile and organization	6
Recycling	9
ARN Recycling	10
Events in 2009	10
Outlook for 2010	12
Chain management	13
ARN Auto Recycling	14
Efficiency measures in the chain	14
Growing market share	15
Outlook for 2010	17
ARN Recycling Services	18
Events in 2009	18
Outlook for 2010	19
Knowledge sharing	21
ARN Advisory	22
Market trends	23
Events in 2009	23
Outlook for 2010	25
Trends in vehicle numbers	26
Legislation and environmental performance	28
Legislation and regulations in the Netherlands	28
Legislation and regulations in Europe	30
2009 environmental performance	31
Appendices	33
Financial report 2009	34
Notes to the financial report 2009	36
Assurance report	38
ARN Management Plan	40

Life cycle of a vehicle

ARN is striving to reduce a vehicle's lifetime environmental impact by sharing knowledge before it is built, recycling its wastes while it is on the road and recovering its materials upon its end of life. We monitor vehicles right from the beginning so that they can be recycled as responsibly and efficiently as possible.

Preparing the vehicle

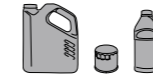
Removing plastic protective film from the paintwork
Removing plastic seat covers
Polishing cloths



0 1 5 7 1 2

Minor service

3 litres of oil
Oil filter
Windscreen washer fluid



Foreword

2009 brought serious economic problems, as foretold by the initial indications in 2008 and the even stronger ones in the second half of that year. The impact on the automotive industry was both dramatic and unprecedented: sales of new vehicles in the Netherlands dropped by over 22% to a total of under 390,000.

These developments also affected ARN. Although ARN is very much focused on long-term objectives and commitments, the short-term turbulence has its implications. The sharp drop in vehicle sales affected ARN financially through a reduction in the waste disposal fee income.

The introduction of the national scrappage scheme, which will continue in 2010, had high visibility and was very successful: over 50,000 transactions were registered under the scrappage scheme in just a six-month period. Both the organization and the implementation of the scheme were flawless. ARN played an important role in this and also made a substantial financial contribution.

Under the scrappage scheme, the environmental benefits coincide with economic stimuli for the automotive industry and the dismantling companies. The dismantling companies coped with and dismantled the increased number of end-of-life vehicles. It became clear on the sales side for both new and used vehicles that consumers have a growing preference for smaller, more economical and more eco-friendly models, which means that vehicles are becoming greener at a more rapid rate.

At the same time, considerable progress was made with achieving longer-term strategic objectives. Much work was done in Tiel on the post-shredder technology (PST) facility, where installation of the production line has already started. The PST facility will be operational at the end of 2010. The separation and processing of shredder waste to produce useful and usable material flows will then begin.

Another of ARN's strategic objectives is to see the rules being monitored and enforced, and removal of end-of-life vehicles through illegal channels tackled. Considerable time and effort was devoted to this over the last year. ARN is adopting an active stance in this matter, because the disruptive effect on the market

and the harmful environmental consequences of illegal practices are quite simply too big. ARN also wants to be actively involved in this in order to combat unfair competition for the ARN network of vehicle dismantling companies and ARN-certified shredder companies. This requires intensive supervision of the whole chain of collection and processing companies, which will benefit not only the environment but also all the parties in the chain.

More and more companies are being advised with waste prevention and separation as well as with the storage and removal of waste in order to raise the level of ARN's services still further. The ARN environmental scan was developed to support companies in these activities in a systematic and, above all, practical way. There is substantial interest in the ARN environmental scan; in 2010 the collaboration with several dealercompanies and car repairshops will be extended.

In 2009 ARN also started to grow a consultancy business aimed at utilizing the expertise it has built up. A range of projects were carried out, for example the supervision of a shredder test in Ireland, a study of recycling options for recyclable precious metals from catalysts in Eastern Europe, Design for Recycling and the national scrappage scheme referred to above, as well as the supplementary scheme initiated by Amsterdam city council.

All these activities lived up to their promise, thanks in part to the organizational changes and reinforcements that ARN made in 2008 and 2009. ARN Holding now has four business units, which have shared the tasks and responsibilities in a logical and clear way: ARN Auto Recycling, ARN Recycling, ARN Recycling Services and ARN Advisory.

The revenues from the ARN Recycling Services and ARN Advisory business units are added to the waste disposal fund. The knowledge and expertise are thus capitalized, which ultimately benefits the processing of end-of-life vehicles in the Netherlands.

As regards personnel matters, management was reinforced at the beginning of 2009 by the arrival of Arie de Jong as COO. There was no change in the composition of the supervisory board in 2009. Mr K.J.F. Bukholczer replaced Mr B. Geerlings in mid 2009 as ROCWA's representative on the executive board of the Auto & Recycling Foundation. We thank Mr Geerlings most sincerely for his efforts and involvement spanning the many years during which he was a member of the executive board.

The sharply reduced income from the waste disposal fee has repercussions for the waste disposal fund, the management of which is the responsibility of the Auto & Recycling Foundation. Unfortunately, the lower income, together with the substantial contribution to the national scrappage scheme, makes an increase in the waste disposal fee inevitable in 2010.

In hindsight, the reduction in the waste disposal fee to 15 euros in 2007 was made too soon. The cost reduction resulting from the introduction of the PST facility has taken longer to achieve due to unforeseen delays. In order to make good this shortfall, the waste disposal fee of 45 euros will be reintroduced on 1 July 2010, but will then be reduced to the level that was charged up to and including 2006.

You can read about this diversity of subjects and our plans for the years ahead in detail in this sustainability report. Recycling and sustainability are more than ever at the centre of attention in politics and the private sector. Corporate social responsibility has become an irreversible national and international trend, and its importance will only increase. ARN has the ambition to make an important contribution to it, and will continue developing initiatives in order to make this contribution even more effective and efficient in the years ahead.

We should like to take this opportunity to thank all employees and all external parties who worked with us last year.

Dave Bebelaar MSc
CEO ARN

Arie de Jong MSc
COO ARN

Amsterdam, 18th May 2010

R D W

“It would be a great pity if ARN’s knowledge and expertise were not to be used, but making them available does not need to be free of charge.”

Johan Hakkenberg

*director of the Department
of Road Transport*



ARN has played an important role in raising the quality level in the vehicle dismantling sector, and is making a significant contribution to tackling fraudulent trade

According to Johan Hakkenberg, ARN is the engine driving the responsible reuse and environmentally aware dismantling of vehicles in the Netherlands. He also thinks that ARN's efforts have resulted in the sector becoming more respectable: "The Netherlands is the leader in vehicle recycling, and that's largely due to ARN. In this respect, they could take a more proactive approach in their PR – also because it's important to improve the general public's opinion of the automotive industry."

Hakkenberg thinks that it is logical for ARN to look for other sources of income: "It'd be a shame if the available knowledge and experience were not utilized. It's certainly important, though, that every B.V. under the Holding Company is able to pay its own way."

Hakkenberg considers ARN to be both a good sparring partner and a good sounding board. For example, RDW is engaging with other parties in order to harmonise worldwide legislation and regulations

concerning vehicle safety and environmental requirements. ARN would be a good organization to give RDW input in this process. Hakkenberg is thinking primarily of information about material requirements; for example, materials that are more sustainable or are better suited to dismantling and reuse.

RDW is the Dutch government agency that regulates the access of all Dutch vehicles to the public highway. RDW monitors the environmental and safety aspects of Dutch vehicles. It does this by granting a type approval for vehicles before they first appear on the road, and then obliging their owners to put them through an APK (periodic motor vehicle inspection). In fact, RDW keeps an eye on all vehicles, from both a technical and an administrative point of view, from the moment they are developed to when they have been scrapped. ARN is therefore able to monitor possible end-of-life vehicles effectively. ARN also has extensive contact with RDW in regard to combating vehicle crime.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



0 3 2 3 5 7

ARN's vision

From operator to active knowledge hub

Reuse and recycling can prevent a future shortage of raw materials

Over the years ARN has developed into an expertise centre, an organization in which theory and practice go hand in hand. ARN's expertise is deeply rooted in a combination of knowledge of and experience with the Dutch market for recycling in the mobility sector. ARN always chooses the most environmentally sound solution for its clients, and ensures that it is in line with legislation. At the same time, ARN always aims to use the most efficient method.

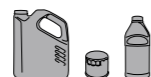
In its area of expertise, ARN intends to deliver a growing contribution to a more sustainable world. Reserves of fossil fuels and raw materials are declining, and therefore recycling and generating energy from alternative sources are becoming increasingly important. Recycling will contribute to preventing a shortage of energy and materials. ARN sees an important role for itself in increasing awareness in this area throughout the chain of automobiles and other mobility products, and in making a contribution to the high-grade recycling of materials from mobility products. This all starts during the design phase of a vehicle. The introduction of post-shredder technologies is making this theme increasingly important. Design and engineering are currently focused primarily on functionality and costs, and in many cases collaboration between design and recycling departments is too limited. Yet this is precisely where considerable benefits can be attained. ARN sees opportunities to use its knowledge about the end of the chain to achieve sustainable gains at the beginning of it.

Substantial quantities of waste are produced during the use of mobility products. There are two areas in this field in which ARN intends to create sustainable value. The quantity of waste can be reduced by creating more awareness in the chain about waste generation. This is easy to do using ARN's environmental scan. ARN also plans to use its expertise to process in an environmentally friendly and efficient way the materials that are recovered.

ARN strives to use the highest value added application when reusing waste from mobility products. A number of factors – for example, limits on technical and economic possibilities – play an important part. Recycling must not lead to unacceptably high costs. ARN will therefore always select solutions that are sensible in terms of both recycling and economics. In ARN's thinking, the aim of achieving a good recycling performance is inextricably linked to the aim of being efficient.

Legislation and regulations form the most important framework within which ARN has to achieve its objectives. ARN actively participates in the dialogue with government about the practical feasibility of legislation and, where necessary, makes proposals for amendments. ARN considers the objectives for the reuse of end-of-life vehicles (ELVs) within the existing statutory constraints to be feasible. However, ARN links this to another important objective, namely achieving a uniform and auditable way to measure and report in all European Member States. ARN is closely involved in outlining a pan-European route for attaining the ELV objectives, that is, the European end-of-life vehicles directive.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



ARN's profile and organization

Recycling, Chain management & Knowledge sharing

Over the last 15 years ARN has developed into a centre of recycling expertise, building on its knowledge of and practical experience with recycling vehicles in the Dutch market. ARN's expertise is also being utilized increasingly often in the mobility sector as a whole: ARN is involved both in innovation and in issues relating to the environment and sustainability. ARN's activities in this area also extend to other countries.

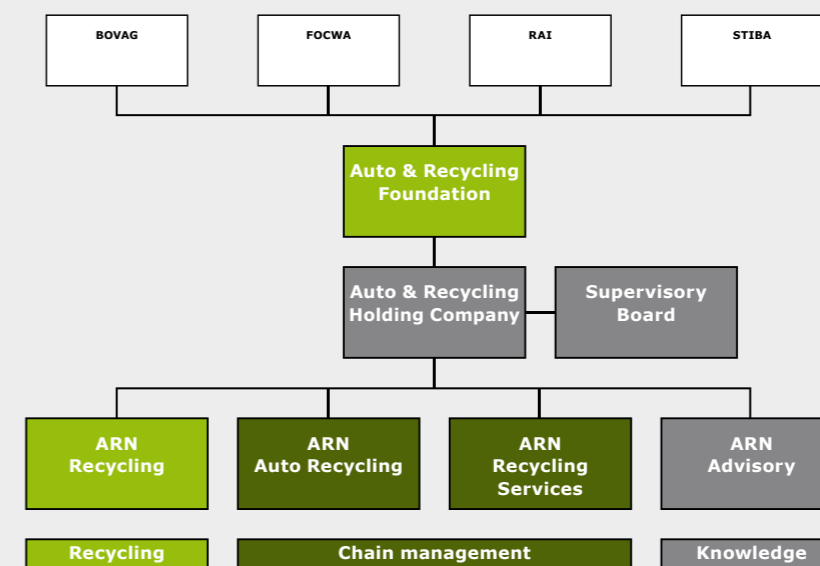
ARN's expertise focuses on three key concepts: recycling, chain management and knowledge sharing

Recycling ARN was established to promote the efficient and environmentally sound recycling of end-of-life vehicles. The insights acquired in this area also can be implemented in other fields. ARN is no longer solely concerned with end-of-life vehicles, but is also interested in the vehicle's entire lifetime, during which comparable materials are recovered. ARN's expertise is also being used for other mobility products, such as two-wheelers, caravans and boats.

Chain management In the Netherlands, ARN – acting on behalf of the automotive industry – directs the efforts that market players are making towards achieving the recycling objective. ARN advises about the implementation and, where desirable and necessary, gives them direction. ARN does this by bringing market players together and coordinating activities. Through ARN's efforts, the combined efforts of the specialist companies in the chain produce the best possible results for the environment.

0 4 9 1 6 0

ARN's organizational structure



Knowledge sharing ARN increasingly shares the know-how it has acquired over the last 15 years and disseminates it in the market. Besides its own research, ARN enters into alliances with knowledge institutes and the business community. Sharing knowledge is at the core of these initiatives.

Objective of foundation, holding company and the four operating companies

Auto & Recycling Foundation The objective of the Auto & Recycling Foundation is to promote all recycling measures that limit as much as possible the damage done to the environment. This concerns the recycling of end-of-life vehicles and other residual materials from the mobility sector in the broadest sense of the term. In the Netherlands, the Auto & Recycling Foundation has the delegated (manufacturer) responsibility for processing end-of-life vehicles. The foundation's executive board consists of representatives of the automotive industry in the Netherlands: BOVAG, FOCWA, RAI Vereniging and RAI. STIBA Vereniging – which represents vehicle importers – chairs the board. The interests in the foundation are equally divided among the industry's four trade associations.

ARN (Auto & Recycling holding company) ARN acts as an umbrella organization, directing and supporting the four business units. The holding company supports the business units with services – for example HRM, IT, finance and communication – so that they can focus on their key activities. The four business units report to the holding company. The holding company reports to the supervisory board and consults with the executive board of the Auto & Recycling Foundation at least twice a year.

ARN Auto Recycling The Dutch End-of-Life Vehicles Management Decree states that a recycling objective of 95% must be achieved in 2015, with a minimum of 85% material recycling and a maximum of 10% energy recovery (European Directive 2000/53/EC). ARN Auto Recycling intends to achieve this statutory objective in an environmentally sound way and at the lowest possible cost by recycling the greatest possible proportion of Dutch end-of-life vehicles. To this end, ARN Auto Recycling coordinates all activities with its contract partners in the end-of-life vehicle chain. These partners are vehicle dismantling companies, collection companies, shredders and processing companies. The activities include filing government reports and cooperating with enforcement agencies.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



ARN Recycling ARN Recycling is responsible for all activities at the post-shredder technology (PST) facility that is under construction in Tiel. The facility will process shredder waste and separate as much as possible into usable materials. ARN Recycling is responsible for operating the facility, purchasing shredder waste and selling the output.

By reprocessing shredder waste into reusable products, ARN Recycling will contribute to achieving the end-of-life vehicle recycling percentage of 95% in 2015.

ARN Recycling Services ARN Recycling Services aims to reduce the environmental impact of vehicle use. ARN Recycling Services engages in three main activities.

- Coordinating the collection and processing of waste streams that are produced during vehicle usage.
- Trading in waste, for example old batteries and cable trees.
- Carrying out environmental scans, which help to reduce the environmental impact in the workshop and repairer chain.

ARN Advisory ARN Advisory provides the ARN business units and third parties with advice related to recycling, legislation and chain management, analyses the associated trends and provides statistics on vehicle trends.

ARN Advisory's goal is the further professionalization of knowledge management and the improvement of knowledge and competence development.

The objective was achieved in the first year of operation (2009) when ARN Advisory completed its first external orders for consultancy services.

Staff

Auto & Recycling Foundation has no employees. The foundation outsources the execution of its policy to ARN.

In 2009 ARN's workforce grew from 22 to 31 people, of whom 10 work part time. The average size of the workforce in 2009 was 28.6 FTEs. ARN has a highly skilled team whose knowledge covers a broad spectrum. ARN offers training and education in the related disciplines.

ARN actively promotes the personal development and the safety, health and welfare of its employees.

Recycling

ARN was established to promote the efficient and environmentally sound recycling of end-of-life vehicles. The insights acquired in this area also generate opportunities and solutions in other fields. ARN is no longer solely concerned with end-of-life vehicles: it is also interested in the vehicle's entire lifetime, during which comparable materials are recovered. ARN's expertise is also being used for other mobility products, such as two-wheelers, caravans and boats.



“ARN should do more to tackle disreputable dismantling companies. They undermine the market and are bad for the sector’s image.”

Bart Ebben
owner of dismantling company

ARN should broaden its activities. You come across the same waste residues everywhere – and no-one has more experience with them than ARN

Ebben thinks that old-fashioned breakers yards will disappear in due course. “If you want a future as a dismantling company, you’ll have to tackle the current recycling requirements, as specified by ARN. You’ll also have to meet the requirements that potential customers set for used parts.” Ebben believes that ARN has a positive effect on the sector and its image. Many of the worst companies have now left the sector, and ARN contributed to their departure. This is good, because you do not want to be associated with such companies. As far as Ebben is concerned, ARN should be more proactive in tackling dishonest dealers: they are bad for the sector’s image and they often work below the cost price of honest firms.

It is a good idea to market ARN’s knowledge and experience, and to charge for this. Ebben: “In the mobility sector, you come across the same materials everywhere and no-one has more experience with them than ARN.” Collaboration with other parties, like BOVAG and RDW, would be good: “We should share knowledge.”

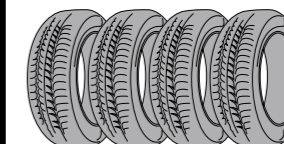
Bart Ebben’s firm specializes in Citroën and Peugeot. Its core business is dismantling vehicles and trading in vehicle parts. The biggest customers are dealers throughout Europe, universal garages and specialists. Demand from customers for used parts is growing, simply because they are cheaper. It is therefore becoming more and more attractive to disassemble good parts. Bart Ebben is a former STIBA board member and is currently on the board of BOVAG. He has worked with ARN for years.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



0 8 2 9 5 5

Replaced after a period
Tyres



ARN Recycling

From shredder waste to reusable material

ARN Recycling's mission is to reprocess shredder waste into reusable products and thus contribute to achieving the recycling percentage of 95% in 2015, as specified in European Directive 2000/53/EC. In order to achieve this goal, ARN Recycling is building a post-shredder technology (PST) facility in Tiel.

Events in 2009

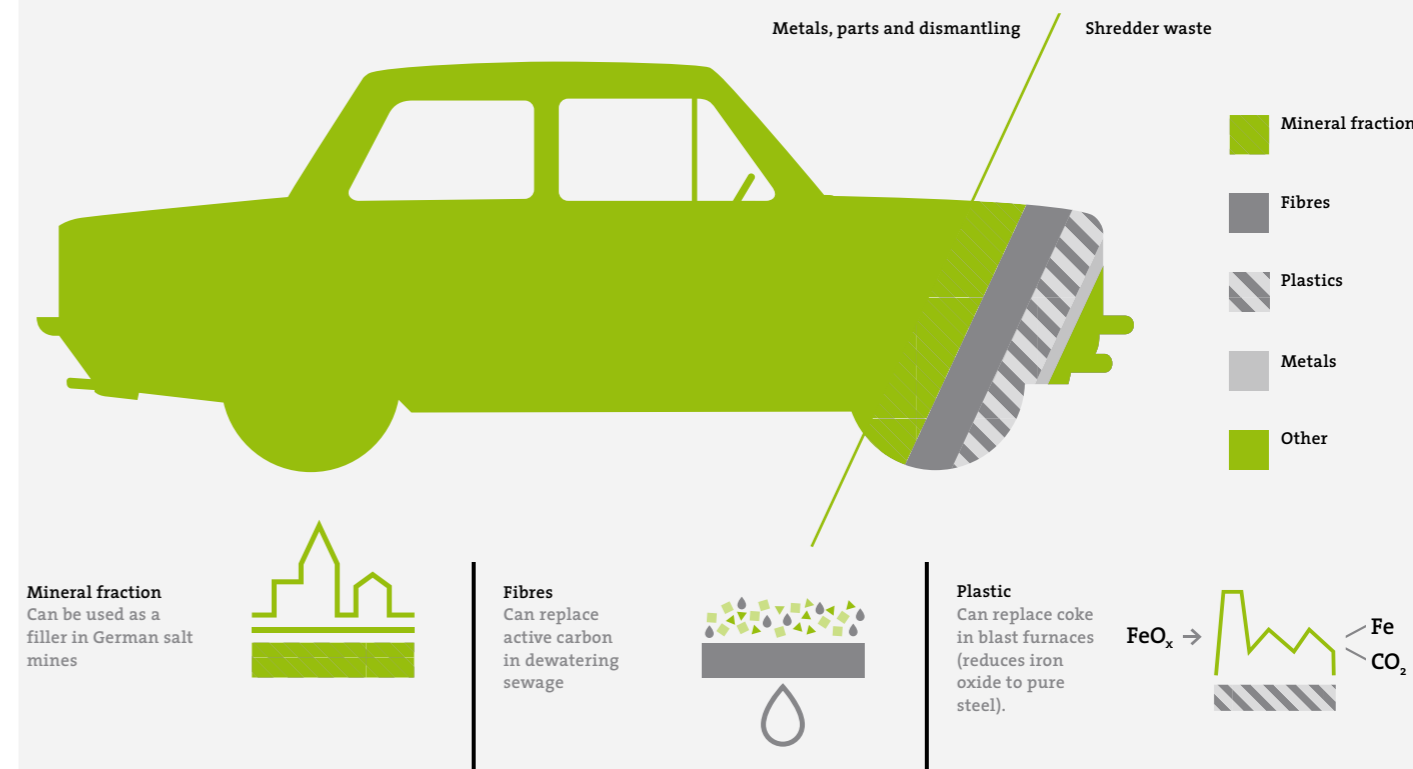
Completion of the processing line is scheduled for 2010.

The year 2015 seems a long way away now, but over the remaining five years the processing line will be optimized. This optimization concerns three targets:

- Achieving the recycling percentage of 95%
- Achieving the underlying division of 85% material reuse and a maximum of 10% energy recovery
- Reducing the cost price of the whole end-of-life vehicle chain by dismantling less material by hand.

These targets have been defined for the shredder waste obtained from Dutch end-of-life vehicles, which amounts to 33,000 tonnes a year. As the PST facility will have a total capacity of 100,000 tonnes, it will be able to process over 60,000 tonnes of additional shredder waste. The facility will thus make a substantial contribution to limiting the amount of land-filled waste in the Netherlands.

Markets for end fractions



Progress with PST facility construction

The construction of the processing building was completed in 2009. The building comprises offices, a bunker hall for shredder waste (1,500 m² floor area) and a production hall (2,200 m² floor area), and meets all environmental and safety requirements. Both halls have a liquid-tight floor and a sprinkler installation with a fire extinguishing water storage capacity of nearly 1,000 m³.

The office section was fitted out and furnished at the end of December 2009. The workshop was also equipped. Equipment, fixtures and fittings for the laboratory are awaited.

Progress with processing line

Because of the innovative nature of the processing line, it took a lot of time, energy and money to bring together all the theoretical and practical knowledge required. Plenty of hard work was done on the design together with Topec (main contractor; part of the Pon Group) and the German engineering firm SiCon (designer); from a comparable project the Austrian company TBS GmbH provided a lot of practical knowledge. The outlines of the processing line were decided upon at the begin-

ning of December. The first machines were ordered in February 2010.

Cooperation with shredder companies

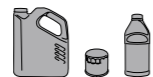
Consultation with the shredders was intensified in 2009. The market situation that will exist after the processing line in Tiel comes into operation was discussed during various meetings. Solutions are being worked out in consultation with the shredders and the dismantling companies in order to avoid unfair competition from companies working with end-of-life vehicles that are outside the ARN system. The problem can be solved effectively by initiating various joint actions.

End fractions market research

There are markets for the three most important end fractions:

1. The minerals (25%) are used as fillers to prevent subsidence of German salt mines
2. The fibres (22%) are used as additives in dewatering sewage sludge
3. The low-chlorine plastic fraction (20%) is injected into a blast furnace to replace coke in the reduction of iron oxide to steel.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



The application of the minerals has been recognized by the Dutch government as 'material reuse'. However, the government considers the application of fibres and the low-chlorine plastic fraction as only 'reuse with energy recovery'. ARN Recycling is therefore looking for alternative markets.

It is not easy to find an alternative for the plastics, as various types of plastic are used in vehicles. This hinders efforts to find a market. ARN is therefore taking a different approach, namely the further separation of the plastic flows, which will create more applications. Higher added value methods are being investigated for the minerals that make the material suitable as a raw material, for example in road building or as a filler in such products as bricks or tiles.

Outlook for 2010

The processing line will be operational in 2010. The machines have been ordered and preparations have been made to install them in the production hall.

A number of new employees will start up the installation in the initial months of the year. The processing line is scheduled to achieve the desired production level of 33,000 tonnes a year at the end of the year, after an intensive test programme has been carried out.

The processing line's plastics module will be expanded so that a substantial portion of the plastics can be recovered. Some additional research will be done for this. The processing line will be equipped with a machine monitoring system, which can detect the wear of components at an early stage. In this way malfunctions in and damage to the line can be prevented. ARN gives high priority to cleanliness in the facility. Among the measures to be taken is the installation of an air purification system in the main processing building, which will extract and capture as much as possible of the dust that is emitted during the separation process.

ARN Recycling is constantly seeking for higher added value methods for end fractions

Chain management

In the Netherlands, ARN directs achievement of the recycling objective on behalf of the automotive industry. ARN advises about the implementation and, where desirable and necessary, gives it direction. ARN does this by bringing market players together and coordinating activities. ARN ensures that all parties in the chain harmonize their special skills in order to achieve the best possible environmental result.

Major service
3.5 litres of oil
Oil filter
Air filter
Fuel filter
0.4 litres of brake fluid
5 litres of coolant
Brake blocks
Multi-belt
Spark plugs
Tyres



ARN Auto Recycling

More efficiency and growing market share

ARN Auto Recycling is responsible for the attainment of the statutory recycling objective of 95% in 2015. ARN has the ambition to do this in an environmentally sound and efficient manner. ARN Auto Recycling intends to achieve this objective by recycling the greatest possible proportion of Dutch end-of-life vehicles. To this end, ARN has set up a monitoring system that records and checks all steps in the chain. The system provides verifiable recycling data for our clients and government.

In 2009, ARN Auto Recycling concentrated primarily on efficiency measures in the chain and on growing its market share end-of-life vehicles. Besides delivering added value to companies that already collaborate with ARN, tackling unfair competition is a major spearhead in increasing market share.

Tender for processing and collection companies

In 2009 ARN prepared a tender for both processing companies and collection companies. The tender for processing companies resulted in cutting the costs of material processing.

The tender for collection companies resulted in a better organized chain. This delivered both cost savings and less impact on the environment.

Brake fluid and refrigerants

The removal of brake fluid has been optimized by using bulk trailers. This has reduced the number of transport movements and cut collection charges.

The refrigerant costs have been cut by employing a different routing in the processing company.

113025

The second life of bumpers

Bumpers are dismantled at dismantling companies and stored in warehouse containers. The bumpers are then picked up by collection companies, which grind them into granules. This reduces the volume by a factor of ten. The ground-up bumpers are then taken to the processors.



Drainage installations at dismantling companies

ARN has installed drainage installations at affiliated car dismantling companies for the efficient and environmentally sound removal of liquids from end-of-life vehicles. These systems are removed from companies that have terminated their contract with ARN. Six systems were dismantled in 2009; two of these were subsequently installed at car dismantling companies that had recently become affiliated to ARN. The installations are the property of ARN and ARN therefore services and maintains them. ARN is devoting a lot of energy to system improvements, in order to enhance environmental performance and minimize maintenance costs.

Sensors in liquid tanks

Recovered liquids are stored in tanks. The collection of these liquids can be optimized by installing remote level sensors. The collection company can define an optimal route on the basis of this information. A sensor that employs radar technology was selected for detecting the levels in the liquid tanks. Many of the tanks were equipped with these sensors in 2009. Collection

will take place on the basis of this technology from 1 January 2010 onwards, and will lead to economic and environmental benefits.

Shredders

ARN collaborates with certified shredder companies. The dismantling performance of car dismantling companies is checked at the shredders. The vehicles received by the shredders are registered via an extranet, which makes monitoring end-of-life vehicles and checking the chain simpler and more efficient.

Growing market share

In 2009, ARN processed 87.5% of all end-of-life vehicles in the Netherlands. ARN Auto Recycling works with a network of nearly 300 chain partners to process end-of-life vehicles in an environmentally sound way. Although there are some good companies in the remaining 12.5% of the market, many do not deal with vehicles in an environmentally sound way. ARN would like to welcome the former companies as partners and – together with industry players – bring about an improved situation in the latter companies.



“It’s a fact that in Europe ARN has the most know-how about vehicle recycling, because they’ve been doing it longest. ARN’s added value is therefore too great to keep it solely for the Netherlands.”

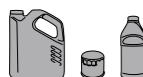
Catherine Lenaerts
director of Febelauto

ARN should continue its pioneering role

“ARN has the most know-how in Europe about recycling, the market and the technology. They’ve been doing it longest.” In Lenaerts’s view, ARN is prepared to take many steps, which it can because it is independent. However, she thinks that a role like this entails obligations: “ARN should continue its pioneering role and carry on with achieving as much as possible through recycling.” ARN has the resources in house to further investigate the most sustainable way to have end-of-life vehicles processed. Febelauto considers the sharing of technical information to be very important. Lenaerts does not expect the commercialization of ARN’s knowledge to be simple: “It brings you up against the interests of several market players. But it’s a pity to keep all that know-how and expertise exclusively inside the Netherlands.”

Febelauto is the organization that coordinates the interests of everyone involved in processing end-of-life vehicles in Belgium. Febelauto ensures that there is compliance in Belgium with the EU End-of-Life Vehicles Directive. Febelauto is seeking to limit as much as possible the impact of processing end-of-life vehicles on the living environment. Prevention is one of the ways to do this. ARN has had close contact with Febelauto for years in order to share experiences.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid

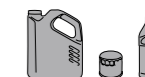


Replaced after a considerable period
Distributor belt



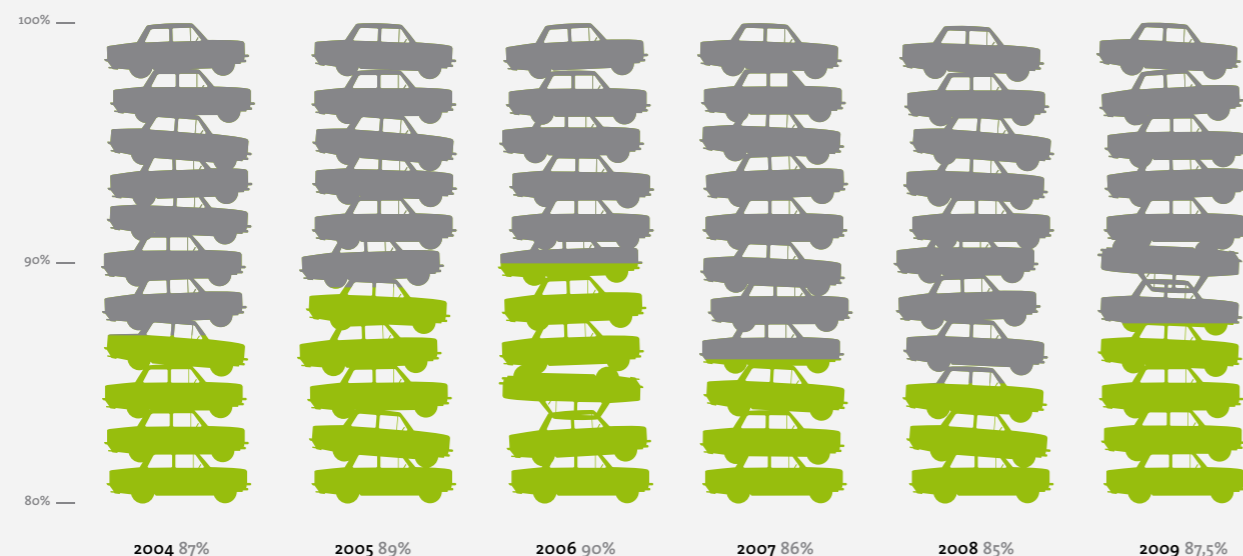
1 2 3 4 5 6

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



ARN's market share

ARN's market share increased in 2009.



The national scrappage scheme

Vehicles that were registered in 2009 via the DNS (national scrappage scheme) were checked and scrapped in an environmentally sound way at certified companies. 248 car dismantling companies participated in the DNS. In 2009 these companies dismantled 52,185 vehicles under the DNS. Of all the vehicles concerned, 99% were cars and 1% were commercial vehicles with a gross vehicle weight of less than 3,500 kg. Of the scrappage scheme vehicles, 88% used petrol, 11% diesel and 1% LPG. ARN Auto Recycling is making various checks to verify whether the contracts signed by the car dismantling companies under the DNS are being fulfilled.

Abandoned vehicles

Rijkswaterstaat (the Directorate-General for Public Works and Water Management) is looking for an environmentally friendly solution to the problem of end-of-life vehicles that are abandoned on motorways. ARN has entered into an alliance with Rijkswaterstaat under which vehicles with a low value are offered to the ARN network of car dismantling companies. ARN ensures that the vehicles are dismantled and destroyed. Contracts have been entered into with a number of dismantling companies in the network.

The business scan for car dismantlers

A professional car dismantling sector is a prerequisite for environmentally friendly recycling. Dismantling companies are having to adapt to changes in the market and in the demand for and supply of more complex vehicles. Further professionalization and sound business practices are necessary for survival. ARN has therefore developed a business scan, which in 2009 was applied to 25 dismantling companies. The scan produces recommendations about operational management and how companies can fine-tune their strategy in order to achieve their objectives. The results of the scans are being used to develop a benchmark against which companies will be able to measure themselves. This benchmark will also give ARN insight into market trends.

Tackling unfair competition

As part of its routine activities, ARN flags environmental offences, fraud and vehicle-related crime. Such practices impede ARN in discharging its responsibilities and it therefore has an interest in tackling them. This is also in the interest of companies that obey the rules and of various government and industry organizations. The problem can be tackled more effectively if the chain takes joint action.

Tackling end-of-life vehicles outside the ARN system

After end-of-life vehicles have been stripped of ARN materials, they are taken to authorized shredders, where they are destroyed. In the Netherlands it is not permitted to break up end-of-life vehicles. In order to monitor this process, the transport of end-of-life vehicles must be reported to the national waste reporting centre, quoting specific. Consultation with chain partners has revealed that some Dutch end-of-life vehicles are reported using incorrect EURAL codes. It is consequently not possible to check what happens to these vehicles. This observation resulted in the provinces issuing a formal warning to the companies concerned. The responsibility for accurate reporting lies with the party disposing of the waste, in this case the car dismantling company.

Tackling improper reporting

In recent years ARN has made efforts to grow its market share. Despite these efforts, our market share dropped from 89% in 2004 to 87.5% in 2009. Much of this can be explained by the increase in illegal dismantling, for example an end-of-life vehicle is reported as being exported, whereas it remains in the Netherlands, or is reported for private scrappage. In many cases these vehicles go not to the statutorily obligatory shredders but to blast furnaces in other countries via breakers. When vehicles are disposed of in this way, no checks are carried out in regard to environmental legislation. ARN notes that these practices are becoming more widespread. When ARN observes specific cases, it notifies the LIV (national vehicle crime information centre), which is an alliance of the RDW (road traffic agency), the KLPD (Netherlands national police agency) and the vbv (insurance bureau for vehicle crime). The LIV uses this information to tackle abuse.

In 2009 ARN became an associate member of the AVC (foundation for tackling vehicle crime). Many parties are working together in the AVC to reduce vehicle crime.

Stricter enforcement

Although the vehicle dismantling sector operates under new, stricter rules, the business community reports that provincial regulators are not always clear in their approach, which creates uncertainty and a greater regulatory burden. The sector-focused approach launched by the government should rectify this unfortunate situation.

The enforcement consultation that ARN has been conducting since 1999 involves representatives of all provincial regulators, STIBA, RDW, LIV and the inspecting agencies. This consultation owes its success to the unique public-private partnership and has served as an example for the composition of other branches.

In August 2009 the enforcement consultation became the sector team consultation. After ten years, ARN handed over the chair to an official from the Ministry of Housing, Spatial Planning and the Environment, who is also tasked as sector team manager. The sector-focused approach makes it easier to share knowledge within the team. In the near future the sector team will concentrate primarily on tackling illegal activities and developing a uniform model for a mass balance of a vehicle dismantling company. ARN considers the sector team to be a very important weapon in tackling unfair competition.

Outlook for 2010

Initiating a new collection method

The method for collecting a substantial part of ARN materials will change as soon as the PST facility becomes operational. During the first half of 2010, ARN will be investigating the best method for collecting materials in the new situation. This may involve restructuring the packaging area and/or amending the master contracts with collecting companies.

Dismantling companies' extranet

The dismantling companies' extranet is scheduled to go live on 1 July 2010. This extranet will provide a system for registering and forwarding collected materials. A digital system has two big advantages: much less paperwork at ARN and the dismantling companies, and a significantly shorter turnaround time for payments.

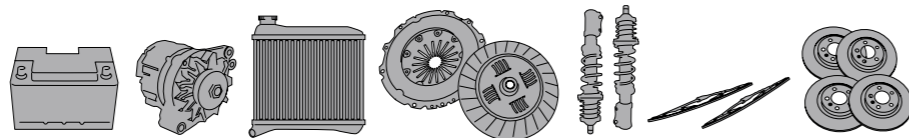
Business scan

ARN is promoting the further professionalization of the sector. In 2010, ARN will continue to support new participants in the ARN business scan with a contribution towards the costs.

Drainage installation sensors

By 1 July 2010 at the latest it will be possible to read levels remotely at all locations that have a drainage installation, thus enabling the collection company to make optimal logistics plans.

Wear parts
 Battery
 Generator
 Radiator
 Clutch
 Shock absorbers
 Windscreen wiper
 Brake discs



ARN Recycling Services

Waste concept and ARN environmental scan on the map

Sustainability is an important theme in the mobility sector. Encouraged by legislation, it also adds value to companies. In many cases sustainable business leads to cost savings.

As far as individual companies are concerned, the focus on the environmental component of sustainable business often ends with the delivery of economical vehicles and obtainment of the environmental permit. ARN Recycling Services utilizes its knowledge and expertise in the areas of wastes, environmental legislation and the environment on behalf of the mobility sector. ARN Recycling Services gives companies insight into the quantity of waste produced during the use of the vehicle and into how to deal with it in an environmentally sound and efficient way. ARN Recycling Services has developed two products for this. Both products – the one-stop shop and the ARN Environmental scan – are specifically intended for automobile companies and damage repairers.

One-stop shop

ARN Recycling Services allows companies to deregister their wastes by logging into an on-line 'one-stop shop'. Companies receive annual overviews of the costs incurred and the quantities of wastes. The system can be used to file statements with government agencies. By using the one-stop shop, companies can be confident that the materials are being recycled in an environmentally sound and efficient way. The recommendations also result in substantial savings.

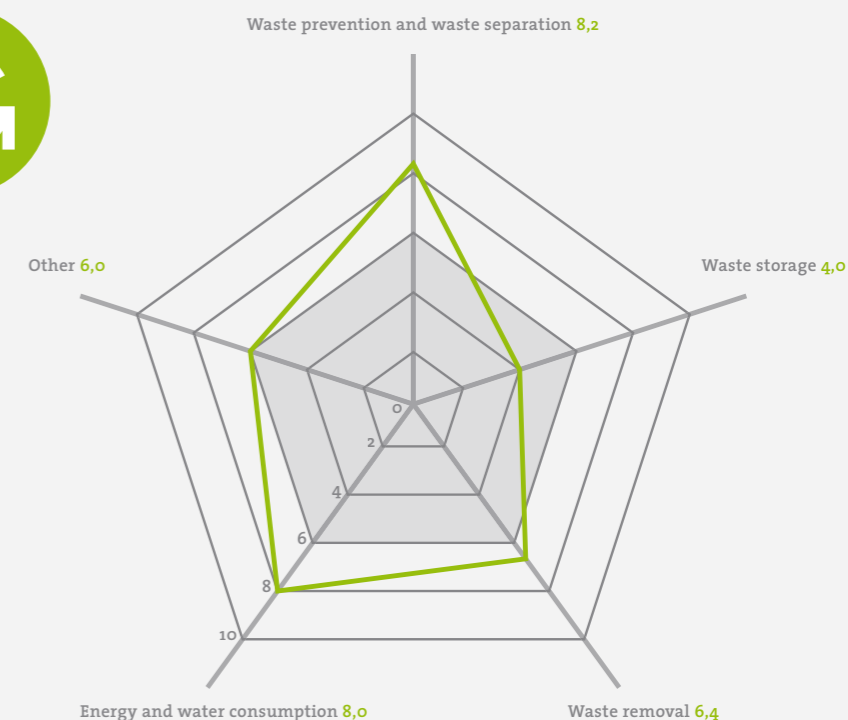
1 4 3 7 1 2

Minor service
 3 litres of oil
 Oil filter
 Windscreen washer fluid



ARN Environmental scan

The ARN environmental scan assesses the car company in terms of 5 points. The firm receives an ARN environmental scan certificate if it receives satisfactory scores on 4 points. It can then display the adjacent quality mark.



ARN Environmental scan

This scan was specially developed for automobile companies (garages, dealers, car repair shops). It identifies and analyses environmental aspects and contributes to the government's chain management policy. The goal is to reduce the environmental impact of a vehicle's use. The ARN Environmental scan thus reduces environmental costs and creates awareness.

ARN consultants conduct ARN Environmental scans at company sites. The result of a scan is a qualitative assessment of five areas:

- Waste prevention and waste separation
- Waste storage
- Waste removal
- Energy and water consumption
- Other environmental aspects of operations.

The results of ARN Environmental scans give automobile companies a clear picture of where sustainable improvements are possible. ARN Recycling Services also gives advice about how these improvements can be implemented. If the company gets a satisfactory score on four of the five aspects, it is presented with a certificate.

Batteries and cable trees

ARN Recycling Services buys in batteries and cable trees, and can offer attractive prices by buying and selling in

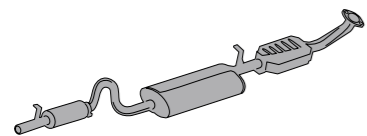
bulk. Needless to say, these materials are processed in a proper way. In its collaboration with processing companies, ARN Recycling Services applies the same standards as the other business units.

Outlook for 2010

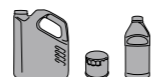
ARN Environmental scan

There has been great interest in the ARN Environmental scan ever since its introduction. At the beginning of 2010, ARN Recycling Services started collaborating with Care Schadeservice, a chain of specialist vehicle repair companies. An ARN Environmental scan will be conducted at all Care branches. Discussions are also being held with BMW and a few other dealer associations and importers about doing the same thing. In 2010 the ARN Environmental scan will undergo further development and expansion. BOVAG and ARN Recycling Services are jointly investigating how BOVAG's sustainable business scan can be combined with the ARN Environmental scan. There will also be a review with the Energiecentrum (SME energy centre) to see if its scan can be integrated with the ARN Environmental scan.

Replace after a considerable period
Exhaustion pipe



Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



Batteries

Prices for primary raw materials have been rising since the end of 2009. This is having a clear effect on the battery trade. The expectation is that increasing economic growth and higher demand for raw materials will make prices rise even further – which will mean that more traders become active again.

Research

On behalf of ARN Recycling Services, ARN Advisory is investigating the possibility of trading in reconditioned parts or materials, such as engine control units and dynamos.

There is substantial interest in the ARN Environmental scan

Knowledge sharing

ARN increasingly shares the know-how it has acquired over the last 15 years and disseminates it in the market. Besides its own research, ARN enters into alliances with knowledge institutes and the private sector, alliances in which sharing knowledge is at the core.



“ARN relieves importers of many responsibilities, particularly with regard to the administrative workload. This means that importers can concentrate on their core business – selling vehicles. And we can be confident that end-of-life vehicles will be processed sustainably and that the statutory targets will be met.”

Willy Tomboy

Toyota Motor Europe

Use of post-shredder technology is important

Willy Tomboy says that ARN is a very professional organization that is in a leading position in Europe: “Toyota is a proponent of the system in the Netherlands, where ARN has to ensure that the maximum number of end-of-life vehicles end up in the system. The use of Post-Shredder Technology (PST) is important to Toyota, because it makes it possible to reach the 95% recycling target.”

Concentrating on the Netherlands Willy Tomboy thinks that ARN must be transparent about the activities of ARN Advisory. According to Tomboy, ARN Advisory should concentrate solely on the Dutch market and only make its know-how available when invited by third parties to do so; it should not actively promote itself in other countries. Tomboy: “In so doing, ARN also needs to ensure that the work it does for third parties doesn't conflict with the local or national strategy of the automobile manufacturers.”

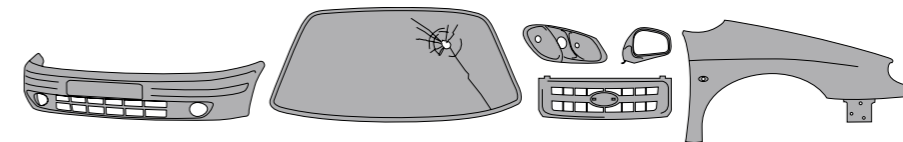
Toyota Motor Corporation is one of the world's most important automobile manufacturers and has a global workforce of over 264,000 people.

Toyota uses sustainable methods to produce a large number of hybrid models in order to limit the environmental impact of its vehicles to a minimum. Toyota's greatest challenge now is to make highly sustainable vehicles that emit no or virtually no harmful substances (CO₂, NO_x, PM) and that are essentially completely recyclable so that the materials can be reused.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



176094



ARN Advisory

Developing and sharing knowledge

ARN Advisory has the role within ARN of being a knowledge centre, a place where knowledge of and experience with recycling and chain management come together. In order to fulfil this role, ARN Advisory acts as an independent body when advising third parties.

ARN Advisory's consultants provide advice about a range of recycling issues. Recommendations can relate to:

- questions about processing end-of-life products in the mobility sector
- environmentally sound recycling of materials
- designing and setting up recycling chains
- explaining and providing information about environmental legislation and regulations.

ARN Advisory provides consultancy services to external clients and to the other business units within ARN. ARN Advisory's organization is divided into four knowledge areas. Consultants develop know-how in these knowledge areas and provide this expertise to both internal and external clients. The four areas are:

- Chain management
- Processing
- Trends & statistics
- Legislation & regulations.

Market trends

ARN Advisory closely monitors market trends that have an impact on recycling. This information is necessary for achieving ARN's recycling objectives. However, this know-how is also utilized when dealing with external clients. A number of current trends that are being monitored are discussed below.

Electric vehicles

Both manufacturers and governments are giving strong backing to electric transport. It is expected that by 2020, 10% of vehicles in the Netherlands will be plug-in hybrids or electric vehicles. The recycling of this new generation of vehicles calls for a different approach. The heavy batteries do not last as long as the vehicle and contain materials that are difficult to recycle. Furthermore, using current technology makes recycling these batteries expensive. On the other hand, electric vehicles contain many scarce materials that are well worth recycling.

ARN Advisory is concentrating its research on two factors. The first concerns alternative reuse options for batteries that are no longer suitable for the vehicle but can still be used to store energy for other purposes. A collection structure needs to be set up for this. The second factor is the development of an efficient and environmentally sound recycling method for electric vehicle batteries. ARN and various market players are collaborating in developing such a method.

Vehicle composition

Although the use of plastics continues to increase, so too does the overall weight of vehicles. Vehicles are becoming heavier despite the use of lightweight materials. This trend is expected to reverse with the advent of a range of small eco-friendly cars. It is not yet clear when this reversal will happen, however, because large numbers of big vehicles are still being sold.

It is also obvious that vehicles contain more and more reused plastics. This reused plastic is often applied in places that are not visible to consumers because of the plastic's less attractive appearance.

Over a 12-year period the weight of plastics in vehicles will double from an average of 75 kg (2003) to about 160 kg (2015). Polypropylene (PP) and polyethylene (PE) are the most common plastics. Polyamides, such as nylon (PA6), are also often used. PP and PE are ideal for recycling. The recycling process needs to take this trend into account.

Design for recycling

The subject of recycling will become increasingly important in a world that is increasingly concerned with sustainability. By technology improvements, the

ARN Advisory cooperates with other consulting organisations, national and international

emissions etc. The emissions of CO₂ during the life cycle are decreasing, as a result of which the environmental benefit to be achieved in the end phase is relatively larger. The reuse of parts is an important element of dismantling. In future, battery packs from electric vehicles will also be reused. A precondition for this is that the batteries must be easy to remove so that the dismantling costs remain low. It is also crucial for battery exchange systems that the batteries are easy to access. This is where design for recycling comes into the picture. In the Netherlands ARN is now focusing primarily on post-shredder technology (PST), in which the removal of certain substances is an important aspect. A good example is PVC – a plastic that makes recycling more difficult because of its chlorine component. The use of cadmium in vehicle paint is another example. Cadmium contaminates the mineral fraction produced in the PST processes and it makes this fraction difficult to use. The use of cadmium has now been prohibited, but it will take many years before cadmium disappears from the recycling chain. These are clear instances of the drastic and long-lasting effects that material selections have on the options for the effective recycling of vehicles.

Events in 2009

In 2009 ARN Advisory was actively involved in various internal and external projects. Setting up the national scrappage scheme was a major project. It was implemented in collaboration with ARN Auto Recycling.

The national scrappage scheme

At the beginning of 2009, ARN reported on its research into the feasibility, environmental effectiveness and financial implications of setting up and implementing a scrappage scheme for cars and light commercial vehicles. ARN carried out the research on behalf of sector organizations BOVAG and RAI-Vereniging. The report was submitted in February by BOVAG, RAI Vereniging

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid

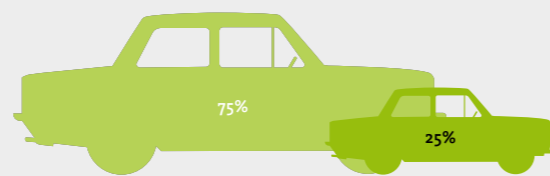


Scrapping scheme

The Dutch scrapping scheme replaced 55,755 older cars and commercial vehicles for newer and cleaner cars.



55,755
scrapped cars



40,954
replaced used cars

14,801
replaced new cars

and ARN to Jacqueline Cramer, Minister of Housing, Spatial Planning and the Environment, and formed the basis for the national scrapping scheme.

ARN Advisory worked out the details of the scheme within two months, set up a contact centre, built a website, developed an application and instigated an introduction campaign. Minister Cramer launched the national scrapping scheme on 29 May.

ARN Advisory is using all the transactions carried out under the national scrapping scheme to build up a database that provides the sector and the media with weekly figures. Brand-specific information can also be retrieved from the database upon payment of a fee.

Supplementary scrapping schemes

In the wake of the national scrapping scheme, many initiatives were developed by businesses and local authorities that wanted to be linked to the national scheme. The goals of the scrapping scheme include improving the air quality in city centres. This was why Amsterdam City Council followed up with its own New Amsterdam Climate programme. ARN Advisory built a special website and answered the first questions posed by Amsterdam residents.

At the beginning of 2009, Mercedes-Benz' commercial vehicles department indicated its interest in having its own scrapping scheme for vans. ARN set up the chain behind this scheme. The chain is based largely on the existing administrative infrastructure.

ARN also used this infrastructure for Rijkswaterstaat's towing away scheme. Here too the scrapping of the vehicle is guaranteed through a combination of administration and smart monitoring.

Airbags and belt tensioners

Since October 2007, the End-of-Life Vehicles Management Decree has required that pyrotechnic parts (airbags and seat belt tensioners) are rendered harmless. Under the supervision of the Netherlands Standardisation Institute, the NEN 7557 (2008) standard was prepared jointly with parties in the sector. ARN initiated the development of this standard in 2006. The objective was to continue to be able to guarantee safety in the chain.

ARN provides all car dismantling companies in its network with equipment that can be used to make airbags and belt tensioners harmless in a safe, efficient and environmentally sound way. ARN moreover trains companies in the safe handling of airbags and belt tensioners. This training enables dismantling companies to comply with NEN 7557.

ARN has held centralized discussions with the provinces in order to amend the permits of the dismantling companies. Ten of the twelve provinces agreed to ARN's plans. An agreement with the remaining two provinces is expected at the beginning of 2010.

As soon as a province agreed, ARN started to deliver the equipment and give training courses. In 2009, 40 of

1 9 0 8 5 5

the 230 car dismantling companies that applied were equipped and trained. It is expected that the remaining companies will be ready in the first half of 2010. The project will then have been completed.

Processing manual

Since its foundation in 1993, ARN has acquired a great deal of theoretical and practical know-how about the recycling of end-of-life vehicles. The assurance and accessibility of knowledge from the four business units is an important area of attention for the knowledge centre and was the reason to set up a system. ARN Advisory is also going to market ARN's knowledge to external parties. The provision of consultancy services started only last year, so it is not yet clear to the outside world what types of knowledge, networks and practical experience ARN can offer.

In due course, ARN will compile a processing manual on the recycling of materials in order to make part of its knowledge available to third parties. The manual will address a range of topics, for example compliance, legislation, the market, processing methods and trends. A series of articles will be written for trade journals over the next few years. This knowledge will then be bundled to form a manual.

Sustainable Platinum Group Metals project

ARN made a contribution to the Sustainable Platinum Group Metals project for Milieukontakt International. The aim of the project is to guarantee that the environmental benefits of automotive catalysts are not offset by, for example, the environmental damage caused by the extraction of the raw materials. The objective is to increase the recycling of automotive catalysts. ARN contributed by supplying information about numbers of vehicles, the parts market and metallurgical processes.

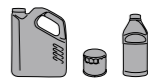
Shredder test in Ireland


ARN was asked by the Irish government to participate in a shredder test. Shredder waste was analysed in order to determine its composition. The data were used to calculate the theoretically feasible recycling percentage.

Outlook for 2010

In 2010, ARN Advisory will raise its profile, primarily in other parts of the mobility sector. It will also participate in various international platforms and discussion forums. Collaboration with other advisory organizations will be given further structure and substance.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



A close-up portrait of Koos Burgman, a middle-aged man with grey hair, wearing a dark suit, a light blue shirt, and a striped tie. He is looking slightly to the right of the camera with a neutral expression. The background is blurred, showing a red surface and a blue wall.

“It is pleasing that ARN
is widening its horizons
to encompass the whole
mobility sector.”

Koos Burgman
managing director of BOVAG

The construction of the PST facility is a good way to increase the recycling percentage

Koos Burgman very much appreciates the fact that there is an organization in the Netherlands that has a good solution for the problem of end-of-life vehicles. ARN's new ambitions for recycling are also logical. "However, the activities of ARN and trade associations like BOVAG should be well coordinated so that we don't get in each other's way or duplicate things," Burgman said. "As far as we're concerned, ARN is primarily about vehicle recycling. Expansion in the mobility sector is fine, for example by recycling light motor-bikes and batteries in bicycles. The PST facility is also a sound initiative and fits in well with ARN's terms of reference". ARN is looking for new waste streams because the facility's capacity is so large. "That's logical and fine," Burgman continued. "Sustainability involves more than just recycling. You should therefore try to collaborate with other parties, for example the IvdM (Institute for Sustainable Mobility)." His message for ARN is: "Continue doing what you're good at – especially as it's something that the whole world's interested in!"

BOVAG is the Dutch trade association of companies that are involved in mobility. A modern society without mobility is inconceivable. Safety and concern for the environment are crucial aspects in this respect. BOVAG believes that scarce resources should be used as efficiently as possible. BOVAG is one of the initiators of ARN and is represented on the executive board of the Auto & Recycling Foundation.

Major service
3.5 litres of oil
Oil filter
Air filter
Fuel filter
0.4 litres of brake fluid
5 litres of coolant
Brake blocks
Multi-belt
Spark plugs
Tyres



Trends in vehicle numbers

The impact of the economic crisis

Trends in vehicle numbers are crucial to ARN's policy. All income from waste disposal fees and expenditure on recycling can be deduced directly from trends in vehicle numbers.

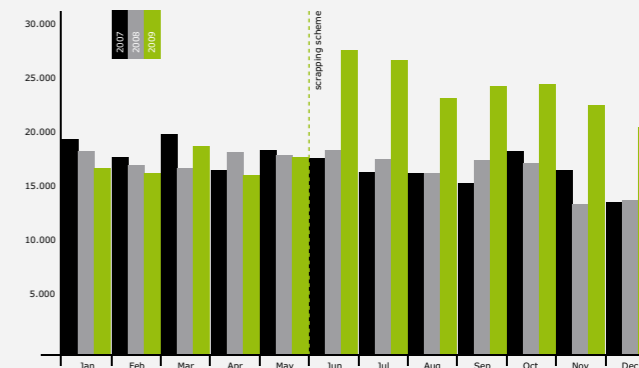
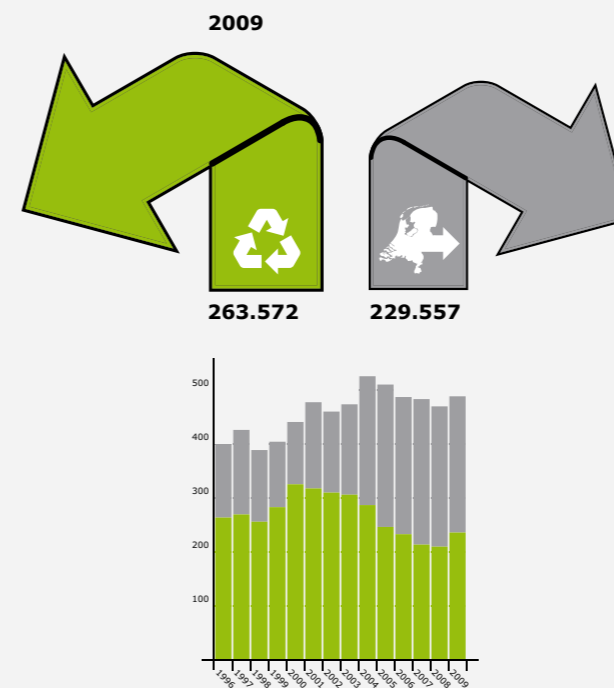
The overall number of vehicles depends on sales of new vehicles and parallel imports, and on the dismantling and exporting of vehicles. ARN's recycling responsibility covers cars and light commercial vehicles with four or more wheels and a gross vehicle weight (gvw) not exceeding 3,500 kg. The figures quoted in this report relate solely to this group of vehicles.

Vehicle numbers

The number of vehicles on Dutch roads hardly increased in 2009. At the beginning of 2010 the Netherlands will have 8.7 million vehicles, namely 7.8 million cars and 0.95 million light commercial vehicles. The average age of all vehicles increased from 8.4 years in 2008 to 8.6 years in 2009. The number of old-timers has been increasing steadily every year, including in 2009. ARN expects this number to stabilize, due in part to changed legislation relating to old-timers (i.e. it will become more expensive to drive an old-timer).

207734

Deregistrations



Registrations of new cars

In 2009 the number of new registrations per month was consistently below that of previous years. This is directly attributable to the financial crisis. The annual figures naturally paint the same picture: 583,697 vehicles in 2008 and 439,631 in 2009 (a drop of nearly 22%). Parallel imports fell at the end of 2008, but started to recover in mid 2009. Sales of new vehicles during the year as a whole were far lower than in previous years.

Number of deregistered vehicles

In 2009 493,129 vehicles were deregistered. Of these, 263,572 were deregistered as end-of-life vehicles and 229,557 were exported.

Dismantling

The number of end-of-life vehicles in 2006 was 25% higher than in 2008. A substantial part of this rise was due to the introduction of the national scrapping scheme. It can be seen in the figure above that there was a clear jump in the number of end-of-life vehicles immediately after the launch of the national scrapping scheme. This scheme led to vehicles being withdrawn at an increased rate. As a consequence the average age

of end-of-life vehicles has decreased from 16.6 years in 2008 to 16.4 years in 2009. An important indicator for the number of end-of-life vehicles is the sale of new vehicles 15–16 years ago: such sales were high around 1993, and this is reflected in the large number of vehicles in this age group.

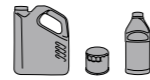
ARN processed 228,783 end-of-life vehicles. This represents an increase in ARN's market share from 85% in 2008 to 87.5% in 2009.

Private scrappage was lower than in 2008. The number of dismantling companies with which ARN cooperated dropped from 252 in 2008 to 248 in 2009. Between them these companies have a growing market share, so therefore on average there are more vehicles being dismantled per company.

Export

In 2009, 229,557 second-hand vehicles were exported from the Netherlands, a drop of 11.5% compared with 2008. In 2009, more vehicles were dismantled than exported for the first time since 2005. There is still a demand for Dutch vehicles in Eastern European countries. The average age of the exported vehicles remained the same as in previous years, namely at around eleven years.

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



Legislation and environmental performance

Implementation of legislation

Developments in recycling legislation at both the national and the European level are important to ARN. These developments concern both specific product decrees – which regulate product responsibility for cars and automotive batteries – and generic legislation that regulates waste management at a European level. This European waste management legislation is implemented in the Netherlands through the Environmental Management Act.

Legislation and regulations in the Netherlands

Second part of the Activiteitenbesluit (Environmental Management Installations Decree)

The second part of the Environmental Management Installations Decree came into effect in 2009. Under this decree, a company no longer needs to apply for a provincial environmental permit; it now only needs to make a report about the activities it undertakes. This change reduces the administrative burden on the private sector. Despite the fact that policy-neutral implementation was top priority, the change does have practical implications. There is a shift from granting permits (preventive enforcement) to more active enforcement. The risk that free riders will start operating in the market has therefore increased.

ARN took part in a vehicle dismantling working group in order to make preparations for the coming into force of the second part of the Environmental Management Installations Decree. The working group also comprised representatives of the government and the vehicle dismantling sector. Together with STIBA, ARN advocated the addition of an approval decision, that is, permission of the competent authorities before an activity may

2 2 9 3 5 2

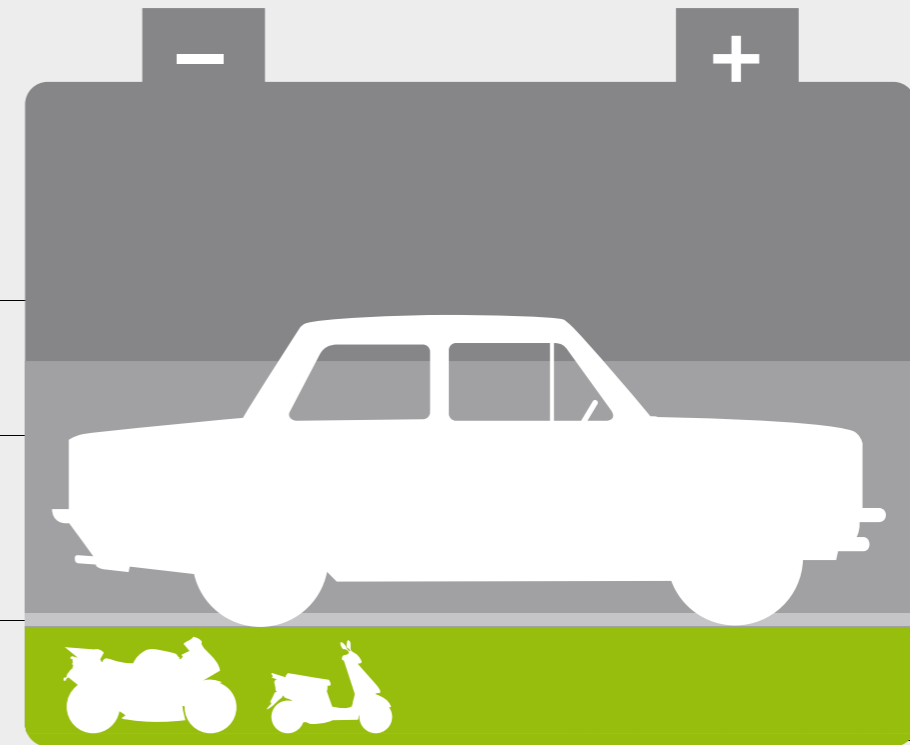
Collective system batteries

The Management of Batteries Decree came into effect in 2008. One of its implications is that manufacturers and importers have to document how the end-of-life batteries are processed. ARN has set up a collective system for this in cooperation with StiBat.

Cars built in 42%
this type of battery is already built in to a vehicle when imported

Cars after sales 38%
this type of battery is imported and is used to replace the existing battery in a vehicle

Cars Hybrid 2% built in hybrid battery



be started. The objective of this assessment is to check beforehand whether the applicant company meets the tough requirements that are set for dismantling companies in order to guarantee high quality management of end-of-life vehicles such that all vehicles are accounted for.

2009 – 2021 National Waste Management Plan

The second National Waste Management Plan, which covers the period 2009–2021, came into effect on 24 December 2009. The plan states that the minimum standard for processing automotive shredder waste is thermal processing. The land-filling of shredder waste is therefore not permitted. This is consistent with the landfill ban on shredder waste that came into effect on 1 January 2009. It is possible to grant an exemption as long as there is no or insufficient processing capacity for the waste. In 2009 the low rate of waste tax incorporated in the Environmental Taxes Act (wbm) for land-filling wastes applied in regard to this exemption. The low rate applies in a limited number of cases, including hazardous waste. Shredder waste is also in this category. The low rate for hazardous waste was scrapped at the

end of 2009. Since 1 January 2010, the normal waste land-filling taxation rate applies to shredder waste. The application of this normal taxation rate represents a substantial cost increase for land-filled automotive shredder waste.

Management of Batteries and Accumulators Decree

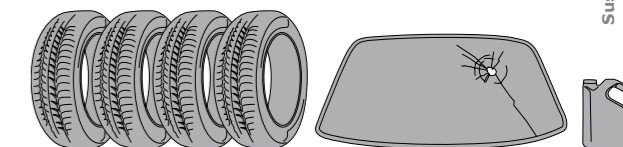
The collective notification about automotive starter batteries and high voltage (HV) batteries for hybrid vehicles was approved on 24 April. ARN agreed with SenterNovem that newcomers will be registered periodically with reference to the aforementioned collective notification. At the end of 2009, 65 importers of automotive starter batteries and HV batteries for hybrid vehicles were participating in the collective notification. Besides ARN's collective notification about automotive starter batteries, four individual notifications were submitted to and approved by SenterNovem. Despite the fact that the Management of Batteries and Accumulators Decree came into effect on 26 September 2008, many importers have still not submitted an individual or collective notification. Last year ARN urged the Inspectorate of the Ministry of Housing, Spatial

Minor service
3 litres of oil
Oil filter
Windscreen washer fluid



2 4 1 2 2 2

End-of-life
Tyres
Glass
Oil
Oil filter
Gasoline
Refrigerant
Brake fluid
Batteries
Metals
Plastics



LoW code	Material	Reuse (kg)	Recycling (kg)	Energy recovery (kg)	Total recovery (kg)	Disposal (kg)
13 02 05*	non-chlorinated mineral oil		148,781	3,200	151,981	77,676
16 01 07*	oil filters		47,782	20,478	68,260	0
16 01 13*	brake fluids		69,644	1,219	70,863	2,428
16 01 14*	antifreeze		440,237	17,859	458,096	451,204
14 06 01*	refrigerant		0	0	0	0
16 01 16	tanks for LPG		87,054	0	87,054	0
16 06 01*	lead batteries		1,119,220	154,375	1,273,595	12,865
16 01 03	end-of-life tyres		3,614,369	126,768	3,741,137	29,742
16 01 20	glass		4,039,206	36,317	4,075,523	350,737
16 01 19	plastics		2,542,840	1,611,536	4,154,376	113,091
16 01 99	waste not specified elsewhere		50,345	0	50,345	5
		44,346,744	12,159,478	1,971,752	14,131,230	1,037,748

Table 1. EU Monitoring Table (in kg)

Planning and the Environment to hold these free riders to account and ensure that they comply with the decree.

Legislation and regulations in Europe

End-of-Life Vehicles Directive reports

In 2009 the European Commission had a study made of the reports by the Member States with regard to the End-of-Life Vehicles Directive. As these reports show significant variations, there are considerable doubts about the correctness of the recycling performances that are presented. Eurostat (the EU's statistical organization) compared and analysed the Member States' reports. The European Commission also commissioned an external integrity review. These investigations were worked out in greater detail by a working group. The final objective is to arrive at a uniform method with which the Member States' reports must comply. Representatives of the Member States, the motor industry and the dismantling sector are participating in this working group. The group's starting point is that there will be no revision of Decision 293/2005/EC – which would necessitate legal changes – and that a directive will be prepared such that the Member States can deliver unambiguous reports.

ARN is playing an active role in this working group and hopes that this will contribute to creating a level playing field between the Member States. ARN's position in this regard is that protection of the environment must remain the top priority of the End-of-Life Vehicles

Directive. Simplification of the reporting method must not lead to poorer environmental performance.

Batteries and Accumulators Directive

For the purposes of the Batteries and Accumulators Directive, preparations were made in 2009 for consultation with the Technical Adaptation Committee (TAC). The TAC supports the Commission in defining measures for the execution of a decision. The TAC consists of national officials and is chaired by a representative of the European Commission. A decision has to be taken about the calculation method for end-of-life batteries and accumulators. This decision will lead to new regulations. ARN takes the view that a plastic battery casing is an integral part of the battery and should therefore be counted in the recycling efficiency. This should also be the case if this plastic casing is used as a reducing agent in the recycling smelting process, where it replaces primary raw materials that would otherwise have to be added to the process. There is a debate going on in Europe about whether this concerns a thermal reaction, a chemical reaction, or a thermal and chemical reaction. The opinion of ARN is that the type of reaction does not alter the fact that this is an efficient recycling method.

2010 environmental performance

ARN was established in response to society's demand for a reduction in the waste from end-of-life vehicles. This section reports on the results that have been achieved in that respect.

Starting points Rules governing the treatment of end-of-life vehicles were laid down in EU Directive 2000/53/EC (End-of-Life Vehicles Directive). In 2002, this directive was implemented at a national level in the End-of-Life Vehicles Management Decree. The decree acts as a leitmotif for all activities related to the treatment of end-of-life vehicles. For example, the decree prescribes that at least 85% of the weight of end-of-life vehicles in the Netherlands must be recycled or reused. At least 80% must be recovered by recycling or reuse, while a maximum of 5% can be achieved through energy recovery. The weight target has been increased with effect from 2015 to 95%, of which at least 85% through recycling and a maximum of 10% through energy recovery.

Various data are collected for the purposes of verifying these percentages. The European Commission has drawn up detailed rules on how these data are to be collected. European Member States must follow these rules in their reporting to the Commission in order to ensure that they report in a comparable way. The EU uses these reports to verify that the objectives laid down in Directive 2000/53/EC are being met. The figures for the recycling percentages and the volumes of processed materials published in this report were compiled in accordance with the EU's monitoring rules.

Quantities recycled Table 1 presents the EU codes for the materials and the volumes of materials actually collected and processed last year. In 2009, 191,980 end-of-life vehicles were registered with shredder companies. The number of registrations in ORAD (the on-line vehicle dismantling registration system) in 2009 at ARN companies was 228,783. The difference between these two figures represents the stock at dismantling companies. The materials that are still at a dismantling company or held in storage by a collection company are not included in the table.

Determination of the metal content in each end-of-life vehicle Car dismantling companies provide ARN with the weights of the end-of-life vehicles that are sent to the shredder. In 2009, the average weight of the individual body shells of the 191,980 end-of-life vehicles on arrival at the shredder was 665 kg.

Determination of the weight of ARN materials Dismantling companies are obliged to remove a number of prescribed materials from end-of-life vehicles. These materials are subject to standards that are kept up to date on the basis of standard measurements and changes in the population of end-of-life vehicles. The standards and the total number of deregistered end-of-life vehicles

give an indication of the total quantity of materials collected. These figures are compared with the actual quantity of collected material as given in table 1. The figures in table 1 are included in the calculation of the reuse percentage. This is based on weight data from the processing companies.

The processing companies with which ARN has a contract supply monthly quality and quantity reports. Once a year they provide data about the mass balance. These data include a declaration of the quantity of processed material that has been reused, incinerated with energy recovery and land-filled. The mass balance data are compared with the weight data from the processing and collection companies to produce a report that is based on sound figures.

The ratios of reuse, energy recovery and final removal are calculated on the basis of the mass balance data from the processors.

Fuel and LPG tanks are not included in the calculation of the recycling percentage. In 2009, 265,154 litres of fuel (diesel, petrol and LPG) and 3,235 LPG tanks were recycled in an environmentally sound manner.



“ARN has a lot of knowledge
– and you should share knowledge!”

Peter Kruip

Head of Projects

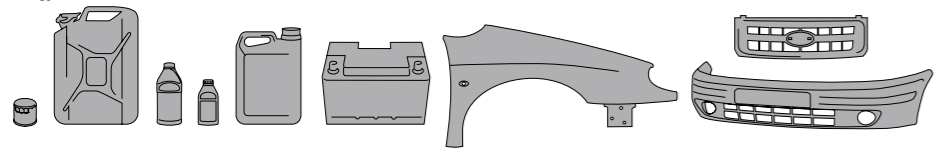
Dusseldorp Inzamelings en Recycling B.V.

The impact that ARN has on the environment and recycling in the Netherlands is very positive

ARN has been doing business with Dusseldorp for the collection of materials since 1995. Peter Kruip has been the contact person for ARN since the beginning of the collaboration. According to Kruip, a great deal has improved in environmental matters and recycling in the automotive sector since ARN was set up: "The impact that ARN has on the environment and recycling in the Netherlands is very positive. ARN was previously rather theoretical in its approach and somewhat less practical, but currently they are well informed about how things work in practice. They're really up to speed." Kruip thinks it is therefore logical that ARN is going to share this knowledge.

However, Kruip has his doubts about the commercial activities of ARN Recycling Services: "They're putting an existing product into an overcrowded market. Consequently they can only grow market share by price dumping." He therefore believes that being an intermediary in the collection of waste streams has no added value to offer.

Dusseldorp has been collecting large quantities of ARN materials for years. Dusseldorp is a business that provides a range of infrastructure and environmental services nationally and especially regionally. The company has several branches spread around the Netherlands and has a wide range of government, business and private customers. The materials collected by the Collection and Recycling business unit from dismantling companies include tyres, glass, bumpers, PUR foam, rubber strips and LPG tanks.



Reuse	Total recycling	Total recovery	Total reuse and recycling	Total reuse and recovery
44,346,744	113,214,034	115,185,785	157,560,779	159,532,530
23.7%	60.5%	61.5%	84.1%	85.2%
Total number of end-of-life vehicles				191,980
Average weight per vehicle				975.6 kg

Table 2. Recycling percentage

Determination of the average weight of end-of-life vehicles In 2009, the average empty weight of all end-of-life vehicles was calculated to be 975.6 kg. This figure was obtained on the basis of the ORAD reports, corrected by the RDW for the weight of the driver and the fuel.

The term 'reuse' refers to complete parts being reused, whereas 'recycling' is used to describe how such materials as steel, glass and plastic are used again. Finally there is 'energy recovery', which means that a material is used as a secondary fuel (e.g. through incineration). Energy recovery and recycling are together known as 'recovery'.

Recycling yield in 2009 The figures in table 2 show that the reuse percentage in 2009 was 85.2%, of which energy recovery accounted for 1.1%.

Appendices

Consolidated balance sheet as of 31 December

(after appropriation of result, in euro)				
	2009		2008	
1 Tangible fixed assets	24,858,165		24,503,099	
2 Financial fixed assets	29,063,395		60,231,022	
Total		53,921,560		84,734,121
3 Stocks	17,938		–	
4 Accounts receivable	2,524,722		2,136,806	
5 Liquid resources	70,561,232		54,301,619	
Total		73,103,892		56,438,425
Total assets		127,025,452		141,172,546
6 Group equity	14,521		14,521	
Total		14,521		14,521
7 Waste disposal fund		93,556,932		128,181,966
8 Long-term liabilities		401,043		401,315
9 Short-term liabilities		33,052,956		12,574,744
Total liabilities		127,025,452		141,172,546

Consolidated profit and loss account

(in euro)				
	2009		2008	
10 Income from waste disposal fee	5,344,365		7,250,361	
11 Income from investments	656,967		408,848	
12 Realized changes in the value of investments	–		-337,212	
13 Non-realized changes in the value of investments	4,702,390		-8,427,003	
14 Other income	1,335,257		549,047	
15 Interest and similar income	2,297,504		2,284,200	
Total operating income		14,336,483		1,728,241
16 Cost price sales	1,033,776		420,730	
17 Costs of outsourced work	40,325,032		16,911,457	
18 Wages and salaries	1,672,896		1,316,982	
19 Social insurance contributions	374,085		337,862	
20 Depreciation of tangible fixed assets	3,637,917		3,458,668	
21 Other operating expenses	1,907,479		1,643,468	
22 Interest and similar expenses	10,332		58,592	
Total operating expenses		48,961,517		24,147,759
Operating result		-34,625,034		-22,419,518
23 Tax on the result	–		–	
Result after tax		-34,625,034		-22,419,518

The consolidated balance sheet and the consolidated profit and loss account include the figures for the Auto & Recycling Foundation, Auto & Recycling Holding B.V., Auto Recycling Nederland B.V., Post Shredder Technology (PST) B.V., Recycling Services B.V. and ARN Advisory B.V. The figures are taken from the annual financial statements of the various entities, which were audited by KPMG Accountants N.V.

Notes to the Financial Report 2009

1 Tangible fixed assets

In 2009, the Auto & Recycling Foundation lent drainage installations to 217 (2008: 218) affiliated vehicle dismantling companies. The systems were removed from three vehicle dismantling companies following termination of the contracts. Where possible, the systems will be reinstalled at other companies in 2010. The construction of the PST facility started in 2008. The building and the infrastructure were completed in May 2009. The facility is expected to be fully operational in the fourth quarter of 2010.

2 Financial fixed assets

The foundation has delegated management of the investment portfolio to the asset managers Kempen Capital Management. The asset manager has been given a defensive mandate, one that is characterized by investment in bonds and shares. The risks connected with investment are therefore as limited as possible. A further decrease in the portfolio took place in 2009 to deposits. On the balance sheet date, 29,063,395 euros (2008: 60,043,654 euros) was invested in shares and bonds.

3 Stocks

Trade goods are valued at acquisition price, namely the purchase price plus the additional costs. Any loss in value as at the balance date is taken into account in the valuation of the stocks.

4 Receivables

The receivables consist mainly of interest to be received and value added tax that can be reclaimed.

5 Liquid resources

The cash of the Auto & Recycling Foundation, Auto Recycling Holding B.V. and Auto Recycling Nederland B.V. held at ING Bank comes under the notional pooling arrangement. The cash of Post Shredder Technology (PST) B.V., Recycling Services B.V. and ARN Advisory B.V. is not included in this.

6 Group equity

The foundation's capital has been paid up by the shareholders RAI, BOVAG, FOCWA and STIBA. Each organization contributed a proportional share of the capital.

7 Waste disposal fee fund

The waste disposal fees received are deposited in the fund. The fund is used as a reserve for both anticipated and unforeseen future expenditure.

8 Long-term liabilities

The 'long-term liabilities' item covers the income from consumers / dealers who wanted to import their vehicles via the RDW testing stations. The foundation had to receive the waste disposal fee before the RDW could issue the registration number. Since 1 January 2007, these vehicles have been exempt from paying the waste disposal fee. Advance payments and moneys received before 31 December 2006 will not lead to payment of a waste disposal fee. There is a procedure that consumers can use to claim a refund of the payment. In addition, the procedure automatically covers duplicate payments and excessive payments. Income that is not reclaimed or cannot be repaid because there is insufficient information, is released in favour of the result after five years. The portion of the waste disposal fee that is expected to be released or to be refunded in 2010 is accounted for under short-term liabilities. The remaining term of the 'advance and excess payments of the waste disposal fee' item is two years.

9 Short-term liabilities

Auto Recycling Holding B.V. forms a fiscal unit with Auto Recycling Nederland B.V., Recycling Service B.V., Post Shredder Technology (PST) B.V. and ARN Advisory B.V. for the purposes of corporation tax. This fiscal unit has a consolidated off-settable loss.

Current-account agreements have been concluded with importers. The waste disposal fee owed is charged each month to their current accounts. Interest is paid on the outstanding balances at the 1-month Euribor rate.

The 'liability to vehicle dismantling companies for materials' item shows the premiums still to be paid to the vehicle dismantling companies for dismantling, collection and processing. The liability is linked to the outstanding materials balances of each company. Outstanding materials balances represent the materials that are still in the end-of-life vehicles that have been registered for dismantling, are in the existing packaging or have already been disposed of but not yet claimed for. The liability for materials is calculated on the basis of the prevailing rates in 2009.

10 Income from waste disposal fee

In 2009, waste disposal fees were collected for a total 439,629 (2008: 568,823) newly registered vehicles. Furthermore, 71,955 was released for non-reclaimed waste disposal fees (2008: 83,191).

11 Income from investments

The income from investments in 2009 was higher than in 2008 thanks to improved market conditions. The size of the investment portfolio was reduced further in favour of a cash position.

12 Realized changes in the value of investments

A loss was made on the reduction of the investment portfolio in 2008.

13 Non-realized changes in the value of investments

The investment portfolio is valued at market value as of 31 December 2009. The difference compared with the purchase price, or the market value on 1 January 2009, is recognized as the non-realized change in the value of investments. In 2009, the non-realized change in the value of investments benefited from higher share prices.

14 Other income

'Other income' consists mainly of the proceeds from the sale of batteries and consultancy for third parties.

15 Interest and similar income

The interest relates mainly to the interest on deposits. The increase in relation to 2008 is due to the reduction of the investment portfolio in favour of a cash position in 2009.

16 Cost price of sales

The cost price of sales relates mainly to the cost price of the purchase, collection, lease of packaging for and storage of batteries.

17 Costs of outsourced work

In 2009, there were on average 251 affiliated vehicle dismantling companies, which between them dismantled 228,783 end-of-life vehicles (2008: 178,450). These companies are paid premiums for dismantling, collection and processing.

The maintenance and servicing of the drainage installations is subcontracted to the companies that installed the systems.

Some of the packaging is leased from the collection companies; the rest is the property of the foundation. This item includes the leasing costs and the costs of maintaining the foundation's own packaging.

In 2009, studies were carried out into the composition of shredder residue and potential markets for it.

The RDC supplies the data for the collection of the waste disposal fee and for monitoring the vehicles registered in ORAD.

Advertisements are regularly placed in the Yellow Pages to inform consumers of the location of vehicle dismantling companies affiliated to ARN. The magazine Auto Recycling Nieuws is published for the automotive industry. It reports on the latest developments relating to the environment and recycling. ARN organizes meetings for its contract partners to keep them briefed about the latest developments.

In 2009 20 million is contributed to the National scrapping scheme.

18 Wages and salaries

ARN's workforce consists of 28.9 FTEs (2008: 22.5 FTEs). The employees perform work for the foundation, its subsidiaries and external parties. Auto Recycling Holding B.V. has a supervisory board comprising five members.

19 Social insurance contributions

Employees can participate in the pension scheme from the age of 21.

20 Depreciation of tangible fixed assets

This item relates mainly to the depreciation on the drainage installations that the foundation has lent to the vehicle dismantling companies. The depreciation charge includes any book profits or losses on the sale or return of the installations and any other changes in their value.

21 Other operating expenses

'Other business expenses' account for the accommodation costs (i.e. the rent, service and maintenance) of the offices at Entree 258 in Amsterdam Southeast and the business premises at Grutterrij 2 in Amstelveen. The item also includes the costs of legal advice, tax advice, asset management and other advice, as well as the accountant's fees and insurance premiums.

22 Interest and similar expenses

Interest is paid on the balances held by the importers at the 1-month Euribor rate.

23 Tax on the result

Auto Recycling Holding B.V. and its subsidiaries form a fiscal unit for the purposes of corporation tax.

To the board of Auto & Recycling Foundation

Terms of engagements

We have performed an assurance engagement in accordance with Standard 3000 "Assurance engagements other than audits or reviews of historical financial information". The purpose of our engagement was to obtain reasonable assurance regarding the design and effectiveness of the administrative organisation and system of internal control of Auto & Recycling Foundation during the 2009 financial year with regard to the goods-flow and payment of premiums. Our assurance engagement was also intended to obtain reasonable assurance that the quantities of materials collected and processed as reported in table 1 of the 2009 sustainability report (page 30) are presented correctly in all material respects.

Criteria

The administrative organisation and the system of internal control with respect to the goods-flow must be set up and work in such a way that it can be established, on the basis of ORAD registrations by contracted car dismantling companies, that all materials supplied by these car dismantling companies are collected by contracted collectors and accepted for processing by contracted processing companies.

The administrative organisation and the system of internal control with respect to the payment of premiums must ensure that premiums are paid correctly.

In view of the restrictions inherent to any system of internal control, errors and irregularities may occur that are not discovered by internal control.

Responsibility of the management

The management of the Foundation is responsible for the design and continuous effectiveness of an adequate administrative organisation and system of internal control.

The management of the Foundation is also responsible for the information contained in table 1 of the 2009 sustainability report (page 30).

Responsibility of the accountant

Our responsibility is to express our conclusion concerning the design and effectiveness of the administrative organisation and the system of internal control, as well as our conclusion concerning the accuracy of the information regarding the quantities of materials collected and processed in table 1 of the 2009 sustainability report (page 30) in an assurance report.

We performed our work in accordance with Dutch law, which includes rules of conduct including requirements with regard to the independence of members of the assurance team.

The principal procedures for the performance of our assurance engagement comprised:

- identifying inherent risks with respect to the management of the goods-flow and the payment of premiums and investigating the extent to which those risks are covered by internal control;
- carrying out observations to assess whether the internal control worked effectively during the year under review, in as far as they were relevant for our engagement;
- establishing that the quantities of materials collected and processed in 2009 are accurately reported in table 1 of the 2009 sustainability report (page 30) through a combination of interviews with the officials responsible for measurement and registration, analytical review of the figures, association testing and substantive testing. We performed substantive testing (ad random) based on internal and external data.

In our opinion the information we acquired is sufficient and a suitable basis for our conclusion.

Conclusion

On the basis of our work we conclude that the administrative organisation and the system of internal control with respect to the goods-flow and the payment of premiums during the 2009 financial year were in all material respects designed adequate and worked effective.

On the basis of our work we also conclude that the quantities of materials collected and processed as reported in table 1 of the 2009 sustainability report (page 30) are in all material respects accurate.

's-Hertogenbosch, 18th May 2010

KPMG ACCOUNTANTS N.V.

R.P.A.M. Engelen RA

ARN Management Plan

ARN Management Plan for automotive batteries and high-voltage batteries for hybrid vehicles

In the context of the 2008 Battery Management Decree, on 24 December 2008 ARN submitted a combined notification to the Ministry of Housing, Spatial Planning and the Environment. The notification was approved on 20 April 2010. The ARN Management Plan was set up to prepare and submit this notification and the annual reporting that arises from it. To establish the quantities of batteries sold by all participating importers, ARN uses the myBatbase system – an online web application that is also used by Stibat (batteries trust). This enables reports to be made in the same system and at the same time about all three categories of batteries and accumulators (i.e. portable batteries and accumulators, industrial batteries and accumulators, and automotive batteries and accumulators). Stibat manages myBatbase and has a helpdesk function. During 2009, a total of 909,775 automotive and HV batteries were reported up to and including the reference date 31-01-2010. This number comprises 384,907 starter batteries built in to cars, 16,120 HV batteries for hybrid vehicles and 508,748 other automotive batteries. A management contribution of 0.22 euros per battery was paid, which covered the costs of the ARN Management Plan. Apart from the start-up costs, the costs incurred in 2009 can be roughly divided into four categories:

- Man-hours for notification and reporting: these are the hours needed by ARN to prepare and submit the notification and reports to the Ministry of Housing, Spatial Planning and the Environment.
- System costs: the fees paid to Stibat as manager of myBatbase for the database application and reporting system.
- Communication costs: the costs of fulfilling the obligation to communicate about the nationwide network of collection points where private end users can hand in their end-of-life batteries at no charge.
- Operational costs: if the residual value of batteries is negative, ARN undertakes on behalf of the participants to continue to collect batteries. The residual value of lead batteries was negative for a brief period in January 2009.

The positive sum from the final balance is added to the automotive batteries reserve. This reserve is intended to enable the continued collection of end-of-life batteries if their residual value becomes negative. As per 31-12-2009, the automotive batteries reserve was 68,257 euros. Bearing in mind the number of reports about 2009 that still have to be made after 31-01-2010, this amount is such that the management contribution per battery for 2010 can be reduced to 0.09 euros per battery.

“ARN’s efforts have resulted in the sector becoming more respectable.”

Johan Hakkenberg Director of the Department of Road Transport

responsibilities, administrative matters can concentrate on vehicles.”

“ARN has a lot of knowledge, and knowledge should be shared.”

Peter Kruip Head of Projects Dusseldorp Inzameling en Recycling B.V.

“ARN should do more to tackle disreputable dismantling companies. They undermine the market and are bad for the sector’s image.”

Bart Ebben owner of dismantling company

“The construction of the PST facility is a good way to increase the recycling percentage.”

Koos Burgman managing director of BOVAG

From operator to active hub

Over the last few years ARN has developed into a centre of expertise for recycling and sustainability in the mobility sector. In this sustainability report ARN gives an account of the organization’s development - from an agency executing a statutory task to an active hub of recycling know-how.

“ARN should continue its pioneering role.”

Catherine Lenaerts director of Febelauto

“The use of post-shredder technology is important.”

Willy Tomboy Toyota Motor Europe

“It’s a fact that in Europe ARN has the most know-how about vehicle recycling, because they’ve been doing it longest. ARN’s added value is therefore too great to keep it solely for the Netherlands.”

Catherine Lenaerts director of Febelauto

“It is p... its ho... mobil...”

Koos B...