



Auto
Recycling
Nederland

INFORMATION FOR CAR MANUFACTURERS

Producer responsibility for car- and car-battery recycling in the Netherlands

In the Netherlands, producer responsibility for cars and car batteries rests with the importers that first bring these products onto the market. As an implementing organisation, and on behalf of the importers, ARN fulfils the associated obligations by assuming this producer responsibility. To this end, ARN collaborates with 238 partners in the recycling chain, realising the gainful reuse of 98.7 per cent of end-of-life-vehicles and 63.6 per cent of car batteries.

Car- and car-battery recycling: how is it all legally regulated in Europe?

Producer responsibility for end-of-life vehicles and car batteries is governed by European Directives [2000/53/EC](#) and the recently published Battery Regulation that replaces Directive 2008/98/EC.

END-OF-LIFE-VEHICLES

The European Management of End-of-Life Vehicles Directive [2000/53/EC](#) has been implemented in the Netherlands as the Bba (Besluit beheer autowrakken). In August 2023, the European Commission [proposed](#) a new directive for end-of-life-vehicles.

CAR BATTERIES

In July 2023, the [Battery Regulation](#) was published, making it final. The implementation decision of the Dutch government is expected by early 2025. This will regulate its practical implementation in the Netherlands.

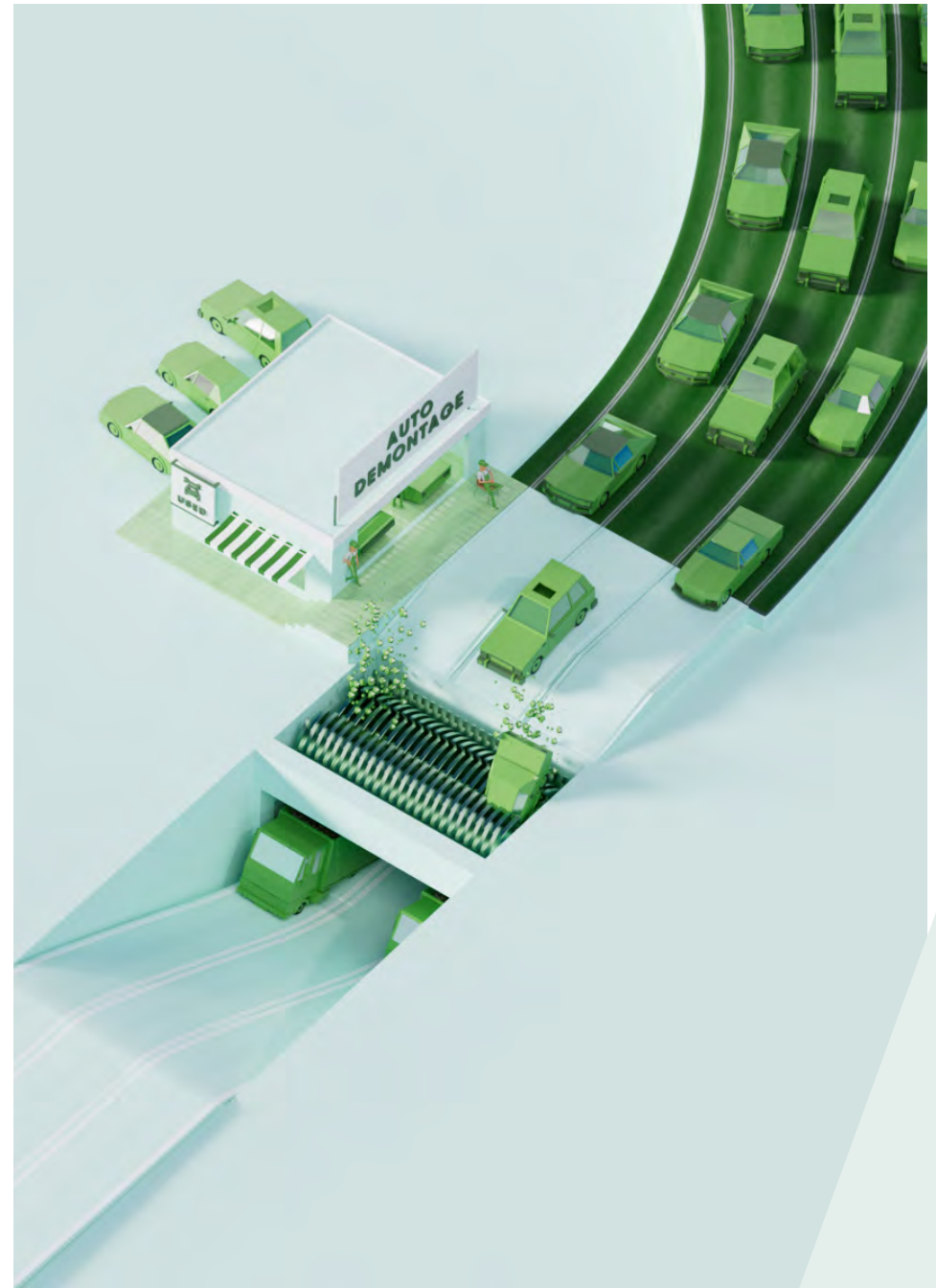


Car recycling in the Netherlands

The lifecycle of a car in the Netherlands, from purchase up to and including recycling

1. The car enters the Dutch market. All importers/manufacturers are mandatorily obliged to pay a recycling fee of €20 per vehicle (2024), in accordance with the “pay-as-you-sell” system.
2. At the end of the vehicle’s useful life, the consumer/garage company returns it to one of the 204 ARN-affiliated car-dismantling companies. These certified companies form a nationwide network that collectively dismantles almost 84 per cent (in 2023) of all end-of-life vehicles in the Netherlands.
3. ARN organises and pays for the collection of waste materials that have a negative residual value and has them recycled by professional parties that comply with Dutch regulations pertaining to waste materials.
4. The dismantled end-of-life vehicles are taken to ARN-recognised shredding companies.
5. The shredder waste obtained from the shredded vehicles is processed by a PST facility. ARN pays the associated processing costs.
6. Every year, ARN reports to the Netherlands government on the collected waste materials and end-of-life vehicles, as well as the realised recycling performance.

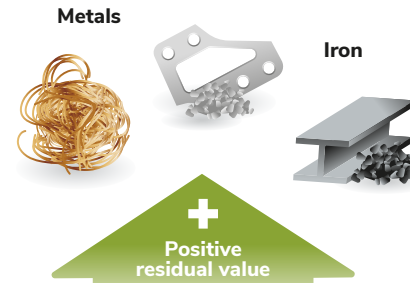
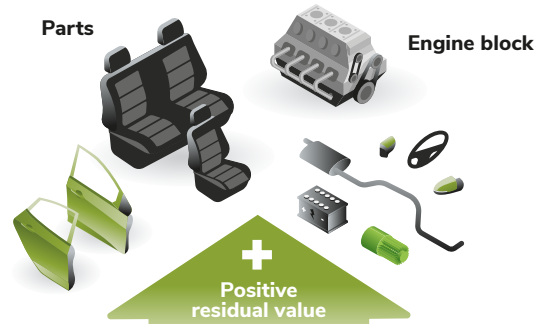
Given that ARN has closed contracts with all the parties that are involved, the best-possible recycling performance can be realised with maximum cost efficiency.



Car recycling

In concert with the chain, ARN processed **133,224** end-of-life vehicles in 2023

When an end-of-life vehicle is dropped off, the car-dismantling company deregisters it with ORAD and the owner is given certificate of destruction



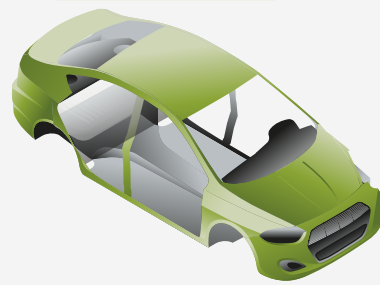
DID YOU KNOW?
 The amount of material left from an end-of-life vehicle that cannot (yet) be recycled would fit into a shopping bag.



98.7% recovery



100%



Car-dismantling company -25.6%

The car-dismantling company removes the parts that can be sold, as well as the materials that must be removed for environmentally responsible processing.

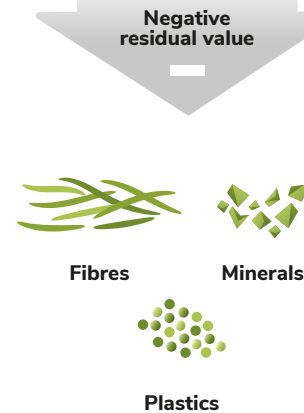
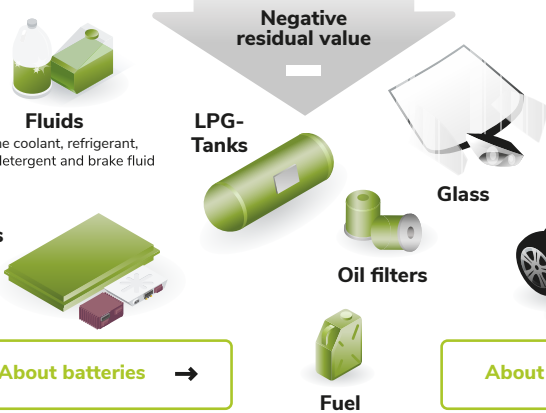


Shredder Post-shredder -73.1%

What's left of the vehicle is shredded by the shredding company, after which metals are separated from non-metals.

Using mechanical-separation techniques, residual materials from end-of-life vehicles are separated into processable materials.

What's left 1.3%



ARN absorbs the costs of collecting and processing materials that have a negative value

Car-battery recycling in the Netherlands

The lifecycle of a propulsion battery in the Netherlands

1. Depending on participation in the ARN Management Plan, a voluntary fee according to a “pay-as-you-sell” system is payable. The fee depends on the weight of the battery.
2. The propulsion battery or starter battery enters the Dutch market for the first time. The importer registers the battery through ARN’s “My Battery Registration” online portal.
3. When a propulsion battery, or a module from it, reaches end-of-life status, it is registered for collection by a car-dismantling or garage company through ARN’s “My Battery Collection” online portal.
4. ARN organises and pays for the collection of the battery, or module, and for its recycling by a company that complies with European regulations.
5. Every year, ARN reports to the Netherlands government on the batteries and modules that have been collected and the realised recycling performance.



ARN FACILITATES BATTERY RECYCLING IN THE NETHERLANDS AND REPORTS ON IT



1 Registering batteries at Mijn Batterij Opgaveportaal

The importer is legally obliged to register the battery when it enters the Dutch market.

65

There are 65 importers signed up to the ARN Management Plan.

8 Reuse

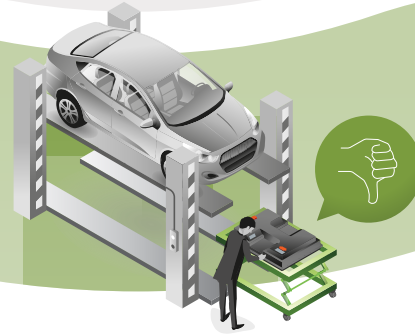
The materials can be used again as raw materials for producing new batteries.



2 Using battery packs



3 The battery or module reaches end-of-life status and is removed from the car by the dealer or the car-dismantling company.



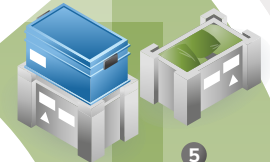
4 Registration with ARN

The battery or module is registered with ARN by the dealer or the car-dismantling company.



5 Packaging for transport

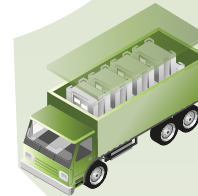
The battery or module that was removed from the vehicle is packaged correctly, ready to be transported.



6 Transport

Batteries or modules are collected with special transport facilities and then taken for recycling.

Some battery cells are given a second life in a different battery application.



Recycling batteries

263,373 kg batteries recycled in 2023

7 Raw materials that can be recovered from batteries



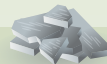
Aluminium



Lithium



Manganese



Cobalt



Nickel



Graphite

Recycling

The percentage of batteries or modules registered with ARN that is recycled.

193,302 kg

70,071 kg

2nd use

Batteries given a second life and used again for an application other than in a car such as for lighting a runway.



How does financing for car- and car-battery recycling work in the Netherlands?

CAR RECYCLING (MANDATORY SYSTEM)

After consultation between the Netherlands government and RAI Vereniging, the amount of the recycling fee is mandatorily set for all imported vehicles (both new and used). This amount is reached by extrapolating expected future costs into a fee for every vehicle that enters the Dutch market.

When the vehicle is sold, in accordance with the “pay-as-you sell” system, a mandatory recycling fee of €20 is payable for every car that is registered in the Netherlands. The Generally Binding Declaration associated with the recycling fee must be renewed every five years. For the current recycling fee, see: arn.nl/en/recycling-fee-for-cars

In this way, ARN assumes the collective producer responsibility of importers and manufacturers. Thanks to the recycling fee, ARN – together with the 238 companies in the recycling chain – is able to meet the legal requirement to recycle at least 95 per cent of cars. It is customary for importers/manufacturers to include the recycling fee in the on-the-road delivery costs and pass these on to the dealers. The dealers, in turn, include the recycling fee among other costs in the vehicle’s price and thus pass it on to the end user.

CAR BATTERY RECYCLING (VOLUNTARY SYSTEM)

Importers who introduce lithium-ion propulsion batteries or starter batteries onto the Netherlands market can participate in a collective system called the ARN Management Plan. In the context of this plan, ARN regulates the safe and responsible collection and recycling of batteries. Participating importers pay

ARN a management fee, in accordance with a “pay-as-you sell” system, for future collection and the costs of recycling. In consultation with RAI Vereniging, the amount of this management fee is set every year on the basis of expected future costs. The current fees (between €3 and €65) for propulsion and starter batteries are listed in [EV Batteries and Starter Batteries Management Fees](#) on the ARN website.

It is thanks to this management fee that ARN can work with professional collection and processing companies to meet legal requirements to recycle at least 50 per cent of propulsion batteries. It is customary to include the management fee for the battery in the car’s on-the-road delivery costs.



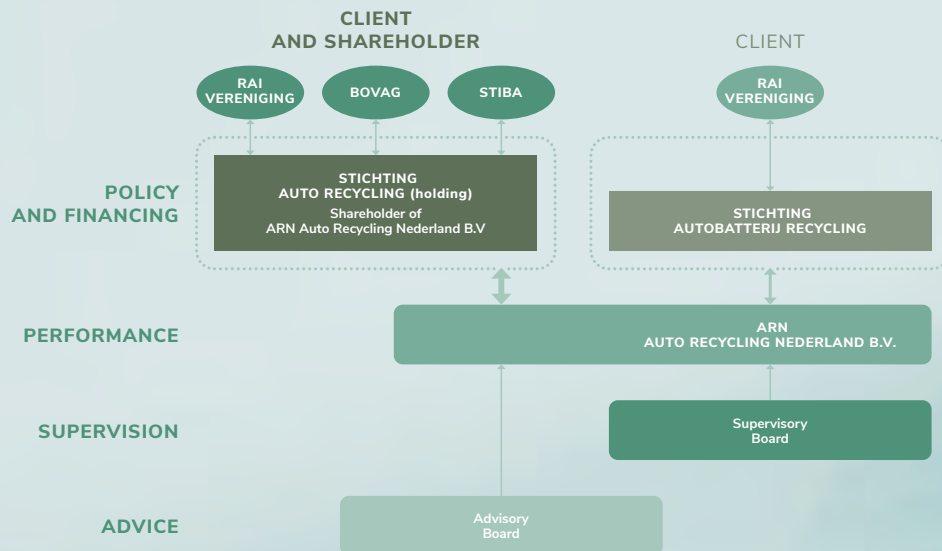
About ARN

For the past 30 years, and counting, ARN has served as a non-profit organisation that ensures, in accordance with European regulations, that at the end of their useful lives cars are recycled with the highest-possible quality for acceptable costs. ARN's activities are funded by a mandatory recycling fee in the Netherlands that is payable for every car and a management fee for propulsion batteries. ARN does all this on behalf of the importers in the Netherlands.

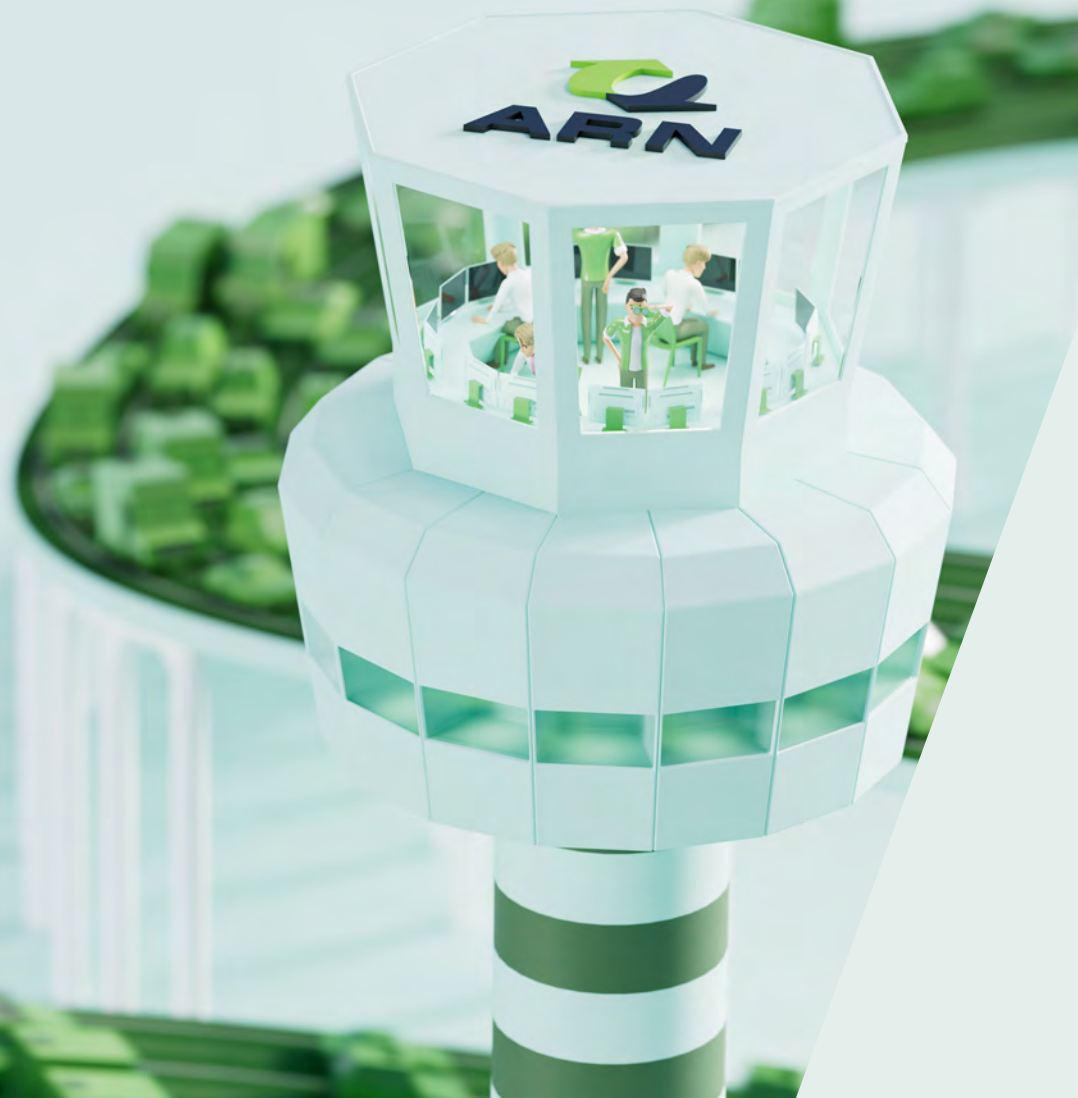
By making effective agreements with car-dismantling-, shredding-, collection-, and processing companies here in the Netherlands ARN has, for many years, been achieving a recycling performance that exceeds 98 per cent for cars and approximately 65 per cent for propulsion batteries.

To proactively collect and exchange knowledge, ARN participates in several car-recycling and battery-recycling partnerships.

Implementing organisation, Auto Recycling Nederland, is owned by a foundation. On behalf of its shareholder, a Supervisory Board oversees this implementing organisation on an independent basis.



Stichting Auto Recycling is both client and sole shareholder of the implementation organisation, ARN Auto Recycling Nederland B.V. Market players in the automotive industry – BOVAG (dealerships and importers), RAI Vereniging (importers) and Stiba (vehicle-dismantling companies) – can nominate, suspend and dismiss a private individual as the director of Stichting Auto Recycling.





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Want to know more?

If you would like to receive brand-specific information, please get in touch with us at ARN. Our account manager, Hector Timmers, can be contacted via +31 (0)64 623 29 70 and hector.timmers@arn.nl

Auto Recycling Nederland

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Video car recycling



<https://youtu.be/z3d8meoBC3U>

Video car-battery recycling



https://youtu.be/lhwEVR-X4_k