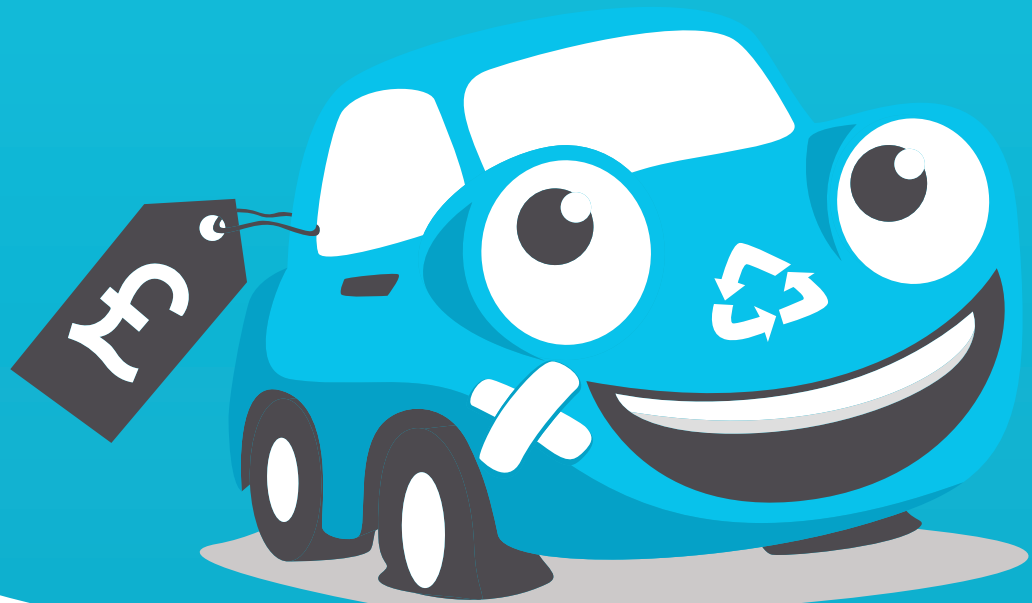


Guide to car recycling

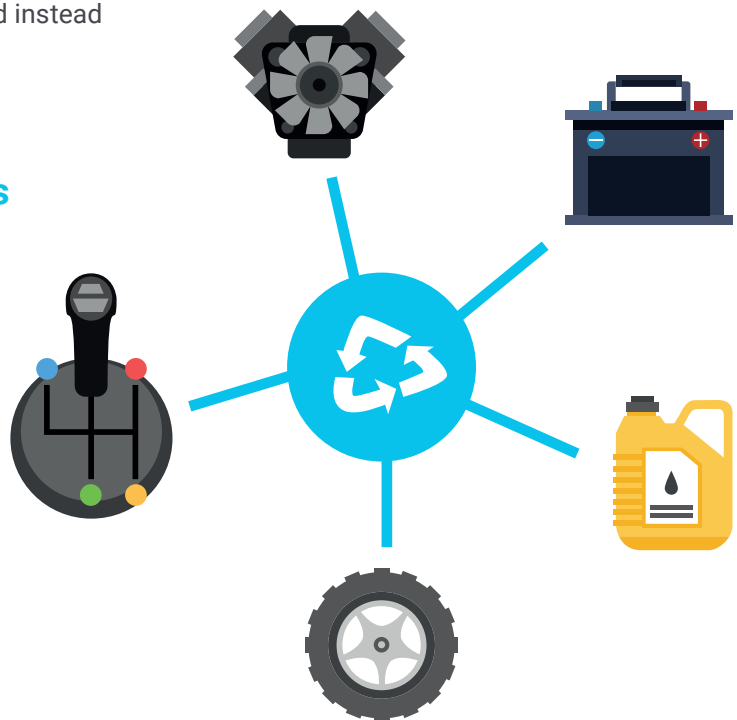
Recycling your car has
never been easier



When a vehicle is scrapped, no matter the condition or reason, it will be taken to an Authorised Treatment Facility (ATF) to be recycled. Whether your vehicle has failed its MOT, been in a crash and written off, or simply reached the end of its lifespan, the car or van will be taken through three steps of a recycling process: Depollution, Dismantlement, and Destruction.

Current international targets for the scrap industry, from the [End of Life Vehicles Directive](#), require ATFs to recycle at least 95% of a car. Each step of the recycling process is therefore tailored to the materials involved to make sure that as much as possible can be recycled instead of being disposed of.

If you'd like to find out what happens to your car once it is scrapped, read on.



1

Step 1: Depollution

When a vehicle enters the depollution stage, this will start the process of removing all the hazardous materials and components safely removed in accordance with the Environmental Agency Guidelines.

The reason cars go through this process is both to maximise efficiency for the following steps and to also minimise any potential harm or damage that the materials could cause to either humans, animals or the environment, should they be left in the car. For example, chemical contaminants in cars such as windscreen wash, antifreeze, batteries, oil, and coolants can present a risk to at least one of the groups mentioned above.



Materials removed during depollution

When depolluting a car, the materials range from those that are removed and can be salvaged for future use, those that can be recycled into new objects, and those that need to be disposed of. The list of materials ranges from liquids and gases, which can be harmful if under direct exposure, and components that might explode, to valuable parts that could potentially be resold

Here's the list of materials that will be removed during the depollution stage:

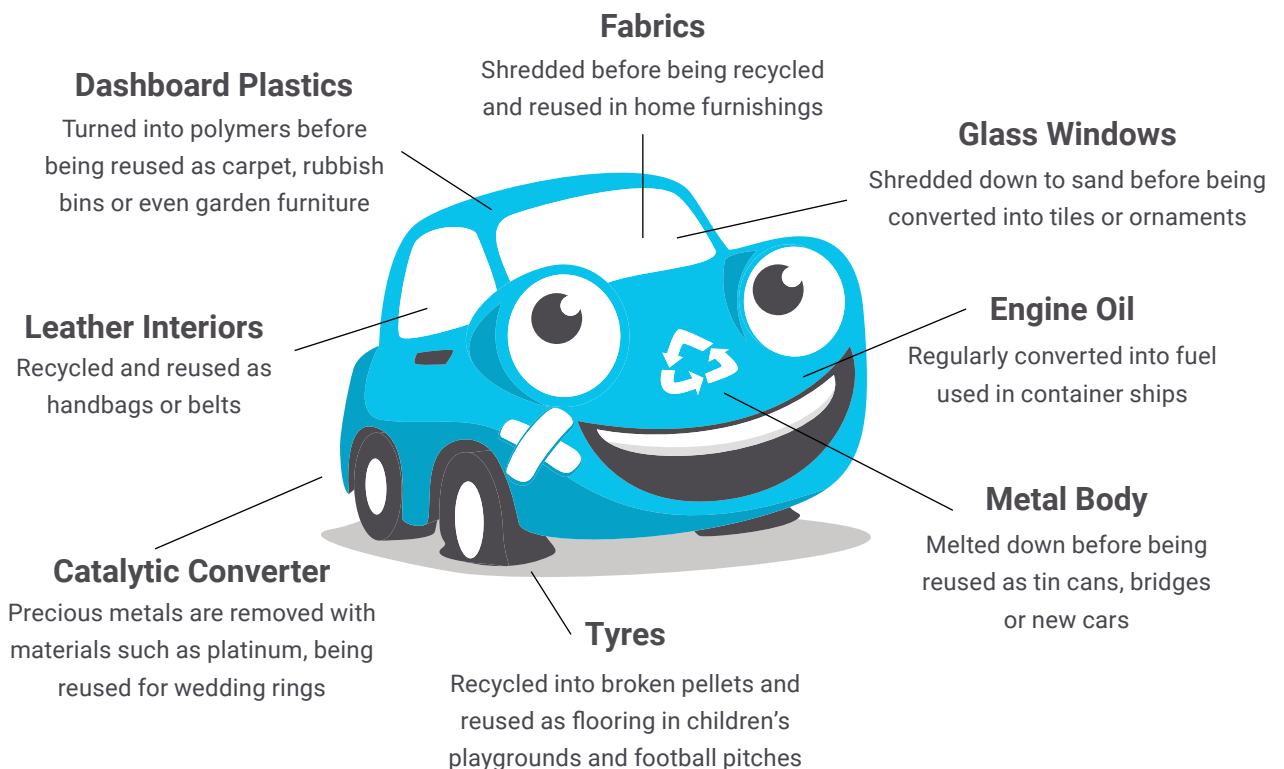
- Air conditioning gas
- Battery
- Catalytic converter
- Fuel
- Liquefied gas tank
- Liquids, including coolant, antifreeze and brake fluid
- Mercury, which can be used in switches
- Oil filters and oils, e.g. oil in the engine, transmission and hydraulics
- Shock absorber fluid and windscreen wash
- Wheels, tyres and lead balance weights

How is a car depolluted?

Firstly, the engine hoses, wires and transmission exhaust system are disconnected. Then, the fluids in the car or van will be drained using filtration, distillation and reverse osmosis – which means that the fluids are removed through a partially permeable membrane using pressure. The chambers of the car are then flushed through with water to make sure no residue remains. The salvaged fluids will then be saved for use in another car or van.

In terms of the potentially explosive materials, such as airbags and seatbelt pretensioners, they will be carefully removed or will be set off where they are, before being removed so there is no risk of injury. Car batteries, which can also be hazardous if mishandled, will be removed and sold as either spares or component parts after being dismantled.

Once all the mentioned materials have been removed from the vehicle, it can now be transferred to the next stage of the recycling process, which is dismantlement.



2

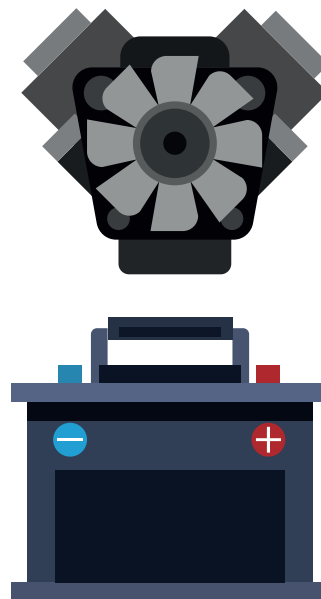
Step 2: Dismantlement

Once the vehicle is fully depolluted, the dismantlement can start. There are three main components involved in the dismantlement process: the engine, the undercarriage and the main body of the car. We'll be looking at how each of these are approached in detail.

Dismantling the engine

Since the engine is one of the biggest components of a scrap vehicle, it is the first to be targeted for dismantling. Using a hoist, the engine is removed from the car and separated into component pieces:

- The battery (which is put in an acid-resistant, leak-proof container)
- The alternator and alternator belt
- The radiator and fan
- The carburettor



Recycling opportunities

The scrap car industry has become very efficient at recycling car batteries, with a 98-99% recycling rate. While it isn't standard practice, unless spares are specifically needed for a certain model of car, some engines can be remanufactured to new standards or component parts can be sold as replacements.

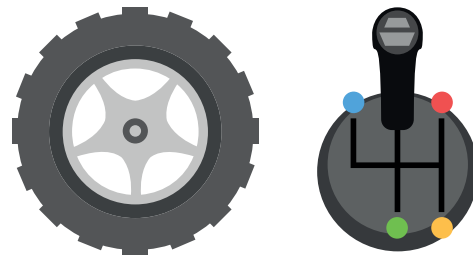
However, if the scrap car was in a poor condition when it came to the ATF, most of the parts will most likely be dismantled and sent for shredding or repurposing.

Dismantling the undercarriage

The undercarriage of the vehicle is the next aspect to be approached for dismantlement. The car will be lifted into the air, using the specialist equipment that the ATF will have access to, and the engineers will set about removing the components beneath the vehicle.

These components include:

- The transmission and exhaust
- The brake pads and rotors
- The drums, shoes and brake lines
- The tyres



Recycling opportunities

There are a few parts of the undercarriage that are quite valuable when removed from a scrap vehicle and can be recycled and reused in several interesting ways.

Recycling car tyres

While in the past it has been a struggle to figure out what to do with old car tyres, new uses are beginning to be found. If the tyres are in a reasonable condition and only part-worn, they can be sold on to use in another vehicle. However, if they are unusable as tyres, they're either used as tyre walls on the sides and corners of racetracks, or they can often be broken down into pellets to make the surfaces of children's playgrounds running tracks and football pitches.

Recycling catalytic converters

While in the past it has been a struggle to figure out what to do with old car tyres, new uses are beginning to be found. If the tyres are in a reasonable condition and only part-worn, they can be sold on to use in another vehicle. However, if they are unusable as tyres, they're either used as tyre walls on the sides and corners of racetracks, or they can often be broken down into pellets to make the surfaces of children's playgrounds running tracks and football pitches.

Recycling glass

The glass of a windscreen and windows in a scrap car is more versatile than you might think. Due to its composition, it can actually be recycled more than once by being ground down into sand and then re-tempered into glass. The glass from a scrap car could become anything from ornaments, tiles, doorknobs, new windscreens, and even builder's sand.

Dismantling the main body of the car

Once the engine and the undercarriage have been removed, the main body of the car can be addressed. Internally, the dashboard, seats, carpeting and circuitry and electronics are removed until the scrap vehicle is no more than a metal shell. From there, a blowtorch is used to cut the chassis into smaller component pieces.

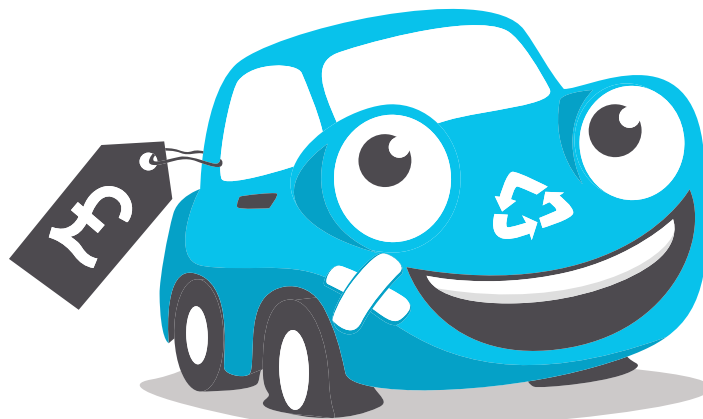


Recycling opportunities

When recycling the plastic components of a scrap car, special care needs to be taken to ensure that they are recycled correctly. Some of them will be made into carpeting, dustbins, or garden furniture, but most are simply broken down and remanufactured into new plastic parts for newer vehicles, such as dashboards, steering columns, and interior panels.

The leather or fabric of the upholstery is sometimes recycled into other products, such as handbags and belts, or shredded and then reused in home furnishings.

Once the metal is separated from the rest of the internal components, it's time to move on to the final step of the recycling process: destruction.



3

Step 3: Destruction

The destruction process consists of three steps to make sure the metal of the vehicle is properly recycled and made ready for future uses. The chassis and shell of the scrap car or van will be crushed and sent to a metal mill and will then go through the following process:

Magnetic separation

In order to separate the metal parts of the vehicle from any leftover plastics or other materials, the scrap car will be processed through a magnet that will remove the magnetic metal, such as steel, from the other materials.

Detinning

In order to prevent rusting, most vehicles will be coated with a thin layer of tin. While the tin is necessary for a vehicle while it is in use, at the end of its lifespan, it's not useful anymore. Once the metal has been separated from other materials, it is run through a process called 'detinning'.

The scrap metal is placed in a hot caustic soda solution which dissolves the tin coating. The metal is then removed from the solution and the leftover tin can be reclaimed using either evaporation and crystallisation using sodium stannate, electrolysis, or using hydrous stannic oxide and acid.

Melting

The steel is then put into a furnace and melted down. Once it is liquid, it will be poured into casters and rolled into flat steel sheets ready to be used again. This process doesn't damage the steel's integrity at all since the process can be done repeatedly and the steel will retain its strength throughout.

Recycling opportunities

Once the steel has been melted down, it can be reused to manufacture future vehicles, construction materials like Rebar (reinforcing bar), tin cans or even bridges.

Frequently asked questions about car recycling

Here are some of the most frequently asked questions about the car recycling process, along with our answers, to make sure you're fully aware of everything that's involved.

Can I keep my number plate after my car has been scrapped?

If you want to keep the number plate from your scrap car, you will need to remove it from your vehicle before it is scrapped and contact the DVLA to inform them that the number plate has been retained.

Once your car is collected and scrapped, the vehicle and its registration will be removed from the DVLA system within 24 hours.

Do I need a logbook to recycle my scrap car?

Your scrap car can be recycled without a logbook (V5 document) but if you own the vehicle, you shouldn't be without one. If you haven't currently got the V5 document for your scrap car, whether that is due to loss or waiting to receive it after a change of name or address, the car can still be scrapped as long as you provide photo ID to the collection service to prove that you are the owner.

How do I get a Certificate of Destruction (COD) for my scrap car?

If you would like to receive a Certificate of Destruction for your recycled scrap car, simply request one from your buyer. The COD confirms that your vehicle will be scrapped in a lawful and environmentally sound manner and is sent to the DVLA to make sure they know the vehicle has been scrapped and can be removed from their system.

What condition does my scrap car need to be in to be recycled?

While a scrap car can be in any condition to be recycled, whether it's old, has been written off in a collision, or is damaged in some way, we do request that you remove all personal items and rubbish from the vehicle before it is collected so there is no risk of contamination.

Recycling your car with Scrap Car Comparison

If you'd like to scrap your damaged or old car, simply enter your registration number and postcode into our [handy quote tool](#). We'll search through our database of trusted and approved buyers from across the UK and find you the best possible price for your vehicle. Our buyers are looking for scrap cars in every category, so there will always be a buyer willing to purchase your scrap car.

You don't even need to worry about transporting your vehicle to the buyer once you've accepted our offer – our Scrap Car Collection vehicles will pick your car or van up from your home, anywhere in the UK, and transport it completely free of charge.

We're dedicated to making sure you get the best price possible for your scrap vehicle when it is being recycled and want to make sure that the entire process is quick, easy and hassle-free.