

What is an end-of-life vehicle?

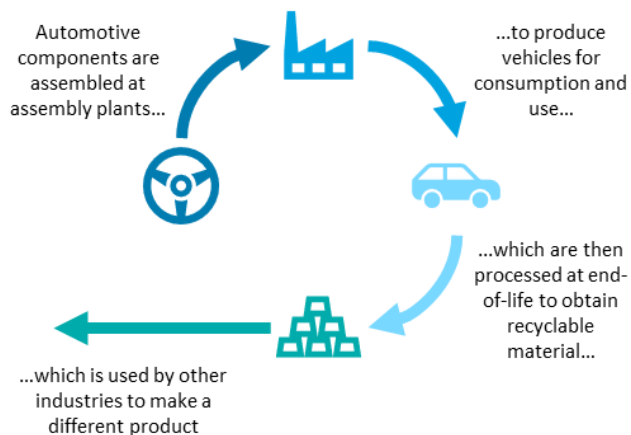
An **end-of-life vehicle (ELV)** is a vehicle deemed to have reached its end-of-life due to incidental or accidental damage, unroadworthiness, vehicle age, or at the owner's request.



What is product stewardship?

Product stewardship is the approach that acknowledges the **responsibility of designers, manufacturers, and sellers of products** to ensure their products and materials are managed in a way that **reduces environmental and human health impacts** throughout the entire life cycle of the product, from creation to end-of-life.

For end-of-life vehicles, an 'open-loop' recycling program may be preferred, given Australia does not have automotive manufacturing presence.



Why product stewardship for end-of-life vehicles?

Environment - in order to achieve Australia's net zero commitment, strong intervention needs to occur in multiple industries and practices, including the treatment of ELVs

KEY FACT

While the current resource recovery rate for ELVs is ~70%, this still results in ~408,000 tonnes of landfill waste each year

Industry harmonisation - the current fragmented and inconsistent ELV regulatory framework across the three levels of government has resulted in inconsistent practices and widespread non-compliance

KEY FACT

A 2014 report found that ~90% of motor wreckers and scrap metal dealers audited were "assessed to be non-compliant to some degree with OHS and environmental protection regulations"

Changing trends - increasing electrification of Australia's vehicle fleet will likely result in more internal combustion engine (ICE) vehicles reaching ELV, and changing vehicle material composition (including EV batteries which poses human health concerns), requiring harmonised processing standards

KEY FACT

Despite the majority of Australia's vehicle fleet consisting of ICE vehicles (~98.5%), the number of battery electric vehicles more than doubled from 2021 to 2022, with the increase likely to continue

Feasibility - Global best practice is already demonstrating the viability of increased ELV recycling up to 90% recovery

KEY FACT

The Netherlands has one of the most advanced infrastructure sites to separate and process automotive waste from ELVs, this enables the country to achieve a reuse/recovery rate of 98%.

What would the scheme look like?

The proposed scheme calls for **nationally consistent regulations** to **improve environmental and human health benefits** relating to ELV treatment.

The scheme would support the achievement of these benefits through the following key components:

- **Establishment of a certificate of destruction process** for ELVs to validate the appropriate disposal of all collected ELVs. This certificate would be required prior to vehicle deregistration to ensure all ELVs are captured by the scheme.
- **Accreditation of Authorised Treatment and Collection Facilities** (dismantling businesses) that would enforce and continuously improve mandatory minimum standards and practices.
- Government regulation that centralises ELV environmental and waste handling regulations.
- Scope inclusion of **all ELVs** including HEV, PHEV and BEVs as well as ICE vehicles. The ELV scheme would administer the **recovery and recycling of EV batteries**.
- Financial support to the **establishment of new processes and infrastructure to increase parts reuse, remanufacturing, manual dismantling, material recycling and energy conversion**.
- Establishment of a **funding model that sources producer and consumer levies at specific stages across a vehicle's lifecycle** (which may include the point of sale of a new vehicle, parallel payment at the time of vehicle registration, and/or at disposal).
- **Consumer information** on the scheme and the related administrative changes.



The need to reduce waste

End of life vehicles (ELVs) are currently a strong contributor to **landfill waste**

KEY FACT

Approximately 4.6% of vehicles (i.e. ~850,000) reach their end-of-life each year, amounting to **~1,360,000 tonnes of waste** requiring processing each year

One way to **improve resource recovery** and **minimise negative environmental impact** is to treat as much of the end of life vehicle as possible

This is the approach that **leading global jurisdictions** have undertaken

KEY FACT

In **Australia**, the typical resource recovery rate for ELVs is **~70%** of the average weight of an ELV. Product stewardship schemes in the UK, Netherlands, Ireland, Germany, Japan and South Korea enable **>90%** of ELV resource recovery

It is now **Australia's chance** to implement a product stewardship scheme to **reduce the overall waste content of ELVs**

The world is shifting to **decarbonisation, waste reduction and circular economies**

Improving the **treatment** of end-of-life vehicles is an important step to improving resource recovery



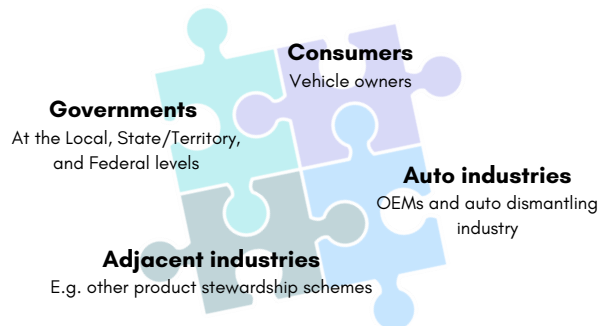
Next steps

A product stewardship scheme needs to be established through a **coordinated and staged approach between industries and governments**. Stakeholder engagement and initial scheme evaluation has identified that **a voluntary scheme without public sector support will not be sufficient to achieve the desired outcomes in the timeframes required**.

The foundational prerequisites needing public sector involvement ahead of the establishment of a successful industry-led scheme are:

- a licensing and accreditation regime of ELV dismantling businesses to enable enforceable minimum standards and practices and the monitoring of the ELV scheme performance; and
- the establishment of traceable evidence of destruction linked to the vehicle deregistration process to ensure all ELVs are captured by the scheme.

The complex nature of ELVs will require collaboration across the entire ELV ecosystem, including:



Key contacts

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REDUCING THE ENVIRONMENTAL IMPACTS OF END OF LIFE VEHICLES IN AUSTRALIA

A Product Stewardship Scheme for End-of-life Vehicles in Australia



FEDERAL CHAMBER OF AUTOMOTIVE INDUSTRIES