

END-OF-LIFE VEHICLES

End-of-life vehicles (ELVs) are those that have reached the end of their use and can be disposed. ELVs are dismantled into parts, each with a distinctive market and environmental impact. Its ferrous and non-ferrous materials and non-metals such as plastic and glass can be recycled.

# THE CRISIS

- India does not have a formal system to collect, dismantle and safely recycle ELVs.
- The bulk of ELV recycling is by the informal sector, in **congested urban areas**, without adequate infrastructure or technology,
- in the absence of any environmental or health regulations.
- Inherently toxic materials such as AC gas and battery acid, those that contain toxins, such as brake shoes that have traces of asbestos, and those that release noxious fumes and particles upon incineration must be properly managed.
- Some parts, such as broken glass, mirrors and lamps almost always end up in landfills, waste to energy plants or remain in the environment.



#### LIFE IN THE FAST LANE

- Growth rate of vehicle population (2000–2011): 9.9%
- ELVs in India in 2015: 87,31,185
- ELVs in India by 2025: 2,18,95,439
- Percentage of increase in ELVs by 2025: 250%
  - ELV dismantling family units: Over 100,000
    - ELV recycling units in Delhi: 3,200
    - ELV recycling units in Kolkata: 1,000

### THE LAWS

- The 'Draft Automotive Industry Standard: End-of-Life Vehicles' by the Society of Indian Automobile Manufacturers (SIAM) is a guide for safe disposal of ELVs (by the consumer) and reduction of heavy metals in vehicles.
  - WHEELS WITHIN WHEELS

In 2014, India could have salvaged

- Steel scrap: >1.5 million MT
- Aluminium scrap: 180,000 MT
- Plastic: 75,000 MT
  - Rubber: 75,000 MT
- In the EU, Japan, China, Korea and Taiwan ELV recycling is controlled by legislation.
- EU-Directive 2000/53/EC requires members of the EU to legislate ELV recycling, and makes manufacturers and importers of automobiles responsible for the recycling costs. Targets are fixed for 'reuse and recovery' and 'reuse and recycling'.

- Canada, Australia and the US have no direct legislation to control ELV recycling, but have other **environmental regulations** to monitor their recycling.
- Japan's ELV recycling law requires vehicle manufacturers and importers to create reverse logistic systems for non-recyclable/ reusable parts, and to organise and pay for their safe dismantling.

# **GOING FORWARD**

Automobile manufacturers and sellers must be made responsible for disposing of toxic parts safely and recycling of ELV through a law on Extended Producer Responsibility (EPR).

# WASTE NOT, WANT NOT

ELV recycling in India is an opportunity to:

- safeguard the environment
- create and upgrade informal livelihoods
- optimise material use
- support resource recovery and efficiency
- The EPR scheme should include **training on dismantling and recycling, and provide access to business finance.**
- The resource efficiency of the informal sector must be recognised in an inclusive policy framework that would enable them to access the financial tools and support available to mainstream businesses such as loans and insurance.
- The Indian government should set up a webbased platform to track vehicle trade and movements within the population.
- The ELV recycling industry requires space to carry out its operations. This must be a consideration while developing city master plans.



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