

CHALLENGE! 5 Challenge of Achieving Zero Waste

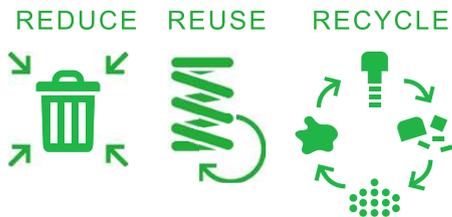
TARGET At each site

**Contribute to sustainable resource use
Achieve zero waste**



The world's population is increasing and the risk of resource depletion on the back of economic development is rising. Furthermore, waste that has become a by-product of a mass consumer society continues to increase, and if things continue at this pace it cannot be properly disposed of and will lead to serious environmental pollution. The Hino Group has set the high target of "zero waste," and in parallel with efforts to reduce waste, the Group will take steps to prevent environmental pollution by improving resource utilization efficiency.

**Conduct 3R to achieve
Zero waste**



To reduce the waste discharged in manufacturing a vehicle, Hino Motors cooperates with Group companies and business partners in "volume reduction," "reusing," and "recycling" based on the 3Rs (Reduce, Reuse, and Recycle) to reduce waste as much as possible.



**Newly manufactured vehicles
using the resources from
disposed vehicle**



Components such as batteries and motors contain natural resources including rare metals and other precious metals. The Hino Group retrieves as many resources as possible from disposed vehicles, including the above-mentioned natural resources, and rigorously reduces the amount of new resource inputs by fully pursuing the "vehicle-to-vehicle recycling technologies" that are utilized in newly manufactured vehicles.



Recycling Initiatives at Production Plants

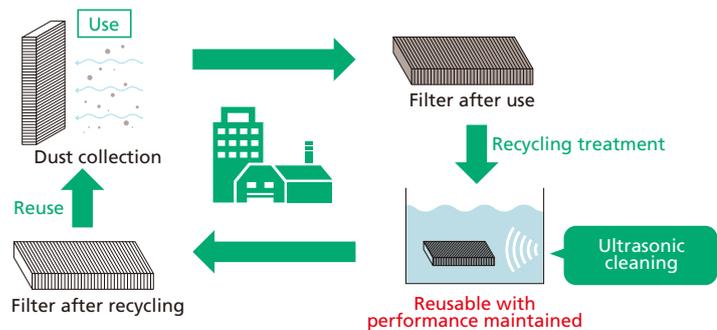
Zero waste

Hino Motors is also working to reduce waste as one activity targeting the Hino Environmental Challenge 2050, its long-term environmental vision. In recent years, Hino has thoroughly re-examined materials which it has not been able to recycle and is working to recycle them internally.

- Major Initiatives**
- Reducing the volume of wastewater treatment plant sludge
 - Reducing the amount of sand used during molding
 - Extending the life of waste liquid processing machinery by installing filtration filters

Example | Reusing Dust Collecting Filters

Dust collecting filters, which had to be discarded because their performance could not be restored, can now be reused after undergoing ultrasonic cleaning treatment.



Design with Recycling in Mind

Zero waste

Newly manufactured vehicles

Since 1990, Hino Motors has been involved in product development and design initiatives with recycling in mind. It established a Voluntary Action Plan in 1998, listing specific values for recycling rates with the goal of enhancing recycling activities. In recent years the Company has also engaged in efforts to comply with regulations on environmentally hazardous substances by reducing them at an early stage.

Hino Motors has pursued the challenge of enhancing recyclability from various perspectives, for instance by adopting easily recycled materials and designing components to be easier to disassemble, early in the product development process.

Environmental Activities at the Recycling Stage

Zero waste

Newly manufactured vehicles

To comply with the Automobile Recycling Law, which came into effect in Japan in 2005, Hino Motors has implemented a process of recovery, processing, and recycling of three materials designated by the law from end-of-life vehicles, namely automobile shredder residue (ASR), airbags, and chlorofluorocarbons (CFCs), with the help of a great many related businesses.

The ASR recycling ratio for fiscal 2017 was 98%, surpassing the legal standard of 70%. In addition, Hino Motors strives to promote eco-friendly manufacturing as early as the development stage by using recyclable materials and, where possible, easy-to-disassemble vehicle designs, thereby fostering the effective utilization of resources and contributing to the development of a recycling society.

 Results of Recycling based on the Automobile Recycling Law