Development of Product Recycling Technology Materials Design Manufacturing Recovery/recycling

We develop and design easily recyclable products and materials with thought to the entire lifecycle of automobiles. We are also developing recycling technology for waste material.

Development of Technology for End-of-Life Vehicle Parts Recycling

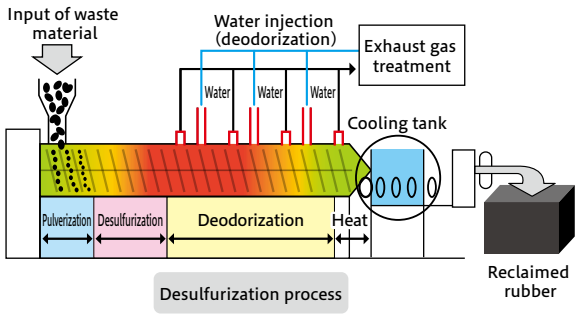
Key items	Measures implemented
New recycling	・Composite material separation technology ・New recycling technology (high quality material recycling)
Use of recycled materials in vehicles	・End-of-life vehicle recycling technology ・Development of applications for recycled materials
Product design for easy recycling	・Product design for easy disassembly ・Materials and composition changes for easy recycling

Examples

Full-Scale Operation of Rubber Recycling Processes to Achieve FY2030 Targets Recovery/recycling

We aim to reduce waste materials by 50% (compared with FY2012 levels) by 2030 on our way to achieving carbon neutrality in 2050. In April 2021, recycling processes for four types of weatherstrips were brought together in a dedicated building. By restoring waste rubber to a raw material state with our original technology and using it in new products, we expect to reduce waste by about 600 tons. This should also have an effect in reducing CO_2 emitted during raw material transport and the incineration of waste. In addition, we hope to contribute to reducing the environmental impacts of the industry overall, by using this recycled rubber not only inhouse but also selling it to other companies.

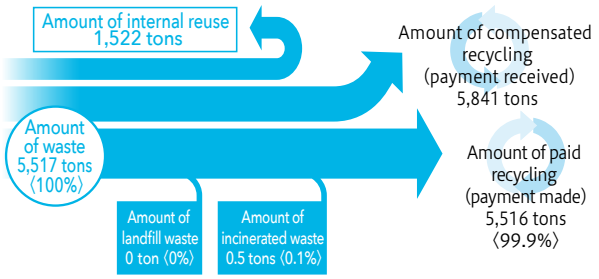
Weatherstrip Recycling Process



Reduction of Waste Materials in the Production Stage Manufacturing Recovery/recycling

To reduce waste in the production stage, we are combating waste at its source and recycling. To minimize waste in the TG 2050 Environmental Challenge, we launched a waste reduction project in 2018 by our plants and production engineering, materials technology, and product design divisions, in which we combat waste at its source and recycle. We also conduct *mottainai* inspections to identify items for reduction with *genchi-genbutsu* (go and see) and other reduction activities at each business location. Good examples of reduction are shared among domestic and international Group companies as the entire Group tries to reduce waste.

Amounts of Waste Generated and Disposed of (results for FY2021) [Toyoda Gosei Co., Ltd.]



Figures in parentheses are the proportion of the discarded materials volume

Reduction of Packaging in the Distribution Stage Recovery/recycling

The packing material used in product transport is being reduced to prevent products from being soiled by increasing the number of times reusable containers are used in the field and maintaining cleanliness. We are also reducing packing material by putting lids on reusable containers and other changes, considering the balance between maintaining product quality and reducing the use of packing materials.