

# Environmental Protection



We are working on environmental protection from the perspective of reducing the environmental loads of our business activities as well as contributing to the environment through our products. In our business activities, we are making efforts to reduce energy use in each process in manufacturing, and promote the 3Rs\* for waste. In addition, 15 of our offices (mainly production bases) have the ISO 14001 certification. Through the effective operation of the environmental management system, we will prevent environmental troubles, comply with laws and regulations of each kind, reduce environmental loads, and promote management activities that are sustainable and in harmony with the global environment.

\* 3Rs: Reduce, Reuse, and Recycle



We will support business sites and step up environmental activities throughout the Group to achieve CO<sub>2</sub> emission reduction targets

As extreme weather events occur more frequently due to global warming, the demand for corporate activities that contribute to environmental conservation, including the realization of a decarbonized society, is growing year by year. The Toyal Group aims to reduce CO<sub>2</sub> emissions from its business activities by 40% (compared to fiscal 2013) by fiscal 2031 and is working to reduce its environmental impact as much as possible. It is our role to coordinate with each business site and carry out the PDCA cycle to realize these goals.

In fiscal 2022, we were able to reduce CO<sub>2</sub> emissions and industrial waste from our business activities compared to the previous fiscal year. However, this was largely due to a decline in operating rates at manufacturing sites as a result of worsening market conditions. The ideal situation is to realize reductions even when manufacturing sites are operating at full capacity. In addition to planning environmental investments at each business site, such as replacing old equipment with energy-saving equipment and switching from fossil fuels to energy that does not emit CO<sub>2</sub>, we are reducing CO<sub>2</sub> emissions and industrial waste through a variety of ideas and initiatives, such as by recycling materials that would originally have been discarded.

Ideas that change the conventional way of thinking are also being born. For example, energy conservation in equipment that heats or cools objects has traditionally been achieved by finely adjusting the temperature settings to an optimal level. By changing our perspective from the optimization of temperature settings and questioning and confirming the systems that have been used in the past, in some cases we have been able to fundamentally reconsider temperature control, leading to more energy savings in the long term.

In addition to collecting and developing effective examples through study sessions and free discussions with business sites, we support each business site in achieving its CO<sub>2</sub> emission and industrial waste reduction targets through new proposals based on the knowledge of outside experts and research on new technologies.

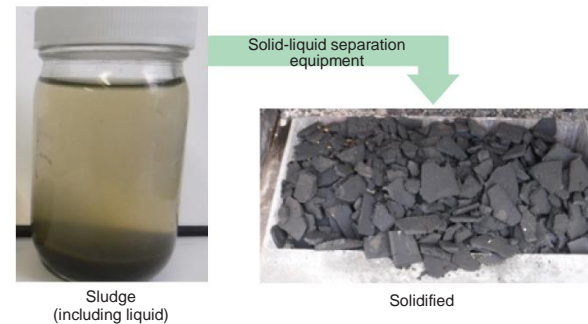
When we hear the words "environmental conservation," we sometimes feel like it's someone else's business, but the reduction of CO<sub>2</sub> emissions and industrial waste are very familiar issues that are closely related to our daily lives. We will step up the environmental activities of the Toyal Group and raise awareness of these issues as issues close to us that will change our future.



Engineering Center  
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## Reducing sludge industrial waste

All sludge discharged from the cleanup of separation tanks at the Shinjo Works was treated as industrial waste by an outside company. Since fiscal 2022, we have been able to reduce the amount of sludge-related industrial waste by 81.3% by solidifying the sludge in a solid-liquid separator with a low operating rate. We will continue our efforts to reduce industrial waste by effectively utilizing equipment with low operating rates.



## Introduction of forest certified products

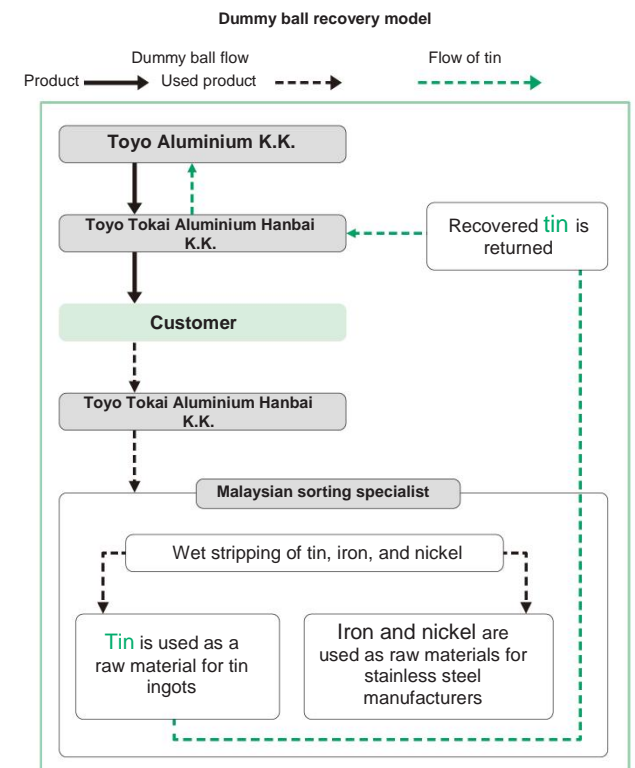
Forest certification systems are systems for promoting the sustainable use and protection of forests by issuing certification marks to wood cut from properly managed forests. It is said that the world is currently losing forest land equivalent to two Tokyo Domes per minute, and it is expected that sustainable procurement of raw materials will become difficult in the future. Toyo Aluminium K.K. and Toyo Aluminium Ekco Products Co., Ltd. are actively participating in the forest certification system and are encouraging consumers to purchase forest-certified products (environment-friendly products) that are manufactured, distributed, and sold using wood cut from certified forests and bearing a certification mark. In addition to supporting the protection of forests and preserving the global environment, we will continue to promote environmentally conscious corporate management and CSR (corporate social responsibility) initiatives.



antibacterial bento cups, deep type (side dish cups)  
\*Bento cup series made from forest certified paper

## Dummy ball recycling business

Toyo Tokai Aluminium Hanbai K.K. sells dummy balls manufactured by Toyo Aluminium K.K. as process materials for the manufacture of electronic parts. Collection operations were started in September 2022, and in fiscal 2022, 19 tons were collected. The ultimate goal is for a partner company in Malaysia to extract the tin, iron, and nickel from the collected dummy balls and recycle them as ingots, and then reuse them as raw materials for manufacturing dummy balls. Making reuse a reality will complete the cycle of recycling from product to product for everyone from Toyo Aluminium K.K. to customers, contributing significantly to a recycling-oriented society.



Dummy balls