

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 and use renewable energy in each process in manufacturing, and promote the 3Rs\* related to 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

C S R  
Key Challenge 2

# Environmental Protection



## All sites working together to reduce CO<sub>2</sub> emissions

**Matsuba:** The Yao Works has been engaged in energy conservation activities for many years, and in fiscal 2023, we continued to promote energy conservation through measures such as reviewing the operation of annealing furnaces and deodorization equipment. However, new measures are continuously needed to achieve the Toyal Group's CO<sub>2</sub> emissions reduction target of a 40% reduction in fiscal 2031 (compared to fiscal 2013). Energy conservation activities are not only a contribution to the children of the future, but can also contribute to the Company's profits by reducing energy costs. Those are our major motivations. Through OKR-sharing meetings and cross-facility activities that transcend the boundaries of each manufacturing site, equipment and manufacturing staff at each site work closely together, sharing ideas and helping each other to reduce CO<sub>2</sub> emissions and costs. Mr. Yamamoto and I joined the company at the same time, so it's easy to talk to him and we often discuss energy conservation activities.

**Yamamoto:** Immediately after being transferred to the Chigasaki Works in April 2023, we conducted patrols of the site and implemented energy conservation measures such as shutting down air conditioning and ventilation equipment during non-essential hours. As a result, we were able to reduce CO<sub>2</sub> emissions by approximately 600 tons per year. Of the two plants at the Chigasaki Works, energy conservation activities have been carried out at the Yahata Plant so far, and will be expanded to the Hagizono Plant from fiscal 2024. In addition, we will work on optimizing the intake and exhaust ventilation of drying ovens for printing presses, which had a significant energy saving effect at the Gumma Works where I previously worked. Due to changes in the composition of its production mix, the Chigasaki Works must reduce its CO<sub>2</sub> emissions by 40% over the next eight years. It is quite the hurdle, but instead of giving up, the entire manufacturing site will take on the challenge as one, saying, "We're all going to create a new history together."



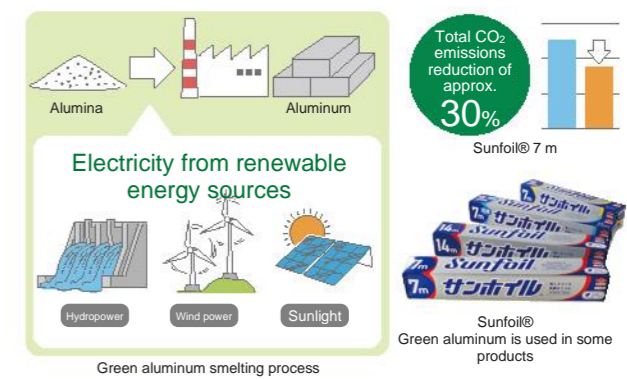
Foil Headquarters  
Yao Works Unit  
Manufacturing Facilities Team Leader  
**Makoto Matsuba**



Foil Headquarters  
Chigasaki Works Unit  
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**Daisuke Yamamoto**

## First in Japan! Sunfoil®: Aluminum foil using green aluminum

Toyo Aluminum Ekco Products Co., Ltd. began using "green aluminum," an aluminum raw material produced using renewable energy, in its Sunfoil® brand from October 2023. This reduces CO<sub>2</sub> emissions throughout a series of processes, from raw material procurement to manufacturing, compared to conventional products. The Sunfoil® brand will continue to focus on ease of use, quality, and the environment as a standard brand that can be used comfortably anytime, anywhere, and by anyone.



## Reducing hazardous waste generation by changing containers

In recent years, China's environmental protection policies have become more stringent, and the requirements for hazardous waste disposal have been raised. Therefore, for Toyal Zhaoqing Co., Ltd., glass bottles (500 ml/bottle) of raw material additive used for silica-treated aluminum paste products must be treated as hazardous waste when disposed of after use. However, by switching to reusable plastic containers (25 kg/container), we were able to reduce the amount of hazardous waste generated to 8.12 kg/t in fiscal 2023, well below the annual target of 12.2 kg/t.



## Competitive team power saving event

With the aim of raising the energy conservation awareness of each and every employee, the Hino Works held a power-saving event in a team competition format in which all employees could casually participate. At the event, participants competed by earning points for energy-saving proposals, finding air and nitrogen leaks, etc., and awards were given at the end of the event. Through the event, we sought to raise each employee's awareness of energy conservation activities and to dispel the perception that energy conservation is "difficult" or "troublesome" by giving them a sense of accomplishment in knowing that their activities contribute to the reduction of CO<sub>2</sub> emissions.



## CO<sub>2</sub> emissions reduction activities with transportation companies

The transportation company to which we outsource our operations owns a long-haul route that departs from Osaka, makes stops at several of our sites in the Kanto area, and then returns to Osaka. While operating these routes, we found that CO<sub>2</sub> emissions due to idling, such as when drivers take breaks, amounted to 2.5 tons/month. To reduce idling, we have prepared driver rest areas at each of our locations, of which use began on March 1, 2024. Through these efforts, we aim to reduce CO<sub>2</sub> emissions by approximately 30 tons per year.

