

Environmental Protection

Material Issue

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



Hane® Module installed at the Gumma Works

CO₂ emissions reduction activities in cooperation with energy supply companies

At Toyal America, Inc., since 2022, we have been cooperating with electric power companies and natural gas supply companies to continuously reduce CO₂ emissions by surveying the status of frontline manufacturing sites, identifying wasted energy in operation and maintenance, and making improvements. In addition to increasing energy efficiency by improving the structure and materials of gas heaters used for heating in production processes, we have also made improvements at 109 sites, such as switching to LED lighting.



Side profile of improved gas heater

Use of green aluminium and recycled aluminium

As a result, we have successfully reduced annual CO₂ emissions by 2,610 tons. In its "Sunfoil®" aluminium foil for home use, Toyo Aluminium Ekco Products Co., Ltd. has been using "green aluminium," which is produced using renewable energy, and has also begun using "recycled aluminium" from April 2025. We have reduced CO₂ emissions by switching 20% or more of aluminium raw materials to green aluminium and recycled aluminium. At Toyo Tokai Aluminium Hanbai K.K.'s Singapore Branch, we are focusing on reducing CO₂ emissions by using "green aluminium" for approximately 30% of aluminium foil for packaging materials.



Reducing total CO₂ emissions from manufacturing sites with environmental protection activities rooted in frontline operations

Tanaka At the Chigasaki Works, in addition to turning off air conditioning and ventilation facilities when they are not needed, we are also promoting energy conservation by increasing energy efficiency at large facilities through the introduction of heat exchangers and pressure controls for ventilation. Furthermore, we are also considering new energy conservation activities, based on close cooperation with the Gumma Works and Yao Works, including revisions to the operation of deodorizing furnaces.

Daiki Tanaka
Manufacturing Facilities Team
Chigasaki Works
Foil Headquarters



When we have to redo production processes or extend operating hours owing to facility malfunctions, it results in the unnecessary consumption of resources and energy. Support for the safe and stable operation of facilities also contributes to environmental protection activities. While steadily executing our day-to-day operations, the Manufacturing Facilities Team will work to further reduce CO₂ emissions and promote recycling.

Yuki Ota
Manufacturing Facilities Team
Gumma Works
Foil Headquarters



Introduction of environmentally friendly small-lot transportation services

At the Gumma Works, we are actively switching to transportation methods with a low impact on the environment, as part of efforts to achieve carbon neutrality. Many of our products are supplied in small lots, with substantial variety, and it was previously difficult to adopt transport methods with low CO₂ emissions, such as rail and marine transportation, because we needed to arrange for transportation in container units. We have recently achieved environmentally-friendly transportation by newly adopting small-lot transportation services that are available from single products. In the future, we aim to further reduce emissions by visualizing CO₂ emissions during transportation.



Products for small-lot transportation
CO₂ emissions comparison [example from transportation of 96 kg product from Gumma Works to Fukuoka Prefecture]

Transportation method	Environmentally friendly small-lot transportation (rail)	Truck transportation	Air freight transportation
CO ₂ emissions from transportation	1.3 kg-CO ₂	47.3 kg-CO ₂	38.9 kg-CO ₂

3R activities in everyday life

As part of efforts to promote the 3Rs for waste, at manufacturing sites we have been promoting initiatives, including reusing packaging materials and used solvents, and recycling employee work clothes as cleaning rags at frontline production sites. In our offices, we have reduced paper usage by switching to electronic applications for some forms that were previously accepted on paper. We are also implementing reuse initiatives, including reusing plastic document sleeves and envelopes that come with forms submitted from each division. Through these 3R activities for limited resources, we aim to reduce the volume of waste generated from business activities.



Recycling work clothes



Reusing stationery