Establishment of a Carbon-neutral Society

While the worldwide movement of decarbonization has accelerated, the Tokai Rika Group has been enhancing activities we consider to be the responsibility of a global company, and has been promoting CO₂ reduction activities within the whole group. These activities include downsizing and reducing the weight of products, which contributes to the improvement of fuel efficiency of vehicles, and improving the efficiency of the use of energy in production and transportation.

Promotion of more compact and lightweight designs for products

Regarding the shift by wire ECU, we have reduced the board CP configuration from 3 to 1 through drastic redesigning. This improvement has reduced the product weight by approximately 30%.



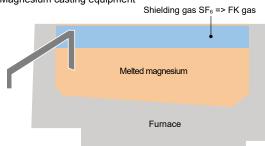
30% reduction in product weight

Reduction in greenhouse gases emissions

As we are using SF₆* for the shielding gas to prevent melted magnesium from burning when exposed to air in the magnesium casting process, we are proceeding with a changeover to an FK (fluorinated ketone) gas with a smaller greenhouse effect. All domestic bases have completed the changeover, and we plan for overseas bases to have completed it in 2030.

 *SF_6 has high global warming potential, 23,900 times greater than that of CO₂, our standard, so it has been specified as one of the targets of emission control.

■ Magnesium casting equipment



Reduction of energy CO₂ emissions

■ Energy CO₂ emissions (globally consolidated)



Reduction of CO₂ in plants

We have organized a working group for each process such as molding, casting, semiconductor, plating, and heat treatment to promote thorough energy saving of production equipment. In FY 2021, we implemented 612 improvements and were able to reduce 1,120 t-CO₂. Among the improvement cases implemented, those with particularly excellent applicability and viewpoints are given in-house awards to raise employee awareness and horizontally deploy them to other plants.

■FY 2021 Outstanding Energy-Saving Examples

Gold Award	·Self-supplied air using press operation
Silver Award	•Connector molding machine: Intermittent air blow •Lower temperature of metal plating degreasing process
Bronze Award	Startup of heat treatment furnace

Use of renewable energy

We aim for renewable energy to account for more than 25% of our power consumption by 2030, and are promoting the introduction of renewable energy such as solar power generation. In FY 2021, we introduced solar power generation at our Hagi Plant and TRT (Thailand), and the renewable energy rate has improved to 6.1%.



Tokai Rika Hagi Plant



TRT (Thailand)