

## Health, safety and reduction in accidents

### We are systematizing and restructuring occupational health and safety education

Occupational health and safety education consists of training and hands-on education aimed at preventing workplace accidents. Workers are made to understand the dangers associated with their jobs and are taught to take actions that ensure their safety. Currently, the people in charge of health and safety at every Murata plant are working together to restructure education in this area.

We are currently in the process of reworking the company's safety education system by first collecting all of the information on education being conducted at each plant and determining which things every employee in the company needs to know, and which things people handling specific tasks need to know. Then, we will be reviewing all of that information to produce more effective training, improve the educational content, and provide more focused training according to specific accident risks.

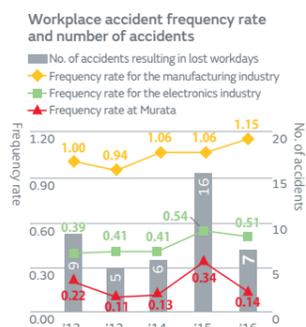
We are working to introduce hands-on safety education that simulates actual workplace risks such pinching, entanglement, and electrical shock. Through the experience we hope to raise awareness toward safety among all of our employees.



Photo (from left)  
Murata Manufacturing Company, Ltd., Yokaichi Plant, Administration Dept., Administration Sec. Takayuki Harada, Kenichi Sasaki  
Murata Manufacturing Company, Ltd., Environmental & Safety Management Dept., Environmental & Safety Promotion Sec. Masataka Mae

In order to prevent industrial accidents, Murata combines “tangible” efforts like improvements to the actual facilities together with such “intangible” approaches as education and awareness activities related to health and safety. The frequency rate for industrial accidents at Murata is low in comparison with the average for the manufacturing industry\*, but we remain committed to continually lowering it even further.

\* Number of casualties caused by industrial accidents per one million actual working hours



## Prevention of global warming

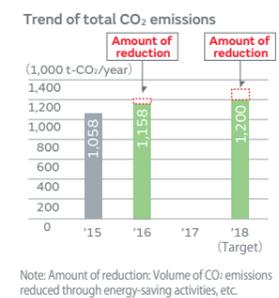
### Contributing to the mitigation of global warming through energy-saving activities that demonstrate our strength as an organization

Murata Electronics (Thailand), Ltd. (“Thailand Murata” below), located in Chiang Mai in Thailand's north, is Murata's second manufacturing base in the ASEAN region. Thailand is displaying rapid economic growth, and as a result, the nation's energy consumption is increasing annually. The government's energy policy has increased energy efficiency by almost 40% in one decade, and Thailand Murata is also actively working to conserve energy. An energy-saving framework, comprising such initiatives as the introduction of high-efficiency equipment such as LED lighting and operating improvements to increase the efficiency of the company's air conditioning system, has been implemented throughout the entire company organization, thereby reducing annual CO<sub>2</sub> emissions by 880 tons. This represents 2.5% of Thailand Murata's total CO<sub>2</sub> emissions. In the future, Thailand Murata will continue to fulfill its social responsibilities as a company doing business in Thailand, while working to provide a positive inspiration to the entire Murata Group with bases across the globe.



Photo (from left)  
Murata Electronics (Thailand), Ltd. Production engineering Dept. Maintenance engineering Sec. Phisit Rataphai  
Administration Dept. Environmental control Sec. Pongpat Sonpan, Thawatchai Jaimoon  
Production Dept. Production engineering Sec. Wirat Jankan

At Murata, we are introducing a global warming prevention plan toward reducing the total amount of greenhouse gases emitted from our business activities. Centered on the Global Warming Prevention Special Committee, these measures are being implemented throughout the Murata Group toward achieving the corresponding goals.



## Conservation of resources and reduction of waste

### Securing multiple waste processing routes for times of emergency

Murata contracts with a waste disposal firm to handle industrial waste generated through production activities, and also carries out recycling. If an emergency situation were to arise, such as an earthquake or flood in which processing facilities are damaged, it is possible that Murata would be unable to get rid of its waste. In such a case, if the storage area became full, Murata's production would have to be halted.

To avoid this potential situation, Murata is securing other additional processing routes at all of its factories so that production activities will not be affected in an emergency. Waste processing not only takes care of unusable resources, but it plays an important role in supporting manufacturing. We are working with waste disposal firms to make sure that function is provided.



Photo (from left)  
Izumo Murata Manufacturing Co., Ltd., Administration Dept., Environment Sec. Susumu Itohara, Tomohiro Hirano  
Okayama Murata Manufacturing Co., Ltd., Administration Dept., Environment Sec. Takayuki Kubo

Murata is working to reduce waste emissions. We also aim to strengthen our industrial waste management system to ensure the regular, responsible processing of that waste.



## Reduction in water usage

### Effectively utilizing water resources with an awareness of water risks

Water is a fundamental resource in people's lives; it is similarly essential to plant manufacturing. Water risks are therefore causing concern worldwide, as water shortages and water pollution become more serious due such factors as climate change and a rising global population.

At Toyama Murata Manufacturing, we take great care to use water resources efficiently. To improve our water recycling rate we have overhauled our coolant water system, and taken steps to optimize the use of water temperature. Such efforts have resulted in a usage reduction of 60,000 tons of water annually, approximately 3% in our factories overall.

Toyama Murata Manufacturing's plant is set in a location within Japan that is particularly blessed with an abundance of water. Especially for this reason, we are committed to taking thorough measures to protect water resources on into the future.



Photo (from left)  
Toyama Murata Manufacturing Co., Ltd., Administration Dept., Environment Sec. Naoto Kato, Takashi Yamada, Makoto Kubo

Murata promotes reduced and effective use of water resources. Each plant is carrying out its own activities and we are ensuring that that information is shared throughout the Murata Group.

