

## Promoting Environmental Management

### “Mega Solar Gunma” completed Further expanding our contributions through renewable energy

Murata’s 3rd large-scale solar power system has been completed and power generation has begun. In August of 2013, with Tokyo Denpa Co., Ltd. becoming a member of the Murata Group, that system was installed onsite at the Tokyo Denpa Gunma Plant in order to contribute to the spread of renewable energy and the stable supply of electric power in Japan’s Kanto region. Electrical power can be generated there on a scale of about 1.6 MW, the largest in our Group, bringing the level of solar power generation throughout the whole Murata Group to about 3.6 MW. “Mega Solar Gunma” is able to produce about 1.84 million kWh of electric power per year, equivalent to the amount of electricity used by 540 ordinary homes. Although the Kanto area was hit by a record heavy snowfall in February of that same year while construction was still ongoing, thanks to the cooperation of all of the contractors, we were able to complete the system and initiate power generation as originally planned. From here on, we will continue to work on increasing the use of renewable energies, on saving energy, and on the reduction of our environmental impact in order to contribute to a stable electric power supply for this area.

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 Special Global Warming Prevention Committee, these measures will be implemented throughout the Murata Group toward achieving the corresponding goals.

Murata Manufacturing Co., Ltd.  
Tokyo Denpa Co., Ltd. Gunma Plant  
**Mega Solar Gunma  
Planning &  
Implementation Group**



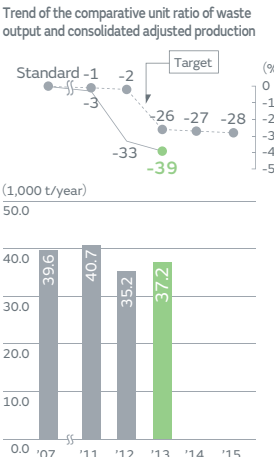
### Managing the risks of waste that sways our production activities

Murata generates various waste in connection with our production activities. That waste is maintained appropriately by us and then processed by a subcontractor. If, for any reason, the acceptance and processing of that waste by the subcontractor is temporarily unavailable, it is necessary for us to reluctantly stop production once a state is attained wherein the waste has continued to accumulate and the storage limit is reached. Murata regards this as a “waste risk” and is striving to reduce that risk. To that end, we are advancing risk management according to the level of effect that is exerted on production, such as by going directly to the subcontractor’s site and confirming the status of processing, but also by securing other processing routes.

At Murata, “zero emissions”\* was attained in the domestic group during FY2003. We are currently tackling zero emissions overseas and the overall reduction of waste generation itself. We are also aiming at strengthening our waste management organization in order to more surely and more stably process that waste.

\* Murata defines “zero emissions” as generating no solid landfill waste, including direct and intermediate processing, and having a 100% recycling rate. (This does not include waste that cannot be handled solely with in-company measures, such as excess septic tank sludge.)

Photo (from left)  
Sabae Murata Manufacturing Co., Ltd.,  
Administration Section  
**Michiko Yabuuchi**  
  
Kanazu Murata Manufacturing Co., Ltd.,  
Administration Section  
**Yuko Miyamae**  
  
Murata Manufacturing Co., Ltd.,  
Environment Department  
**Wataru Kushioka**



### Establishing an “impressive” factory, open to the community, and where plants, insects, and birds can be experienced

At Fukui Murata Manufacturing, we plant trees and flowers that have a connection with the local area, and use landscaping materials that can be obtained locally, such as stones and gravel, in carrying out greening activities that are rooted in the local region. We are also tackling other various greening projects like a rose garden where 150 plants of 70 varieties bloom in all their glory, a biotope that is frequented by butterflies and small birds, a greenhouse where tropical plants are cultivated and a cold room where alpine plants are grown, and more. In events like plant tours, these zones are open to all residents of the community, and the trees and flowers can be enjoyed throughout the seasons. We also invite local schoolchildren and, as they experience the living things, flowers and trees that inhabit these areas, they also learn the importance of Nature. These areas are also useful for environmental study. A leading-edge technology factory that is harmonized and coexists with a richness of Nature... This is just another form of social contribution by Murata.

“Wanting the existence of Murata to be the pride of that area”

In order to actualize business management that is in a close relationship with the area, with the community, we are continuously conducting environmental study projects for elementary and junior high school students, natural woodland preservation activities, and factory greening activities, etc., called “Murata Woods”.

Photo (from left)  
Fukui Murata Manufacturing Co., Ltd.,  
Administration Department  
**Shigeki Saito**  
**Yoshito Iwao**

### Strengthening the structure for cooperation across borders and promoting continued improvement in our environmental activities

Individuals in charge of environmental management for the Murata Group in each ASEAN country gathered at Murata Electronics (Thailand) Ltd., and held a meeting on their environmental activities. By actually being able to discuss the issues thoroughly, face-to-face, there were many instances that lead to the discovery of and solutions to problems, and they were able to renew and deepen their understanding of those issues. This became an opportunity to further strengthen the bonds between those in charge at each plant, and they have been able to continue the information exchange through Internet conferences, etc., even after that. In the Murata Group, our overseas production ratio is increasing and the level of influence of plants abroad has grown larger than ever before. Thus, communication not only between headquarters and plants but between the plants themselves as well is being invigorated, the structure for mutual cooperation is being strengthened, and further improved and even more efficient environmental activities are being advanced.

At Murata, an integrated framework for eco management is being built globally to include all plants in Japan and all overseas production bases. The aim is to share information in connection with environmental management, promote highly effective and efficient environmental activities, and strengthen governance.

Photo (from left)  
Murata Electronics (Thailand) , Ltd.  
Administration Department  
Environmental Control Section  
**Supathat Thippanya**  
  
Murata Electronics (Malaysia) Sdn. Bhd.  
Administration Department  
**Tham Yoke Wan**  
  
Murata Electronics Singapore (Pte.) Ltd.  
Quality & EHS System Department  
**Anand Ariyaratnam**