## nt Web

# [Promoting Environmental Management]

We at Murata strive to aim at reaching harmony with the environment in every stage of our corporate activities including development, design and production processes.

For environment, health and safety
By establishing a system to allow employee initiatives



Wuxi Murata Electronics Co., Ltd Administration Dept. left / Lu Yingting right / Zou Yi

Wuxi Murata conducts EHS (Environment, health and safety) management activities. However, it has been difficult to permeate these activities due to the transfer of production from other plants and the quickly expanding scale of the plant itself. To address this issue, we have identified EHS as a critical company-wide challenge, and have assigned an employee in charge of EHS at each department to allow departments to take initiative in promoting these activities. We have also extended our EHS activities to the regional community by providing lessons at neighboring primary schools.

#### Environmental management

Murata has completed consolidation of environmental management framework based on the environmental management concept at every plant in Japan as well as every production site overseas in FY2009. We will share information with regard to environmental management, and aim at the promotion of highly efficient and effective environmental activities and strengthening of the governance.

Controlling hazardous chemical substances to prevent in-house contamination in collaboration with suppliers



Fukui Murata Manufacturing Co., Ltd. Purchasing Sec. Left / Ayumi Matsuda

Right / Erika Yaqi

We are in charge of sourcing raw materials and parts procurement from suppliers in and out of Japan at Fukui Murata. We strive to prevent the procurement of parts and raw materials containing hazardous chemicals by strictly surveying contained chemicals before purchase. We will continue to work hard to achieve prompt procurement of parts and raw materials with less environmental impact in collaboration with suppliers to meet our customer requests.

#### Green procurement/green purchase

We need to practice "green procurement" to procure more environmentally preferable parts and materials to reduce environmental burden of our products. To this end, we have been asking our suppliers for their understanding and cooperation to practice their own environmental management.

Product development to meet advancing ecological needs



Iwami Murata Manufacturing Co., Ltd. Engineering Sec.

Hiroe Ogawa

The market share of energy-efficient and long-life LED lighting systems is quickly expanding as the market demand leans toward ecologically conscious products. LED lighting systems require more ecological features for their electronic devices used, such as smaller, thinner and longer-life. Our business unit succeeded in developing ceramic capacitors with higher capacitance during actual usage for LED lighting systems, and we will continue our efforts to develop products that contribute to the environment.

#### Eco design

At Murata, we manufacture environmentally preferable products thoroughly focusing on environmental burden throughout their entire lifecycle including parts and materials procurement, design and development, production, use, recycle and disposal.

## Department-wide challenge for our CO<sub>2</sub> emissions reduction project



Kanazawa Murata Manufacturing Co., Ltd.
Production Dept. 1

Akihito Tamura

Kanazawa Murata has greatly reduced power consumption by making improvements over the cryo compressor (helium compressor) used for ultra-high vacuum pump as a part of our  $CO_2$  emissions reduction project. We achieved this feat three months earlier than our initial schedule thanks to collaborative effort with associated departments. We were able to reduce the amount of  $CO_2$  by 363 tons per year (1% of the total  $CO_2$  emissions at our plant). Our success has motivated us to continue our efforts to make even greater reductions in the future.

#### Global warming prevention

Under the guidance of Global Warming Prevention Special Committee, Murata promotes group-wide activities to establish new global warming prevention policies, and aims to reduce the total quantities of greenhouse gasses emitted through our business activities. Undertaking a new waste reduction initiative in collaboration with neighboring plants



Komatsu Murata Manufacturing Co., Ltd. Administration Dept.

Kanji Matsuda

At Komatsu Murata, we are actively working toward reducing waste emissions and waste processing costs. For example, we have not been marketing waste plastics because the volume / weight ratio did not allow us to cover costs. However, we have coordinated the timing of waste disposal with neighboring plants within the group to secure sufficient volume so that we can now cut costs by selling our plastic wastes. We will continue collaborating with neighboring plants to reduce waste emissions.

#### Waste reduction

Murata as a group has achieved zero emissions domestically in FY2003. Currently we are working on achieving zero emissions at overseas sites as well as reducing waste generation itself at the source.

Development of eco-conscious raw material containers contributes greatly to the reduction of CO<sub>2</sub> emissions from distribution



Murata Manufacturing Co., Ltd.
Materials Production Dept.

Takehiko Ishisaka

Until recently, returning Murata's reusable raw ceramics material containers after distribution required space equivalent to 50 full trucks each month. We set the target of reducing this by at least 65% and developed eco-friendly stackable containers to help us meet that goal. We are now projecting 68% space savings for returning containers. We are hoping to reduce CO<sub>2</sub> emissions from distribution further by expanding this approach to other containers as well.

#### Promoting eco-conscious distribution and packaging

We strive to reduce environmental burden at the distribution stage of products in addition to manufacturing stages. We reduce CO<sub>2</sub> emissions by promoting efficient transportation in addition to reducing waste through using less packaging materials.

Instilling awareness about Murata's environmental conservation in the community through heart-felt activities



Sabae Murata Manufacturing Co., Ltd. Administration Sec.

Michiko Yabuuchi

Sabae Murata has been carrying out various "hand-making" activities to promote awareness about our environmental measures among the regional community members. For example, we have been offering compost materials from our food waste for gardening, and placing planters or seasonal decorations in our neighborhood as a part of our heart-felt communication with the community. We are also participating in municipal events and giving lessons at local elementary schools to strengthen our ties with local residents.

#### Environmental risk communication

Murata strives to minimize environmental risks of business activities affecting the local community and to be ready for handling any problems promptly when they happen. To this end, we do our best to disclose information pertaining to such efforts including inviting local residents to company tours so that they can understand Murata's environmental conservation activities.

Carrying out business activities that allow co-prosperity with the ecosystem



Anamizu Electronics Industries, Ltd.
Administration Sec.
Photo, from left to right
Hisao Miyaji
Hiromi Ikeshita
Tsunematsu Hama
Kenji Matsumoto

Anamizu Electronic Industries has kept track of environmental impact on the ecosystem through its business activities to promote conservation for biodiversity. In addition to conservation activities to protect wisteria and azalea that are designated as natural heritage by the prefecture, we participate in community-based mountain conservation. We also publish an in-house journal periodically to instill awareness about biodiversity in our employees.

### Conserving biodiversity

Murata has been working on conserving and restoring the ecosystem based on our philosophy about the association between business activities and biodiversity. On January 2011, we added an action plan for biodiversity conservation in our environmental policy to further accelerate our activities, and to promote awareness of the importance of biodiversity conservation in our employees.