



Contributing to the environment  
**“Monozukuri” at Murata...  
 Contributing to  
 the reduction of  
 environmental impact  
 through individual efforts**

Murata Manufacturing Co., Ltd.  
 Executive Vice President,  
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 Toru Inoue

**Through both the manufacturing process  
 and the products and services that it produces**

Murata is involved in two facets towards making a contribution to reducing our environmental impact. One involves suppressing the amount of materials and energy used in the process of manufacturing, while also reducing, as much as possible, the emission of environmentally harmful substances. The other is contributing to a reduction in the environmental impact of society as a whole through our products and services. More compact, slimmer, multi-functional electronic components result in higher density and higher efficiency final products, thus saving resources for society overall and also contributing to energy savings. For the manufacturing process, we established a target of a 15% reduction in basic units for CO<sub>2</sub> emissions in a three-year plan that set our fiscal 2012 as the base year. And, in fiscal 2014, we were on right track with a 14% reduction. In producing ceramic electronic components, Murata's flagship product, “sintering” is an essential process and it uses a lot of energy. We were able to increase our already major results in what is normally difficult to achieve energy conservation by optimizing such conditions as the structure and atmosphere of the sintering furnace itself. First and foremost, Murata has a culture of

building our own production facilities and manufacturing processes, and the idea that the people involved in development, manufacturing technology and even production should devise, operate and improve their own production facilities, on their own, is deeply rooted. In every office, in every manufacturing process, efforts to reduce CO<sub>2</sub> emissions are being practiced and are producing results. That has also culminated in a number of other achievements, such as cost reduction and improved facilities and work environments. Although it is not as easy to set forth specific numerical targets for the reduction of the environmental impact from products and services as it is with the manufacturing process, we are aware of how very large a social impact Murata's products and services do exert. While seeking indicators that objectively identify the actual contribution to reducing the environmental impact caused by our electronic components, we will aggressively make proposals and work toward creating new business opportunities based on that value. These two facets serve as the pillars in the continued efforts of individuals involved in manufacturing at Murata, as well as in our activities toward reducing the environmental load we create.

**Personnel in charge of the environment around the world  
 adjusting their environmental activities through “face-to-face relationships”**

The Murata Group has been promoting activities that are centered on our Head Office and domestic plants in order to expand the level of our environmental activities. However, now that our global business is growing, it is essential to further increase those activities in our overseas production plants as well. In December of 2014, individuals in charge of the environment for the ASEAN region (Thailand, Malaysia, Singapore, the Philippines) and for Finland gathered at our Head Office for a Global Environment Meeting in order to share Murata's principles on its environmental activities and introduce the Murata Environmental Standard. The principles of the Murata Group in regard to environmental activities have not yet sufficiently permeated throughout companies like Murata Electronics Oy, which joined the Murata Group three years ago, and Philippine Manufacturing Co. of Murata Inc., whose factory went into operation just two years ago. There may also even be situations in other plants in which more than 20 years has passed since they were founded, but where those principles were not fully passed on to each new person in charge. It is therefore important for us to ensure that all members involved in environmental activities everywhere understand the Murata Environmental Standard and come to be able to think and act on their own at each plant. During that five-day meeting, staff from the Head

Office held discussions and exchanged views with individuals in charge of the environment overseas on content that had not been communicated well to that point, and each side was able to gain a better understanding of the other's thoughts and positions. And, as a part of that meeting, the group visited our Yokaichi Plant in order to confirm actual on-site circumstances with their own eyes. They also went to an industrial waste treatment plant that Murata has subcontracted and toured its complicated liquid waste treatment process. Through this gathering, the participants were able to get a better understanding of the Murata Environmental Standard and to see an actual production site, so they are now using that information toward enhancing environmental activities at their respective plants. We can also presume that new companies and plants will continue to be established in line with our business expansion from here on out, so we will hold such meetings regularly and strengthen such measures in order to ensure that each plant possesses an organization that can make determinations and act on their own initiative.



Global Environment Meeting

**Sharing the Murata  
 Environmental Standard  
 around the globe**

Photo (from left)

Murata Electronics Oy Sourcing & Logistics  
 Jukka Vähäsarja

Philippine Manufacturing Co. of Murata, Inc.  
 Environmental Control  
 Ryla A. Nunag

Murata Manufacturing Co., Ltd. Environmental & Safety  
 Management Department Administration Group  
 Norichika Ueura

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Murata Electronics (Malaysia) Sdn. Bhd. Safety,  
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 Supathat Thippanya