

\_\_\_\_\_ \_\_\_\_\_\_ -14 - -



# Murata Report 2012

Corporate Report CSR Report



### Innovator in Electronics<sup>®</sup>

Many people are unaware of Murata's electronic components. However, Murata components are used by almost all of us. Computers, mobile phones, home appliances, car electronics... Inside our electronic equipment, which continues to evolve dramatically, becoming ever smaller with more advanced functions, Murata components are hard at work.

### Innovator in Electronics<sup>®</sup>

Electronic components keep on changing. Murata wants to keep on changing, too. We work to stay in step with the trends of the times, keeping our focus on the customer, carrying out our manufacturing with pride, continually seeking out new challenges, and striving to always remain the tireless innovator that we are. Under a philosophy that is unchanging, we continue to make bold changes. In any and every age, Murata will always be an innovator.

### Index

### Corporate Report

CSR Report

Profile

- 02 Index 03 Top Message 05 Value Network 07 Core Competence Products by Application 09
- Financial Highlights 17 Global Network
- 19 CSR Commitment 21 New Businesses and CSR 23 Environment Feature Article 25 Promoting Environmental Management 27 Employees
- 28 Society and the Community 29
  - CSR Activities: Targets and Results
- 33 Members of directors Stock information Major shareholders



### Innovator in Electronics®

01

15

31

Opinions from the Third Party

### 32 List of domestic and overseas sites

# Murata's Corporate Grand Design



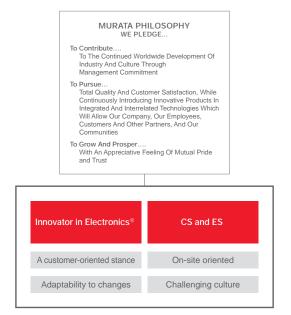
# Our Corporate Grand Design – A vision of the Murata that we seek to be

Throughout the history of our company, the ideals embodied in the Murata Philosophy have served as the base for our corporate management, and we have experienced considerable growth in tandem with the evolution of our electronics society. We believe that the future holds many more opportunities for electronics, which will drive further growth in this field. To allow us to remain a company capable of contributing to the advancement of society in the midst of a drastically changing market environment, we have drawn up our "Corporate Grand Design," which lays out the actions that Murata must take and the company that we must be.

In the face of an increasingly global market and the ever-diversifying needs of customers, Murata must maintain its ability to offer the world's highest standard of customer value. It will require the cooperation of Murata members around the world and our many other global partners to build a value network that delivers solid customer value.

It is important that Murata employees continuously ask themselves what values customers require, and how the work they do may help to provide these values. As we embrace a common vision of the Murata we seek to be in ten years time, we are taking a bold step forward towards a new Murata capable of providing new values.

President Statutory Representative Director Tsuneo Murata



CS: "Making the efforts to have our customers consistently recognize the value we offer"

ES: "A workplace environment in which the employees find their work challenging and in which they can continue to grow"

# All for Customer

Our desire to serve customers links us together.

All employees linking together freely to create values to please our customers in our powerful global deployment, this is the concept behind our value network. We will contribute to world's future through Murata's value network.

Products, people and information – our network freely links them all throughout the world

Say, the customer's development site is in Europe, an order is made from the purchase center in Singapore, and products will be shipped to a plant in China. Murata caters to this customer through sales force, production site and staff at various locations around the world. This is now a common situation. Overseas markets occupy 85% of Murata's net sales signifying our change in our relationship with customers from "catering overseas from Japan" to a "complex interfacing of global sites and functions."

We need to centralize information in order to administer a global supply chain. We base IT system development on the idea of having the right person at the right place, by sharing human resources beyond countries and regions, and hosting the Global IT Meeting to coordinate opinions. We value an environment where networks are formed naturally whenever and wherever necessary, trusting and entrusting tasks with each other and thinking from other people's viewpoints without being bound by one's common sense.



Murata Manufacturing Co., Ltd. Manufacturing System Design Dept Masashi Azuma Murata Manufacturing Co., Ltd. Business Engineering & Information System Grou Cholo Galvez Lunaria Sharing customer feedback in-house to make proposals with width and depth

The term "marketing" can mean many things. Our interpretation of marketing is an "effort to figure out what's valuable for our customers." Sensor Products Dept. has introduced FAE (Field Application Engineering) system where our market representatives develop their specialty in creating an environment to proffer values to our customer. We must determine market trends, how our customers deploy their businesses, and what Murata can do to help. To this end, we fully take advantage of technological exchange meetings we hold for our customers as well as presentation opportunities. Our key aim is to share customers' visions for business deployment while helping our customers develop understanding of what Murata's sensors can realize, rather than just soliciting product specifications. Examples of this aim include producing a demonstration unit in-house to visualize features in presentation, or working together with a module department when stand-alone elements do not derive a solution. By sharing positive or negative customer feedback with other departments horizontally, we can broaden the horizon of our proposals.



Sensor Products Division Yoshitomo Ishioka

# Murata's Core Competence

All technologies are directly in line with our markets and customers.





[Murata s manufacturing technologies]

### Materials

Murata has established a technology to precisely control ceramic materials and electrode materials that critically determine the property of electronic components.



From 1 µm thick ceramic sheets to complexly shaped filters created by injection forming - we pursue "the functional shape."

Forming



When fired, ceramic's crystal structure shifts to achieve certain properties. Firing is a technique to control these invisible changes inside a furnace.

Firing



Processing

Once they have gained electric properties from the processes through firing, ceramics are formed into electronic components through various additional processes.

### Processing



### Murata s core technologies ] Core c

### Material technology

Developing new materials from scratch keeping 10 years in future in scope

It is Murata's characteristics and strength to vertically integrate all manufacturing technologies surrounding electronics such as materials, components and modules. What determines future of technologies depends on an accumulation of seed technologies, in the upstream processes, namely those pertaining to ceramic and organic materials. We are striving to develop materials with various characteristics drafting a roadmap for the world 10 years from now in scope.



Materials Development Grou Hayato Katsu

### Lavering technolog

with smallest size and largest capacity

Layering technology is applied to a process to form prepared ceramic materials into extremely thin sheets, and configure electrodes and stack numerous layers. Over the years of developing and producing monolithic ceramic capacitors, Murata has been thoroughly refining this technology. Our advantage comes from maintaining well-balanced refinement in all processes. This allows us to offer excellent QCD in totality for the market where smaller size and large capacitance are in demand increasingly.



Production Engineering Development Group Kazuhiro Tabata

### Production technolog

in original in-house facilities

As a principle, Murata develops and builds original in-house production facilities. For example, I was responsible for implementing a visual inspection unit to ensure built-in quality and quality assurance through a unique image-processing algorithm. We need production lines and facilities to meet the product concepts in order to create and propose new values in electronics, and come up with new products as a result. This is also the source of Murata's competitiveness.





### Finish

Once completed, products are delivered to users only if rigorous testing proves that they live up to their Murata label.



### Radiofrequency technology

### A technology for tomorrow's communication

Murata's high-frequency filters and communication modules with those filters integrated are behind mobile device innovations evidenced by rapid evolution of smartphones and tablets. Many of Murata's modules designed with original LTCC design technology and simulation technology are integrated in small advanced equipment. We strive to develop new technologies to meet future needs of the society by always staying ahead of our era.



Murata Manufacturing Co., Ltd Communication System Products Division Atsushi Ono

Products by Application



## Audio and Visual

### TV plays an "ACTIVE" role

Murata links TV to information technology

Modern television sets do more than entertain by showing enjoyable programs.

Thanks to increases in screen size and image quality, linkage to peripherals, and integration

with communication services, they are now becoming the most accessible information terminals available.

# Electronic components that bring "Innovation" into equipment

By downsizing electronic equipment and adding new functions, Electronic components transform equipment from within.

Smaller size along with higher and multiple-functionality does more than just make electronic equipment more convenient. These advancements also create new value in our everyday lives.

Small electronic components have a great impact on us

by changing our communication, working style, lifestyle, and entertainment.

If your life has changed from last year, you can be sure that Murata has played a part in it.

Key Murata products used in audio-visual equipment





Electrical Double Layer Capacitor

Electrical double layer capacitors support peak load in mobile equipment batteries and small power supplies. They are characterized by small size, low profile and low resistance, and contribute to prolonging battery life and making power supplies smaller.

Switching Power Supply

Introduction of an original circuit Large capacitance capacitor characterized enables high efficiency, small, by low profile and low ESR. It stabilizes low-profile, power saving and low power supply for circuits requiring strict heat generation units. voltage control, and contributes to making advancements in AV equipment features.

Flat-screen TV sets represent a core market for Murata.

Enjoying rapidly increasing demand in emerging economies, flat-screen TVs not only drive the growth in demand for components such as capacitors, but stimulate the need for infrared sensors for energy savings and power supply modules that contribute to energy savings and downsizing.



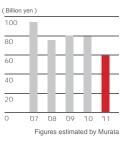


Polymer Aluminum Electrolytic Capacitor



### Net sales share and net sales for the AV market





## Communications

### Mobile phones link you with your future, your security

With Murata, connection takes up a brand new meaning

People around the world now use mobile phones. The launch of new higher-speed, higher-capacity communication services is accelerating the trend for more diversified and smarter products. On the other hand, demand for simple low-end phones is also growing. Microwave products, sensors, and functional modules contribute to the advancement and diffusion of innovative communication technology.

## Computers

### Ubiquitous computing in the true sense

Murata makes things " simple " with not-so-simple technologies

Easy to carry and connect to networks,

highly mobile PCs are drawing enthusiastic attention with the spread of Internet connections and cloud computing services. Murata downsizes its electronic components, permits them to accommodate higher-frequency signals, reduces loss to make them friendlier to the battery, and develops sensors that confer high reliability and operating comfort, thereby providing support for new-age computing.

Key Murata products used in mobile phones



SAW Filter and Duplexer

SAW filters and duplexers, which separate the necessary signal from all radio frequency signals, are key devices in radio frequency circuits. With its unique miniaturization technology, Murata helps RF circuit downsizing.



SWITCHPLEXER®

SWITCHPLEXER® is used for noise filtering and switching between reception and transmission. Murata's innovative multilaver module technology allows the achievement of compact size and high reliability.

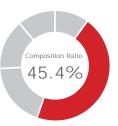


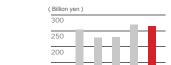
Connectivity Module

Enabling the mobile phone to access the Internet via wireless LAN, these modules lead the trend of increasing multifunctionality for mobile phones.



Net sales share and net sales for the communication market





100

Figures estimated by Murata

### Key Murata products used in computers



Shock Sensor

In addition to protecting hard disks from impact and vibration, shock sensors make it possible to operate computers by simply touching or shaking them without using the conventional mouse pointer.

Monolithic Ceramic Capacitor and Low-ESL Capacitor

These capacitors stabilize the power supply circuit to MPU, helping reduce size and thickness of mobile PCs.

Mobile computing now in a new phase of growth.

Net sales share and net sales for the computers and peripherals market As personal computer CPUs become more powerful, market demand 150 for capacitors and noise suppression devices is growing. Murata 120 commands an unrivaled share in the shock sensor market for hard 18.7% disk drives. As tablet PCs with wireless LAN capabilities emerge in the market, Murata can expect further growth in one of company's strongholds, microwave products. 08 09

The spread of sophisticated mobile phones drives the growth of Murata components.

Components for mobile phones account for the largest portion of Murata's electronic component sales. In addition to the rapid increase in the number of handsets in use, the spread of sophisticated models such as LTE units and smartphones has caused a sharp rise in the number of components used in handsets, such as capacitors and SAW filters, permitting us to expect continued rapid market growth in the future.

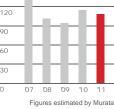






Offering an increasing range of functions, modern PCs face an even worse noise environment on the inside. Murata's traditional noise suppression products can eliminate various noise problems





## Automotive Electronics

### Automotive technology is going through transformation for our Earth and people

Thus Murata 's missions abound...

The automotive industry is increasingly computerizing and electrifying their vehicles to improve their environmental compatibility as part of their responsibility for people and our planet. Murata's highly reliable electronic components based on the heat resistance of ceramics prove their mettle under punishing driving conditions.

Power devices that accommodate high power accelerate advancements in hybrid and electric drive technology.



### Key Murata products used in automobiles



Monolithic Ceramic Capacitor (for Power Electronics Applications)

Employed in the inverter that controls the hybrid / electric vehicle motor, monolithic ceramic capacitors for power electronics applications feature a space-saving design.

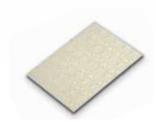


MEMS Gyro Sensor

MEMS gyro sensor utilizes MEMS technology to detect gyrating motion and is used for navigation and robot posture control. This technology will contribute to development of telematics and motion control.

Murata enjoys a growing demand for various electronic components that ensure environmental friendliness, safety, and comfort in cars.

As environmentally friendly cars go mainstream, automobiles are fitted with more electronics, causing a rapid growth in demand for capacitors and other electronic components from Murata. Various sensors used for safety equipment as well as Bluetooth® modules are also successful. We expect to continue to achieve high growth in the sales of components for automobile applications.



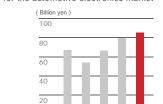
LTCC Multilayer Substrate

This low-temperature co-fired ceramic substrate is used for ECU (electric control unit ) for power train control and radar modules for safety improvement where high reliability is required.



Net sales share and net sales for the automotive electronics market





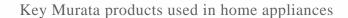
Figures estimated by Murata

Home Appliances

### Eco living is cool living

Make it smart with Murata's electronic components

Even more energy savings and environmental compatibility are required for the home electric appliances we use in our everyday lives, such as lighting and air-conditioning. Murata offers low-loss and long-life ceramic capacitors, transformation-efficient power supply modules, and sensors/communication modules that control equipment by monitoring its operation to provide support for smart home electronics.





Rotary Position Sensor (SV Series) POSISTOR<sup>®</sup> for Motor Starters

Rotary position sensor is a small and reasonable angle sensor used for rotary switches in home appliances such as washing machines. It contributes to making appliances smaller and more reasonable.

POSISTOR<sup>®</sup> controls the electric current generated when the refrigerator compressor is activated. By helping reduce power consumption, POSISTOR® contributes to the opening of a low-carbon society in future.

### Creating ecological value as a new form of affluence.

Home electric appliances are icons of a wealthy lifestyle. Emerging markets are seeing increasing demand for thermistors for refrigerators and air-conditioners. In advanced countries, home electric appliances represent a major target in the commitment to reducing energy consumption. Murata's electronic components also find use in the control circuit of LED lighting equipment.

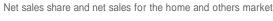


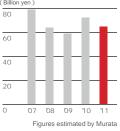
Ionizer (Ionissimo<sup>™</sup>)

lon generators provide anti-mold, anti-virus, air cleansing and skin-moisturizing effects. We can now propose a new aspect to our lifestyle, the control of air quality.









# **Financial Highlights**

### Electronics market continues to expand.

Murata's electronic components are the leading factor in its growth.

During FY2011, although sales of Murata products for smartphones, tablet PCs and automotive electronics were strong, other electronic equipment including note PCs and flat-screen TV were weak, resulting in reduced income and gain.

We are expecting a significant growth in FY2012 due to further development of smartphone and tablet PC markets, advancement in automotive electrification and recovered performance of other electronic equipment.

### Other components

### Proposing new values with sensor fusion

Murata has been proposing numerous types of sensor products. We are now trying to proffer new features with combined multiple sensor signals in addition to making our conventional proposals based on stand-alone sensors. This new technology, "sensor fusion," allows us to create and propose new values including motion sensing.

Murata Manufacturing Co., Ltd. Sensor Products Division Takatomo Sakai

Kei Kawashima

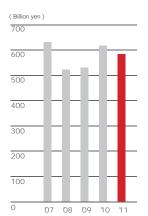
Power supplies and other modules

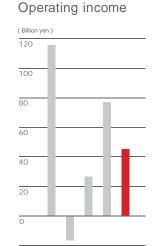
Preparing a new system for industrial standard products

Till now, Murata's strong suit for power supply modules has been products with customized sizes and outputs. We are preparing our manufacturing system to produce industrial standard products that have large, global markets.

Murata Manufacturing Co., Ltd. Power Device Products Division Yuki Otani

### Net sales





(20) 07 08 09 10 11

### Capacitors

Going beyond specifications That's where Murata's strengths are shown

07 08 09 10 11

Net income

( Billion ven

80

70

60

50

40

30

As automobile electrification evidenced in HV and EV goes forward, demands for automotive monolithic ceramic capacitors are picking up. Specifications for this implementation are very demanding since human lives depend on them, and this is where Murata's strengths can truly show.

Murata Manufacturing Co., Ltd. Sales Engineering Group Yuko Abe



07 08 09 10 11

Total assets

(Billion yen)

1,200

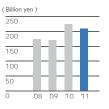
1,000

800

600

400

0







15

### Piezoelectric products

### Shifting from developed nations to BRICs Entering into yet larger markets

We are working on devices that allow specific frequencies to pass through for mobile phones, such as SAW filters and duplexers. Our main market is beginning to shift from developed nations to BRICs nations, in anticipation of demands becoming even larger for smartphones and tablets.

Kanazawa Murata Manufacturing Co., Ltd. SAW Products Dept. Sunao Yamazaki



### Communication modules

### Realizing network solutions with high quality modules

Demands for Murata products are expanding in automotive applications, such as car navigation systems and car audio systems. If automobiles are required to last 10 years and 100,000 km, we will aim to meet even higher standards with our communication modules. We will aggressively introduce network solutions in new areas including healthcare and energy.

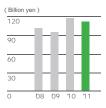
Murata Manufacturing Co., Ltd. Connectivity Products Division



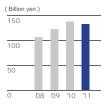




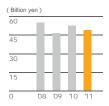












# The Americas

Net sales: 40.6 billion yen Number of employees: 609 Subsidiaries: 10 Murata Americas General Manager Distribution Sales Woody Wilder

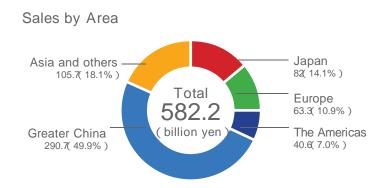
BECOMING A GLOBAL COMPANY Requires A collective EFFORT!

As a member of the Murata Group, Murata Americas has long been committed to leading customer design collaboration for tomorrow's products. We will ensure further innovation to deliver new ideas and seamless business practices to exceed the rising expectations of our company in the future.

# Global Network

74 companies in many regions of the world. Wherever you find us, we are always Murata, ever innovative.

Approximately 85% of Murata products are sold overseas. Japan, Asia, North and South America, Europe. Not only do we adhere to the same customer-oriented policy at each of our sites, we also strive to be a beloved corporate citizen and trusted presence in every region. Furthermore, each site recognizes itself as a member of the same Murata group, moving together towards a common goal. Around the globe, Murata works as one.



These figures reflect sales by area and subsidiary numbers as of March 31, 2012. These figures reflect electronic component and other product sales by area.

# Europe

Net sales: 63.3 billion yen Number of employees: 1,093 Subsidiaries: 16

Murata Electronics Europe B.V. Global Key Account Manager Telecom Infrastructure Jorma Patovirta

Global Networking with Local Support !

Telecommunication infrastructure customers' key business needs are high quality, high reliability and even faster and bigger data speed capacity. Murata Europe supports global customers R&D to provide the most sophisticated innovations. Combined with excellent local support and service all over the world we aim to fulfill and exceed our customers' requirements.

# Greater China



Murata Electronics Trading (Tianjin) Co., Ltd. Sales Manager Xingzhe Liu

Challege to the higher target!

China has become a global production base as well as an enormous center for consumption. As Chinese corporations rapidly become global and increase fierceness of their competition, it is vital for us to aggressively seek demands and provide products to meet their needs. We will work as a team to expand our business and continue to contribute to the creation of new products to inspire wonder and excitement in our customers as well as Murata's advancement.





# Japan

Net sales: 82 billion yen Number of employees: 22,548 Subsidiaries: 24

### FILL UP OUR FUTURE WITH THE STORIES OF INNOVATION.



Murata Manufacturing Co., Ltd. Technology & Business Development Unit New Technology & Products Development Group Department Manager

Katsumi Fujimoto

Murata has organized excellent teams of engineers that can come up with original technologies and vertically integrate technologies, differentiating us in each of the specialized product categories. In addition to Murata's engineering environment where we practice scientific management with remarkable perseverance and sincerity, we are also aiming at training engineers to focus on values our customers require.

# Asia and Others

Net sales: 105.7 billion yen Number of employees: 5,704 Subsidiaries: 9



Murata Electronics Singapore (Pte.) Ltd. Assistant General Manager Process Engineering and Quality Improvement, MLCC Manufacturing Division Wang Yanling

Transform to a Value Creation Center

Murata Singapore is evolving organizationally to create new values as the regional HQ for the ASEAN region. We will develop a competent team with required knowledge and skill sets to further develop our manufacturing technologies, while ensuring added values for global sourcing, global IT, and low cost manufacturing concepts, etc.



# In harmony with the Earth, Society and People Innovator in Electronics<sup>®</sup>

The Murata Philosophy, which has guided the activities of our company since its inception, contains such phrases as "contribute to the development of industry and culture," "pursue prosperity for our company, employees, customers, partners, and communities" and "grow and prosper with an appreciative feeling of mutual pride and trust," and these phrases represent the very spirit of our CSR policies today. It was in keeping with the principles of this philosophy that we established our CSR charter, in which Murata Group corporate officers and employees undertake to fulfill their social responsibilities as good corporate citizens, while acting on Murata's management principles with integrity and justice. We have identified CS\*1 and ES\*2 as important ideals, and all the members of the Murata organization, united by a common vision, are working autonomously to realize the goals of our newly established Corporate Grand Design. Murata is also committed to fulfilling its responsibilities as a member of society and the community, whether with respect to environmental efforts such as the reduction of CO<sub>2</sub> and protection of biodiversity, pressing global issues including the problem of mineral resources in strife-torn regions, or the unprecedented devastation brought about by the Eastern Japan earthquake of last year. In our business

activities, we have made the health and safety of our employees our highest management priority, and we are engaged in an organization-wide effort to create a safe and comfortable workplace, and to maintain and promote the physical and emotional health of our workers. As part of this undertaking, we are persevering in our efforts to obtain OHSMS (Occupational Health and Safety Management System ) certification. We at Murata remain committed to being an open presence in our community and society, and a corporation that continues to be worthy of trust and respect, and we want to ensure that our customers know they are in good hands when they do business with Murata. Guided by the CSR Management Committee we have organized to act upon the management principles embodied in our CSR charter, we will continue to serve the needs of society by promoting our fully-integrated, company-wide CSR management policies in a consistent and strategic manner.

President Statutory Representative Director Chairman of the CSR Management Committee Tsuneo Murata

CSR Charter( Outline )

In line with its management philosophy, Murata aims to continue to be a company that is trusted by society, by committing to compliance with laws and regulations, as well as to highly transparent governance, respect for human rights, health and safety, social contribution and environmental preservation, on the basis of high corporate ethics. To these ends, Murata stipulated the CSR Charter, as the norms to be observed by all those working at the Company.

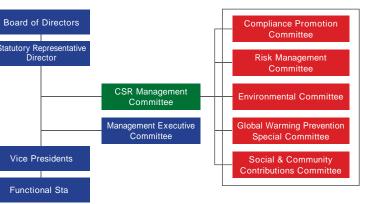
Corporate governance	We will fulfill accountability and enhance management transparency, so as to remain open to our communities and society, and continue to be a reliable and respectable company.	Vi
Human rights and labor	We will respect the human rights and dignity of individuals.	[ Scop
Health and safety	We will improve product and service quality and boost employee morale by securing a safe and comfortable working environment and managing employees' health.	This re concep each p "Investo
Environmental preservation	We aim to realize a society where people can live a healthy life with peace of mind, by reducing negative impact of our corporate activities on society, environment and natural resources.	[ Perio Betwe <sub>Some</sub>
Fair trade and ethics	We aim to maintain the highest standards of ethics, so as to be a company that fulfills its social responsibility and wins social trust.	[ Orgai Murat ( Murat
Management system	We will establish a system that ensures compliance with this CSR Charter, and continuously improve the system.	We

\*1 CS: Making the efforts to have our customers consistently recognize the value we offer

\*2 ES: A workplace environment in which the employees find their work challenging and in which they can continue to grow



[CSR-related committees organizational chart]



pe of reports and information disclosure system ]

eport is written and edited to be concise with care to help readers easily understand Murata's CSR pt and activities. Detailed information, case studies and environmental performance data from plant are also provided on the Murata website. Detailed financial information can be found in tor Relations.

od of the report ] een April 1, 2011 and March 31, 2012 e of the activities taking place before March 2011 or after April 2012 are covered in the report as well

anizations reported ] ata Manufacturing Group

ata Manufacturing Co., Ltd. and 74 subsidiaries in and out of Japan)

For items marked with this icon, further information is available on the Murata website.



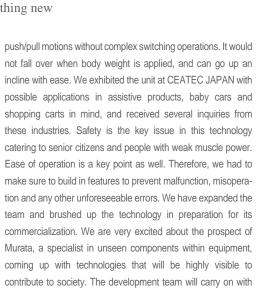
Feature Article: New Businesses and CSR [Electric Walking Assist Car]

Implementing "Fall prevention" for society Derived from MURATA BOY technology



A project initiated by MURATA BOY development team and in-house recruited members to challenge something new

"MURATA BOY" is Murata's original bicycle-riding robot filled with various sensor, control and communications technologies. Side by side with unicycle-riding robot "MURATA GIRL," he has taken the role of a PR robot for Murata technologies. He has been a pride and joy of the development team. However, the development team did not stop at just giving him a PR role. They had a strong urge to implement MURATA BOY technologies to create something useful for society as real products. The idea of Electronic Walking Assist Car project was incubated from such an urge. This development project was initiated by the MURATA BOY development team and engineers recruited in-house. "Fall prevention" technology developed for MURATA BOY and MURATA GIRL project was at its foundation. A gyro sensor in Electronic Walking Assist Car senses the tilting angle of the unit and keeps it standing by moving a wheel in the direction of the tilt. The unit can move forward/backward in reaction to slight



their feeling of excitement as they enter the next step.



Main features of Electric Walking Assist Car are "fall prevention and "power assistance." It is built with a slim body thanks to its inverted pendulum control.

Photo, from left to right Murata Manufacturing Co., Ltd. Technology & Business Development Unit New Business Development Group Masavuki Kubo

Murata Manufacturing Co., Ltd. echnology & Business Development Uni MIRAI Project Sec Yoshitaka Hane

Murata Manufacturing Co., Ltd. Production Engineering Unit Production Engineering Development Group Shigeru Tsuji Murata Manufacturing Co., Ltd. Technology & Business Development Unit

MIRAL Project Sec Kenichi Shirato



Feature Article: New Businesses and CSR [Wireless Power Transmission System ]

High efficiency, easy-to-use and simple construction in the plug-free recharging system

Very first capacitive coupling wireless power transmission system With a potential to become infrastructure for the smart energy society

Wireless power transmission system recharges battery without a power cable, simply by placing a unit on a designated area. Murata's New Product Development Group was researching this technology years ago while people were only dreaming about it. There are roughly two different categories of power transmission systems. One is the electromagnetic induction where current flow in the coil of the recharger generates magnetic flux, causing current flow in the coil of the equipment via magnetic flux to charge its battery. Coils on the transmitting side and the receiving side must be aligned precisely, or otherwise feed efficiency becomes degraded considerably. Further, current flow in coils inevitably generates heat resulting in more energy loss. Another is capacitive coupling, where electrodes are placed on the recharger side and equipment side, and energy is transmitted via the electric field generated as two electrodes are brought close together. Capacitance being generated between



electrodes, this is the principle of a capacitor. With this method, it is possible to make the recharger smaller and thinner giving more freedom of design. Misalignment up to 4cm or so would not decrease the feed efficiency either. Lack of heat generation from this method further reduces energy loss. Murata acquired a patent for this method. In November 2011, Hitachi Maxell, Ltd. released its "AIR VOLTAGE for iPad2" using the module Murata developed. This marks the dawn of wireless recharging system becoming a part of our lives. As this technology advances, recharging equipment plug-free and cable-free will become a common scene. Not only does this technology contribute to saving energy, it will also make our life more convenient. As smart energy society develops in the near future, and EV ( electric vehicles ) are everywhere on streets, wireless recharging will be an essential technology for our daily life. Murata is drawing a big picture surrounding this technology.



Realizes wireless recharging system (where equipme can be recharged just by placing it on a recharging stand without a powe cable)

Photo, from left to right Murata Manufacturing Co., Ltd Technology & Business Development Uni New Business Development Group

Hironori Sakai Satoshi Shinoda Keiichi Ichikawa Kazuya Kato Hironobu Takahash Tsuyoshi Suesada Shinji Goma

### Environment Feature Article [Global Warming Prevention ]

# Acting as a leading factory for global warming prevention until now and will be always

All employees participate in saving energy while aiming at more advanced manufacturing

Having a plant which consumes the largest amount of energy and emits the largest amount of CO2 in the Group, Izumo Murata Manufacturing has been actively working on energy saving and reduction of CO<sub>2</sub> emissions. For example, we have been trying to save energy by applying a catalytic converter for our exhaust gas treatment system. Since our products are made of ceramics, they require high-temperature firing. We use an exhaust gas treatment system to further heat and break down various organic ingredients. The downside to this system was its large energy consumption. Our production engineering departments developed and introduced catalytic technology for the exhaust gas furnace. Introduction of the is converter helped achieve an equivalent or more exhaust gas treatment capacity compared with the conventional system while significantly lowering heat generation, resulting in half the energy consumption.

Annual CO<sub>2</sub> emissions from our plant were cut down by 2,100t-CO<sub>2</sub>. We also exchanged the electric heater with a hot water heater with a high-temperature heat pump in the drying process to realize reduction of 400t-CO2. We further installed a wattmeter for each process to visualize energy usage, so that we can promote energy-saving awareness and practice for all employees.

With visualization of energy consumption, we began finding out that the energy consumption patterns of different facilities consuming different amount of energy in the same process, and standby energy consumption being nearly unchanged from operating energy consumption. We expect to save energy further by analyzing and taking measures against the problems we discovered among our members. This is the very first attempt for the Murata Group to take such measures. We are hoping that this will eventually permeate the entire Group.

no Murata Manufacturing Co., Ltd. bal Warming Prevention Coordinate Production Dept. 2 ment Manage Hiromi Kadowaki

Environment Feature Article [Wastewater Treatment Plant] Industrial wastes pose risks to the environment Their thorough reduction is our social responsibility

Low-degradable wastewater treatment plant realized through aggregated wisdom of various departments

Yasu Division manufacturing processes generate industrial wastewater containing low-degradable substances. The amount of generation is approximately one quarter of the total waste generation in the Murata Group in Japan. Until now, we have consigned their treatments to outside companies. However, we could no longer ignore CO<sub>2</sub> generation from transporting large amounts of wastewater by tank trucks. We must also consider our social responsibility in the case where those tank trucks have accidents. Completely treating the wastewater within the plant without letting loose such risks is at the basis of environmental conservation. Murata has been contemplating many approaches of in-plant treatment in conjunction with company-wide waste reduction act

Pref. holding the large



Although there are several ways of treating wastewater, consuming a large amount of energy for water treatment also affects the environment adversely. The treatment plant constructed at the Yasu Divisior breaks down harmful chemicals by oxidization chemicals, and the remaining organic substances go through biological treatment. We, of course, needed to consider reducing the amount of wastewat generated by various processes, and had to ensure it can be processed with ease. We called upon members from development departments, facility management departments and other departm problem together and came up with solutions. Now, the only thing finally emitted from the plant is water We meet the strictest water quality standards of Shiga

Photo, from left to right Kazuhiro Yoshi

akeshi Omura

vouhei Yamamoto Keishi Imamura Takashi Fuiino

11.91

### [ Promoting Environmental Management ]

### Strengthening the business

through environmental management activities

Murata has integrated ISO14001 standard ( EMS ) domestically as well as globally to conduct environmental activities efficiently and effectively. As a company-wide office, we keep in mind "efficiency" and "coordinating environmental activities and businesses." We have been improving "efficiency" through environmental focus and advancing bookkeeping and system operability, to reduce burden of implementing EMS. With "coordinating environmental activities and businesses," we are supporting activities so that businesses result in meeting environmental goals as opposed to setting EMS activities as department goals. We are promoting development of stronger connections between business improvement activities and EMS activities to strengthen our businesses.



Murata Manufacturing Co., Ltd. Environment Dept. Kayo Nakata

### 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.

### Naturally leading sustainable living

That is the feature we aim at

Electrical double layer capacitors we manufacture at our department are capable of being charged or discharged instantaneously, and they last semi-permanently under normal circumstances. Taking advantage of these characteristics and combined with a small electricity-generating element, we can make battery-free electric equipment. This technology can prolong battery life by absorbing output fluctuation. For equipment that is replaced when its built-in battery expires, longer battery life provides longer product life. As we work on developing these products, we dream about people living a naturally sustainable life just by using equipment with built-in electrical double layer capacitors.

### 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.

Murata Manufacturing Co., Ltd. Chemical Device Group Atsutaka Mori



Building good relationships with suppliers for better green procurements

We request our suppliers to submit a GLIS ( Green Level Investigation Sheet ) so that we can improve our green procurement practice. However, we have not been successful in gaining understanding from all suppliers for the importance of green procurement. To this end, we are working on communicating with all suppliers through in-house seminars, free public seminars and individual training sessions. As a result of overseas production transfers in our Group, chemical procurement is rapidly increasing. We intend to build good relationship with suppliers and fix a firm environmental management system.

### 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.

Murata Electronics (Thailand ) Ltd Purchasing Control Sec

- Left/ Nantanarissara Moonrunasee Right/ Poonyarak
  - Setungkabutr

Horizontal deployment of material container reuse in collaboration with overseas sites

Okayama Murata Manufacturing provides ceramic materials to production sites in and out of Japan. Although we have been promoting reuse of material containers, used containers were disposed at overseas sites especially in China. We have developed containers that can be compactly stacked for transportation, so that they can be reused after use by returning them to us. Collaborating with overseas sites within the Murata Group improved transportation efficiency and placed us one step closer to resource saving and reducing distribution-related CO<sub>2</sub> emissions.

### 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 CO2 emissions by promoting efficient transportation in addition to reducing waste through using less packaging materials.

Production Dept. 1 Shusaku Omae



Promoting understanding for Murata's environmental conservation through the maintenance of community-oriented landscaping

Yokaichi Plant opened its rhododendron orchard to the public in 1991. This orchard hosts an arboretum with a blend of Japanese red pines planted there since before the plant's foundation and rhododendrons, the prefectural flower of Shiga. This facility was made available to the public for viewing more than 20 years ago to nurture exchanges with the local community and to develop understanding of our environmental conservation activities. We also promote communal activities such as potato digging events within the plant lot in collaboration with a local NPO, and providing environment/science lessons at regional elementary schools.

### 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.

Yokaichi Plant Administration Dept



Okayama Murata Manufacturing Co., Ltd.



Murata Manufacturing Co., Ltd.

Left/ Masae Fujikawa Right/ Kotomi Kitagawa

### Forest preservation activities keeping in scope 100 years in future

Tome Murata Manufacturing has been working on preserving biodiversity in the area by considering the impact of business activities over the ecosystem. Tome City, where Tome Murata Manufacturing is located, is blessed with wealth of Nature. Internationally renowned Ramsar marshes designated by the Ramsar Convention, Izu-numa and Uchi-numa are in this city, and many birds migrate to its Hasama River flowing through the city center in the winter. In addition to protecting marshes, lakes and rivers for migrating water birds, we are also working on forest conservation/cultivating activities with 100 years in the future in scope. We plan on instilling awareness of biodiversity in our employees through lectures and company journals and continue to work on actual conservation activities including tree planting.



Tome Murata Manufacturing Co., Ltd. Production Sec. 2 Keiichi Kikawada Tome Murata Manufacturing Co., Ltd. Quality Control Sec.

Tsutomu Yamauchi

### 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



[Employees]

Providing a comfortable working environment where human rights are respected and high safety and health standards are maintained

Wuxi Murata leads other foreign-affiliated companies in the new industrial city by practicing ES, helping its employees improve themselves and developing a new community.

Wuxi Murata Electronics Co., Ltd. is located in Wuxi, on the south bank of the Yangtze River, a city that has been rapidly industrialized in recent years. The Murata subsidiary has a prominent presence in Wuxi New District, an area in the city where many foreign-affiliated companies now operate. The local government and community regard the company highly for its promotion of compliance, respect for human rights, and active contribution to welfare. The many awards it has received so far include "Best Foreign-affiliated Company," "New Company with Business Integrity," "Company Excelling in Labor-management Relationships," and "Best Corporate Volunteer." All these achievements have been made possible by the Murata management philosophy, which focuses on customer and employee satisfaction. At Wuxi Murata, the employees' union, known as "Gonghui," and the management maintain good communication for continual improvement of safety and health within the working environment. An example is an initiative to reduce the burden on operators to help them maintain good health, both physically and psychologically. Another program, focusing on learning and career

improvement, helps employees develop the skills to identify and solve problems on their own. Developing communicative skills of managers, shop floor staff, and group and subgroup leaders is particularly important in ensuring a comfortable working environment. Even outside working hours, the company provides as many occasions as possible for employees to interact casually with one another. Such events include birthday lunches, cultural festivals, and athletic meets. Many of the working population in this fast growing industrial city come from rural provinces throughout the country. Quite a few of these workers suffer from loneliness. The company's commitment to employee satisfaction plays an active part in forming a new community in the city. The pursuit of employee satisfaction not only brightens up the workplace, but also leads to improved product quality, which in turn leads to customer satisfaction. We are keenly aware that different sites in the global Murata Group and customers around the globe have their eyes on Wuxi Murata. With this awareness, we strive to continue making our working environment even better

Photo, from left to right Wuxi Murata Electronics Co., Ltd. Human Resource Management Sec Fu Daixian Wuxi Murata Electronics Co., Ltd.

Corporate Administration Group Zhong Weiyue

Wuxi Murata Electronics Co., Ltd. Human Resource Management Sec. Zhang Ying Wuxi Murata Electronics Co., Ltd. Human Resource Management Sec Zhu Tian

### [Society and the Community]

## Maintaining a global outlook while deepening relationships with local communities

Conveying the wonder of science and manufacturing to Chinese children

Not only are MURATA BOY and MURATA GIRL beloved in Japan, but they also take part in many exhibitions and events in China, which has earned them many fans in this country as well. As part of our effort to carry out activities that provide further benefits to the local community, and in line with our desire to teach young children about the wonder of science and manufacturing, Murata ( China ) Investment Co., Ltd. conducted science classes for Japanese elementary schools in Shanghai and Suzhou in 2010, and visited local Chinese schools in 2011 to carry out science classes for young children. As we continue to pursue our business activities that have taken root in China, we will also persevere in our efforts to demonstrate how fascinating science and manufacturing can be.

1 MURATA BOY and MURATA GIRL display their talents in front of a large group of children



Providing aid to the victims of natural disasters in Thailand

When Thailand experienced torrential rains and flooding last year, employees of Murata Electronics (Thailand), Ltd. were among the victims of this natural disaster. In response to this situation and in keeping with Murata corporate policy, Murata Electronics (Thailand ), Ltd. took action to provide aid to the disaster victims among our employees. We supplied sandbags to prevent flooding of homes, provided daily necessities such as food and water in addition to financial assistance, and did our part to support our employees in their time of need. In addition, Murata Manufacturing Co., Ltd. also donated funds to the disaster relief effort through the Thai Red Cross Society.

2 Providing food and water to local employees in disaster-stricken areas

### Social contribution through recycling efforts

Okayama Murata Manufacturing Co., Ltd. has been collecting aluminum cans since 2003, using the proceeds from their sale to donate wheelchairs, books and other supplies to local social welfare organizations and elementary schools. Since 2008, we have also collected used ink cartridges, donating them to local preschools which use them to earn funds to purchase playground equipment. When we visit elementary schools and preschools to make these donations, we make an effort to promote interest in environmental conservation by introducing the environmental efforts carried out at Murata. We will continue to engage in activities that benefit our society and local community, and will strive to be a company that our employees can be proud to work for.



3 Gathering aluminum cans 4 Murata employees donating ink cartridges to preschool children

## [CSR Activities: Targets and Results]

Murata commits itself to continual improvement in priority theme areas through the implementation of a broad range of measures.

5tl	h Environmental	Action Pla	n: Results for Fiscal 2011		arly achieve t achieved
	ltem	Region(s)	Targets for FY2011	Results for FY2011	Achievemen
		Global	Continually extend the range of environmentally friendly products and develop eco-friendly technology ( production processes ).	Made steady progress in design and development for downsizing, energy saving, and reducing environmentally hazardous substances. Developed more than 50 products that meet eco-product standards.	
	[1]Product environmental	Global	Continue to reduce and replace environmentally hazardous chemical substances contained in products.	Reduced and replaced environmentally hazardous chemical substances contained in products as planned.	
friendliness		Global	Increase sales of environmentally friendly products to help shape society with a low environmental impact	<ul> <li>Implemented activities designed to promote the use of, obtain approval for, and increase sales of eco-friendly products. Many customers granted approvals and began to replace existing products.</li> <li>Provided further total solutions for LED lighting systems. Began to verify the e ects and functionality of the task and ambient lighting system.</li> </ul>	
		Global	Recognize CO <sub>2</sub> emissions and quantitative basic units by product.	<ul> <li>Built a system for recognizing CO<sub>2</sub> emissions and quantitative basic units by product for domestic production sites and started operation of this system.</li> <li>The production sites in Singapore, Thailand, and Shenzhen started recognizing CO<sub>2</sub> emissions and quantitative basic units by product.</li> </ul>	
(*	(1)Production sites	Domestic plants	Implement and monitor measures to reduce CO <sub>2</sub> emissions from production.	•Developed plans to implement measures to reduce CO <sub>2</sub> emissions from production and implemented these measures according to those plans.	
1		Overseas plants	Recognize CO <sub>2</sub> emissions from production.	•Started recognizing CO <sub>2</sub> emissions from production. •The production sites in Singapore, Thailand, and Shenzhen developed plans to implement measures to reduce CO <sub>2</sub> emissions from production.	
Tackling global warming	(2)Logistics	Domestic plants	Reduce CO <sub>2</sub> emissions from logistics per unit of net production by 15% from FY2007.	Reduced 31% from FY2007. A careful review of the operation plans in response to fluctuations in quantities made for substantial reductions in CO <sub>2</sub> emissions.	
		Overseas plants	Recognize CO <sub>2</sub> emissions from logistics.	Started recognizing CO <sub>2</sub> emissions from shipments from overseas plants to customers.	
	(3)Green purchasing	Domestic plants	Maintain a green procurement ratio of 100%.	Maintained a green procurement ratio of 100%.	
[3]Chemicals		Domestic plants	Reduce the use of environmentally hazardous chemical substances per unit of net production by 1% from FY2007.	1% increase compared with FY2007 Failed to reach the target despite achieving a 4% reduction from the previous year.	
		Overseas plants	Recognize the usage of environmentally hazardous chemical substances.	Overseas plants started recognizing use. The Wuxi and Shenzhen sites started initiatives for reducing the use of these substances.	
]	(1)Waste	Global	Reduce waste emissions per unit of net production by 1% from FY2007.	Reduced 3% compared with FY2007. The introduction of a facility for treating alkaline waste at the Yasu Division made it possible to achieve the target.	
	reduction	Overseas plants	Continue efforts to achieve zero emissions.	Maintained zero emissions at the Wuxi, Shenzhen, Taiwan, and Thai sites.	
	( 2 )Containers and packaging	Global	Increase the ratio of eco-containers made of internally produced materials to more than 10%.	Achieved the target of more than 10%. Introduced approximately 65,000 new containers, accounting for more than 30% of containers used in logistics (approximately 200,000)	
	( 3 )Production processes	Global	Reduce raw material loss ratios.	Introduced measures for improvement (e.g. for higher yields) in individual processes.	
[5]Biodiversity		Global	Provide employees with biodiversity education.	Included biodiversity in the general environmental education program starting FY2011. Provided biodiversity education for all employees as planned.	
		Global	Provide environmental education in biodiversity for elementary and junior high school children.	Developed a new environmental education program using the "Murata Forest," an initiative for the conservation of domestic woodlands ( <i>satoyama</i> ) and implemented trials. This initiative will be developed further in FY2012 and after.	
_	5 ]Environmental/ ocial contribution activities	Global	Continue environmental/social contribution activities.	Continually implemented projects such as environmental education for elementary and junior high school children, an initiative for the conservation of domestic woodlands ( <i>satoyama</i> ) named " Murata Forest, " and the greening of plants to ensure that business is deeply rooted in the communities and societies where Murata operates.	

Social Activity: Targets and Results for Fiscal 2011 and Targets for Fiscal 2012

	ty: Targets and Results for Fiscal 2011	-		×: Not achieved
Item	Targets for FY2011	Results for FY2011	Achievement	Targets for FY2012
Promoting development of the internal	In addition to developing internal controls to ensure the appropriateness of operations, continually promote operational standardization, visualization, improvement and reforms.	In addition to developing internal controls aimed at ensuring the appropriateness of operations, Murata continually promoted operational standardization, visualization, improvement and reforms. The company has also been expanding the scope of the internal control system since the previous fiscal year. To ensure compliance as well as operational e ectiveness and e ciency, the company now improves and evaluates the internal control system at almost all consolidated sites.		In addition to developing internal control ensure the appropriateness of operati continually promote operational standardiza visualization, improvement and reforms.
control system	Improve monitoring functions to ensure operational appropriateness to increase the transparency and effectiveness of the corporate governance system.	The number of group companies both in and outside Japan that are covered by monitoring was increased step-by-step to achieve nearly 100% coverage. Taking a risk approach, the separate internal audit department evaluates and monitors priority items to increase transparency and e ectiveness.		Further improve monitoring functions to ensure operal appropriateness to achieve greater increases in the transpa and e ectiveness of the corporate governance system.
Promoting compliance	Reestablish the compliance system from a cross-group perspective to further streamline the operation of the system. (Continue to conduct surveys of compliance and test the understanding of the Code of Conduct. (Periodically communicate information on compliance promotion activities. (First) establish Compliance Month in the corporate calendar.	<ul> <li>① Conducted a survey of compliance and tested the understanding of the Code of Conduct.</li> <li>② Published 4 reports on compliance promotion activities. Starting in November, the company provided information on daily compliance issues on a monthly basis in the form of news reports, Q &amp; A, and quizzes.</li> <li>③ Murata Manufacturing and domestic a liates held study meetings and other activities during Compliance Month (October)</li> </ul>		Reestablish the compliance system from cross-group perspective to further stream the operation of the system. ① Continue to conduct surveys of compliance and the understanding of the Code of Conduct. ② Pediotically communicate information on compliance promotion as Publish 12 issues of an email magazine featuring compliance hrow Publish 12 issues of an email magazine featuring compliance promotion Publish 12 issues of an email magazine featuring compliance promotion Stirmly establish Compliance Month in the corporate caler
Strengthening	Study company-wide business risks for which response requires enhancement and continually follow up on the response to risks made by responsible departments to strengthen risk management activity.	Checked progress in implementing measures against significant risk items and made continual improvements.		Upgrade measures related to priority company- business risks and continually improve measures through risk management activity.
risk management	Learn lessons from the Eastern Japan earthquake in reevaluating the effectiveness of measures against disasters such as emergency response and quake-resistant solutions for buildings and production equipment in order to enhance overall crisis management.	Ensured communication means, including means to confirm the safety of employees, during disasters. Reevaluated quake-resistant solutions for buildings and production equipment and introduced necessary additional measures.		Strengthen advance measures aimed at ensu business continuity in emergency and continu enhance crisis readiness.
Society and community	<ul> <li>Provide support for the development of future human resources as innovators through science education programs for elementary and junior high school children.</li> <li>Aggressively conduct regional contribution activities to ensure that business is deeply rooted in the communities and societies where Murata operates.</li> </ul>	<ul> <li>Plants worked with local elementary and junior high school to plan and hold educational programs for children such as electronic craft workshops and environmental education.</li> <li>Conducted open plant events, community clean-up activities, and forest conservation activities. Many employees took part as volunteers.</li> </ul>		Continually conduct social and regit contribution activities to ensure business is deeply rooted in communities and societies where Mu operates.
	Conduct a test of compliance and CSR procurement understanding for all purchasing representatives in and outside Japan.	Conducted a test of compliance and CSR procurement understanding for all purchasing representatives in Japan. Made progress in conducting a test of CSR procurement understanding for all purchasing representatives outside Japan.		Conduct a test of compliance and C procurement understanding for all purchas representatives in and outside Japan.
Suppliers	Conduct in-house training and operational diagnosis for purchasing sites to strengthen compliance.	Conducted training a total of 5 times for relevant departments to strengthen compliance (attended by approximately 150 employees)     Conducted legal and contracting training for buyers (attended by approximately 30 buyers)     Completed purchasing operational diagnosis of purchasing sites.		Conduct in-house training and operatii diagnosis for purchasing sites in and out Japan to strengthen compliance.
	All overseas materials sites will start concluding CSR agreements with their suppliers.	All overseas materials sites started to conclude CSR agreements with their suppliers.		All overseas materials sites will start conclu CSR agreements with their suppliers.
				Keep employees at Murata Manufacturing an domestic a liates informed about the need compliance in transactions with suppliers.
	•Continue to implement the system to enable employees to select career paths according to their aptitude. Expand the in-house open recruitment system. Evaluate employees who entered Murata as new graduates and have entered their second year at the company to examine the appropriateness of their appointment, and follow up on these employees. Introduce a self-declaration system and a career development program for employees who joined Murata as new graduates and have entered their 4th year at the company. Increase the number of foreign employees on loan to 20 in FY2011.	<ul> <li>Evaluated all employees who entered Murata as new graduates and entered their second year at the company to examine the appropriateness of their appointment. Employees who expressed interest were interviewed about their future career development.</li> <li>Approximately 100 employees that had not been transferred for three years after joining Murata as new graduates were interviewed individually to ask about their future career development.</li> <li>employees accepted on loan from overseas.</li> </ul>		<ul> <li>Continue to implement the system to enable emplot to select career paths according to aptitude.</li> <li>Introduce a self-declaration system and a c development program for young employees.</li> <li>Increase the number of foreign employees on loan t in FY2012.</li> <li>Introduce and expand a program that helps s employees play an active part at work.</li> <li>Introduce the Senior Expert "system.</li> <li>Hold 10 career management-training sessions during FY2</li> </ul>
	Promote education and awareness-raising programs to prevent harassment. Continue to promote education for all managers who have not undergone training on moral/sexual harassment. Held 5 training sessions during FY2011.	A total of 23 sessions for directors and a total of 4 sessions for general and female employees were held at the Head O ce, Tokyo Branch and plants.		Promote education and awareness-rai programs to prevent harassment. (Continue to promote 5 training sessions for all mar who have not undergone training on moral/sexual haras and 2 sessions for general employees during FY2012.)
Employees	<ol> <li>Introduce and firmly establish a benefit package with a focus on diversity and independence.</li> <li>Promote and support diverse ways of working according to the nature of jobs and customers.</li> <li>Enhance and establish a system to help employees strike a balance between work and family life ( work-life balance ).</li> </ol>	<ol> <li>Introduced a new selective benefit package with three pillars of support (for independence, health promotion, and lifework balance)</li> <li>1.Expanded the scope of the Murata Increasing Productivity (MIP) System, the discretionary work plan for planners and technical specialists.</li> <li>369 employees participate in this system as of March 2012.</li> <li>2.Introduced two individually selected holidays per year. Employees can take these holidays in consideration of their workload.</li> <li>3.Developed and implemented a general employer action plan under the Act for Measures to Support the Development of the Next Generation.</li> <li>2.Held a job experience and company tour event for the children of employees. (The November 3, 2011 event was attended by 14 children.)</li> <li>3.Introduced an hour-based paid leave system.</li> </ol>		<ul> <li>Firmly establish a benefit package w a focus on diversity and independence</li> <li>Enhance and establish a system to h employees strike a balance betww work and family life ( work-life balance)</li> </ul>
	<ol> <li>Promote manufacturing education including the development of personnel capable of working on a global basis.</li> <li>Provide continuous training to improve management skills and practice PDCA.</li> </ol>	<ol> <li>Implemented a plant training program for new employees.</li> <li>Individuals participated in the 6-month program.</li> <li>Held a cross-organizational exchange for production departments. Attended by 11 employees from Murata and 8 employees from other companies.</li> <li>Provided an English education program in Japan.</li> <li>8 x 3.5-hour sessions for 231 employees.</li> <li>Implemented a group training program for improving management skills and a follow-up program. Group training for 205 employees, followed up on 66 participants.</li> <li>2.3.Ren 54-base PDCA cycle to help participants firmly acquire follow-up kills.</li> <li>3.3.Implemented a leadership training program in response to the current situation for 159 employees.</li> </ol>		<ul> <li>Promotion of management philoso and shared measures</li> <li>Provide education for globalization ( English training session for each half-y term)</li> <li>Train the next generation of leaders.</li> </ul>
	Implement procedures for achieving external certification for the occupational health and safety management system at 10 plants in Japan. Strengthen readiness to confirm the safety of employees and their family members in a timely fashion in the event of an emergency.	<ul> <li>9 plants in Japan achieved external certification.</li> <li>Introduced and started operation of a system for confirming the safety of all Murata employees.</li> </ul>		Implement procedures for achieving exte certification for the occupational health and sa management system at 12 plants in Japan.



: Achieved : Nearly achieved ×: Not achieved

### Opinions from the Third Party

## Thinking back on Murata s CSR

Information about the Murata Group's CSR management is available in two ways: in a printed publication titled "Murata Report 2012" and on the Murata Group website. This printed booklet only contains the most important information, while the website presents more detailed data. To provide basic information for a better understanding of the Murata Group's CSR management, the printed report consists of two sections: corporate and CSR reports. Filled with attractive photos, both sections are designed to directly convey employees' messages, which will hopefully help the reader feel closer to them.

Despite showing key information, I believe that, as an annual report, the booklet still needs a means of clarifying the connection between policies and organizations on one hand, and achievements and results on the other. In other words, it should introduce some KPIs (key performing indicators) to indicate developments in CSR management year after year. It is no easy task to establish KPIs for social activities, but the important thing is to continue to run a PDCA management cycle in pursuit of this. At the same time, I would suggest that individual projects and initiatives be presented in greater detail. The feature article, "New Businesses and CSR," presents new products relevant to our aging society and next-generation energies-an embodiment of Murata Philosophy and an example of CSR integrated into core business operations. Indeed, it is an important mission of any corporation to develop businesses that meet the needs of society and contribute to social development. The Medium-term Management Plan, which is positioned between Murata Philosophy and practices, could be given a greater focus to improve the Murata CSR report even further. Here, it could provide a clearer picture of the transparent decision-making process.

As a global company, the Murata Group roots its CSR principles throughout the entire organization. This report includes articles about Murata operations in China and Thailand, showing that the company applies its stringent domestic CSR standards to overseas sites as well. The data section in the website shows that Murata is now starting work to recognize CO<sub>2</sub> emissions from overseas logistics operations. This makes it clear that the company is steadily building global CSR management. I would recommend that a global company like Murata develop common indicators for grasping and controlling progress in CSR management on a group-wide basis.



Graduate School of Business Administration, Kobe University Professor Katsuhiko Kokubu

### Profile

### List of domestic and overseas sites

### [ List of domestic sites ]

Murata Manuf	acturing/ Head O ce•Branch•Plant and Division•Sales O ce
Head O ce	Murata Manufacturing Co., Ltd.
Branch	Tokyo Branch
Plant and	Yokohama Technical Center / Yasu Division /
Division	Yokaichi Plant / Nagaoka Plant
Sales O ce	Sendai / Mito / Saitama / Tokyo / Tachikawa / Hamamatsu /
	Nagoya / Azumino / Kyoto / Kobe / Okayama / Fukuoka

### [ List of overseas sites ]

North & Sou	th America
U.S.A.	Murata Electronics North America, Inc.
	SyChip, L.L.C.
	Murata Power Solutions, Inc.
	VTI Technologies, Inc( as of June 30, 2012 )
Canada	Murata Power Solutions( Toronto )ULC
	Murata Power Solutions( Canada )ULC
Mexico	Murata Electronics Trading Mexico, S.A. de C.V.
Brazil	Murata World Comercial Ltda.
	U.S.A. Canada Mexico

Eur	оре	

Netherland	Murata Electronics Europe B.V.
	Murata Electronics( Netherlands )B.V.
Germany	Murata Elektronik GmbH
U.K.	Murata Electronics( UK )Limited
	Murata Power Solutions( Milton Keynes )Limited
	Murata Power Solutions( Celab )Limited
	Celab Power Management Limited
	NCL Holdings Limited
France	Murata Electronique SAS
Italy	Murata Elettronica S.p.A.
Finland	Murata Electronics Oy
	Murata Consumer Electronics Oy

Other sales o ces also operate in Spain, Sweden, Hungary, and Switzerland

### Domestic subsidiaries

Fukui Murata Manufacturing Co., Ltd. Izumo Murata Manufacturing Co., Ltd. Toyama Murata Manufacturing Co., Ltd. Komatsu Murata Manufacturing Co., Ltd. Kanazawa Murata Manufacturing Co., Ltd. Okayama Murata Manufacturing Co., Ltd. Kanazu Murata Manufacturing Co., Ltd. Sabae Murata Manufacturing Co., Ltd. Iwami Murata Manufacturing Co., Ltd. Hakui Murata Manufacturing Co., Ltd. Himi Murata Manufacturing Co., Ltd. Azumi Murata Manufacturing Co., Ltd.

Komoro Murata Manufacturing Co., Ltd. Wakura Murata Manufacturing Co., Ltd. Tome Murata Manufacturing Co., Ltd. Odaki Murata Manufacturing Co., Ltd. Asuwa Electronics Industries. Ltd. Anamizu Electronics Industries, Ltd. Murata Land & Building Co., Ltd. Murata Eiko Co., Ltd. Murata Active Partner Co., Ltd. Murata Electronics Co., Ltd. Murata Software Co., Ltd. Murata BUNSEKI Partner Co., Ltd.

### Asia

China	Murata( China )Investment Co., Ltd.
	Wuxi Murata Electronics Co., Ltd.
	Shenzhen Murata Technology Co., Ltd.
	Murata Electronics Trading( Tianjin )Co., Ltd.
	Murata Electronics Trading( Shanghai )Co., Ltd.
	Murata Electronics Trading( Shenzhen )Co., Ltd.
	SyChip Electronic Technology( Shanghai )Ltd.
	Murata Power Solutions( Shanghai )Co., Ltd.
	Guangzhou Murata Power Solutions Limited
	Beijing VTI Sensor Co., Ltd( as of June 30, 2012 ) $$
Hong Kong	Murata Company Limited
Taiwan	Taiwan Murata Electronics Co., Ltd.
Korea	Korea Murata Electronics Company, Limited
Singapore	Murata Electronics Singapore( Pte. )Ltd.
Thailand	Murata Electronics( Thailand ), Ltd.
	Thai Murata Electronics Trading, Ltd.
Malaysia	Murata Electronics( Malaysia )Sdn. Bhd.
Philippines	Murata Electronics Philippines Inc.
	Philippine Manufacturing Co. of Murata, Inc.
India	Murata Electronics India Private Limited
Vietnam	Murata Electronics( Vietnam )Co., Ltd.

### muRata Murata Manufacturing Co., Ltd.

### Members of directors

Statutory Representative Directors President Tsuneo Murata

Executive Deputy President Yoshitaka Fujita

### Board of Directors

Tsuneo Murata
Yoshitaka Fujita
Hideharu leki
Koji Makino
Yasuro Tanahashi ( Outside Director )
Hiroaki Yoshihara (Outside Director)

### Statutory Auditors

Standing Statutory	Standing Statutory Auditors		
	Motohiko Nakayama		
	Yukio Yoshino		
Statutory Auditors	Masakazu Toyoda ( Outside Auditor )		
	Shizuo Nakanishi ( Outside Auditor )		
	Kazuto Nishikawa ( Outside Auditor )		

### Vice Presidents

Executive Vice Presidents		
	Hideharu leki	
	Koji Makino	
	Yukio Hamaji	
Vice Presidents	Masao Nishimura	
	Yuichi Kojima	
	Toru Inoue	
	Shinichi Madokoro	
	Takekazu Okada	
	Norio Nakajima	
	Satoshi Sonoda	
	Hiroshi Iwatsubo	
	Toshihiro Maegawa	
	Yoshito Takemura	
	Takehiro Konoike	
	Hideki Maruyama	
	Yutaka Tada	
	Masahiro Ishitani	
	Kenichi Mizuno	
	Satoshi Ishino	
Fellow	Norio Sakai	

### Stock information

### As of March 31, 2012

- 14,186 (6.3%)

Number of shares outstanding at the end of current term 225,263 thousands of shares

Number of shareholders at the end of current term 80,035

Number of Shares Outstanding (thousands of shares)

Financial Institutions Foreign Companies Domestic Companies Own Shares Individual Investors & Others

March 31, 2012		
89,034 (39.5%)	79,079 (35.1%)	
March 31, 2011		9,764 (4.3%)
91,319 ( 40.5% )	81,883 (36.4%)	

March 31, 2010		9,548 (4.2%)	(4.7%)
89,715 (39.8%)	84,726 (37.6%)		31,246 (13.9%)
March 31, 2009		8,942 ( 4.0% )	10,633 ( 4.7% )
88,469 ( 39.3% )	85,251 (37.8%)		31,862 (14.2%)
		9,051 (4.0%)	— 10,630 (4.7%)

Ctook	Exchange	Linting
SLUCK	Exchange	LISUIIQ

[Domestic]	Tokyo Stock Exchange First Section Osaka Stock Exchange First Section
[Overseas]	Singapore Exchange

Major shareholders	As of	March 31, 2012
Name	Number of shares ( Unit: one thousand )	Ownership(%)
Japan Trustee Services Bank, Ltd. ( trust account )	12,564	6.0
JP Morgan Chase Bank 380055	9,905	4.7
The Master Trust Bank of Japan, Ltd. ( trust account )	9,348	4.4
Nippon Life Insurance Company	9,201	4.4
State Street Bank and Trust Company	5,761	2.7
The Bank of Kyoto, Ltd.	5,260	2.5
Meiji Yasuda Life Insurance Company	5,240	2.5
SSBT OD05 Omnibus Account - Treaty Clients	4,401	2.1
The Shiga Bank, Ltd.	3,551	1.7
Mizuho Corporate Bank, Ltd.	3,000	1.4

( Note ) The company holds 14,186 thousand shares of its own stock. As these shares do not confer voting rights, they are excluded from the above table.

SWITCHPLEXER, EMIFIL, POSISTOR and Ionissimo are the trademarks or registered trademarks of Murata Manufacturing Co., Ltd. Innovator in Electronics is a trademark or registered trademark of Murata Electronics North America, Inc. ( USA ) Bluetooth is a trademark or registered trademark of Bluetooth SIG, Inc. ( USA )