


DOWA

DOWA HOLDINGS CO.,LTD.
<http://www.dowa.co.jp>



* This report uses forest-certified paper and eco-friendly soy ink 



Towards the Realization of a Resource-Recycling Society —————

CSR REPORT 2014

DOWA

DOWA's CSR

The DOWA group conducts business based on the corporate philosophy of: “Through our deploying business on our earth, we seek to contribute to a high standard of living and the emergence of a resource-recycling society.”

〈Editorial Line〉

DOWA CSR Report 2014 reports the CSR philosophy and the major business activities of the DOWA group of the year in an easy-to-understand way to all stakeholders.

(1) Areas covered in this report

■ Target organizations

DOWA Holdings and subsidiaries (both in Japan and other countries) that are included in our consolidated accounting are selected in these reports. Data on some of our efforts are only associated to DOWA Holdings and other major companies of the group.

Our overseas subsidiaries of Kunshan Dowa Thermo Furnace Co., Ltd, JIANGXI DOWA ENVIRONMENTAL MANAGEMENT CO., LTD., DOWA ECO-SYSTEM SINGAPORE PTE. LTD was added to the data collected for this report in 2014.

■ Target areas to report

The report consists of four areas of DOWA's CSR policies: Governance, Safety, Environment, and Society. It covers each of these policies, current implementation status of its major issues and the activities by the above-mentioned organizations.

■ Target audience

This report is intended for our customers, stockholders, investors, clients, local communities, researchers, students, employees, rating & evaluation agencies, governmental agencies, NGO's, NPO's and all stakeholders of the DOWA group's business activities.

■ Target period

The report mainly covers activities conducted from April 1, 2013 until March 31, 2014 (Fiscal year (hereinafter referred to as “FY”) of 2013), partially including the past background and previous activities to provide more accurate information.

■ Reference guidelines

The UN Global Compact (UN GC)

ISO 26000

Environmental Reporting Guidelines 2012 by Ministry of the Environment (Government of Japan)

(2) Publishing of a web version

This report highlights and reports CSR activities of the DOWA group, focusing on some important points, to provide an overview of those activities in an

DOWA group is committed to conducting business based on the CSR activities, considering the future of our earth and society to contribute to resolving social problems through business activities. We are also promoting a variety of CSR activities to increase transparency of our business and gain trust from our stakeholders.

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easy-to-understand way. For more details, visit our website (to be posted in2014). Check our website for detailed information about the topics with  mark. If errors are found after publication of the CSR report, they will be reported on our website with errata notes.

(3) Basic information

■ Publication Date June 2014

■ Due Publication Date of the Next Report June 2015

■ Responsible Department CSR Department, DOWA Holdings, Co., Ltd.

■ URL

<http://www.dowa.co.jp> (in Japanese)

http://www.dowa.co.jp/index_e.html (in English)

■ Contact

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E-mail address: info_dowa@dowa.co.jp

A full-page photograph of Masao Yamada, President and representative director of DOWA HOLDINGS, Co., Ltd. He is a middle-aged man with dark hair and glasses, wearing a dark suit, light blue shirt, and a patterned tie. He is standing in an office environment with blurred desks and other people in the background. A semi-transparent dark blue box is overlaid on the right side of the image, containing white text.

This year marks the one hundred and thirtieth year since our establishment in 1884. We have evolved into a unique resource-recycling company consisting of five core business areas, responding agilely to wildly fluctuating global market. We continue to be committed to resolving social problems through our business activities in this rapidly changing global market.

President and representative director,
DOWA HOLDINGS, Co., Ltd.
Masao Yamada

山田 政雄

Message from the Management

Contributing to Resolving Problems of Global Society through Business Activities

Responding to Changes in order to Continue Growth

While there is some indication of economic recovery in US and Europe, the growth rate of economy in emerging nations such as China and India are slowing down, although it continues to grow. Japanese economy shows a recovery trend as a result of correction of the extreme yen appreciation and government economic policies. As for business environment around the DOWA group, the demand for products for automobiles, smart phones and renewable energy is increasing, while the metal price is weakening in general and the general weakness of the yen is continuing. We have steadily implemented various measures for improving productivity and increasing the number of orders along the Mid-term Plan V. As a result our revenue and profit increased in 2013 and continued to expand business. Responding to rapidly changing external environment, we endeavor to continue our business in a steady but agile manner.

Our group celebrates the one hundred and thirtieth anniversary of incorporation. Our mining, refining and smelting business in Akita has evolved into a unique resource-recycling company consisting of five core business areas, through diversification, selection and concentration since the 1980s, responding to rapidly changing business environment. We will continue our efforts, capitalizing on our long cherished experience.

Confirming that Safety is the Top Priority

DOWA's CSR policies focus on four major areas: Governance, Safety, Environment and Society. All employees voluntarily take part in safety activities to promote risk management and corporate-wide safety education to improve the level of health and safety in the workplace, based on our basic philosophy of, "Safety is the top priority." In 2012 we started a project across the group to promote safety (see P.28), which is a joint initiative across businesses in each

region. This project was aimed at strengthening promotion of excellent safety initiatives horizontally across the group to improve the safety level of the entire DOWA group. This initiative also started in 2013 in DOWA's companies outside of Japan.

There are no shortcuts to safety. Each employee, including the management, will confirm that safety is the top priority again to continue this initiative in which all employees participate.

Enhancement of CSR across the Supply Chain

Demand increases for promoting CSR activities across the supply chain as the DOWA group deploys business on a global basis. We revised our CSR procurement policy, based on universal rules of the UN Global Compact guidelines, considering human rights, work safety and conservation of environment. Promoting responsible procurement of minerals is a very important issue for us as we are engaged in handling of metal products. We announced our policy on conflict-free minerals in 2012 and we have built a management system to examine usage status and sources of raw materials of DOWA. We are also committed to obtaining certification by third parties for conflict-free minerals.

These initiatives are all based on close cooperation with our clients. We will make every effort to enhance risk management, monitoring and education across the group and promote CSR activities across the supply chain so that our customers can safely use our products without anxiety.

This report conveys our initiatives for CSR to all stakeholders as well as to make each and every employee to be aware and thoughtful of CSR. We would be very grateful if you could send your opinions and comments on this report. It will be very helpful for us to resolve social issues through our business activities.

About DOWA group

Our resource-recycling business consists of five core business areas deployed globally.

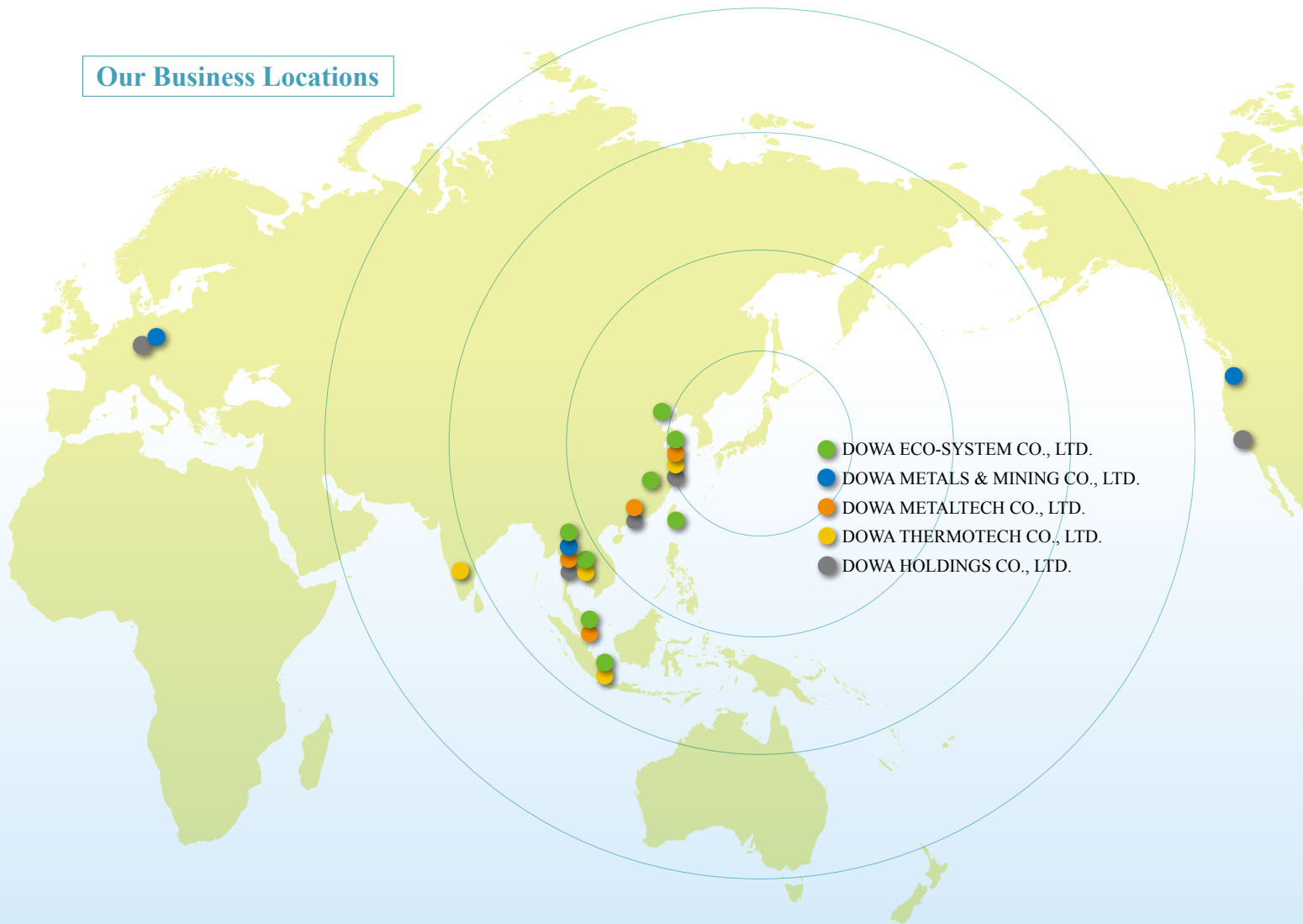
The DOWA Group is engaged in our Nonferrous Metals business where we extract useful metals from natural resources. In our Metal Processing and Heat Treatment business we add value to the extracted metals. In our Electronic Materials business we further improve the functions of metal materials and, in our Environmental Management & Recycling business we detoxify waste, separate and collect metals from waste.

We are committed to resolving social problems such as global issues of the environment and resources through our unique resource-recycling business—from production of non-ferrous metals, highly value-added products and to their recycling.

Corporate Profile

| | |
|-----------------------------------------|---------------------------------------------------------------------------------------|
| • Name | DOWA Holdings, Co., Ltd. |
| • Incorporated | March 11, 1937 |
| • Head Office | 22nd Floor, Akihabara UDX Bldg, 4-14-1 Sotokanda, Chiyoda-ku, Tokyo 101-0021 JAPAN |
| • President and Representative Director | Masao Yamada |
| • Common Stock | 36,437 million yen |
| • Employees | Approximately 5,700 persons |

Our Business Locations

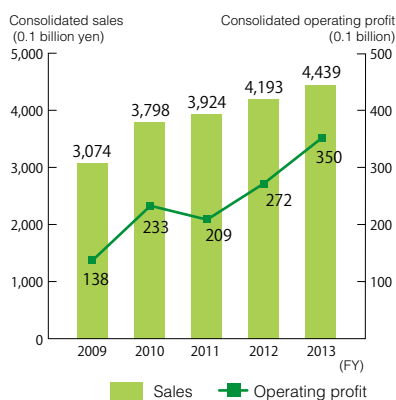


2013 Business Results

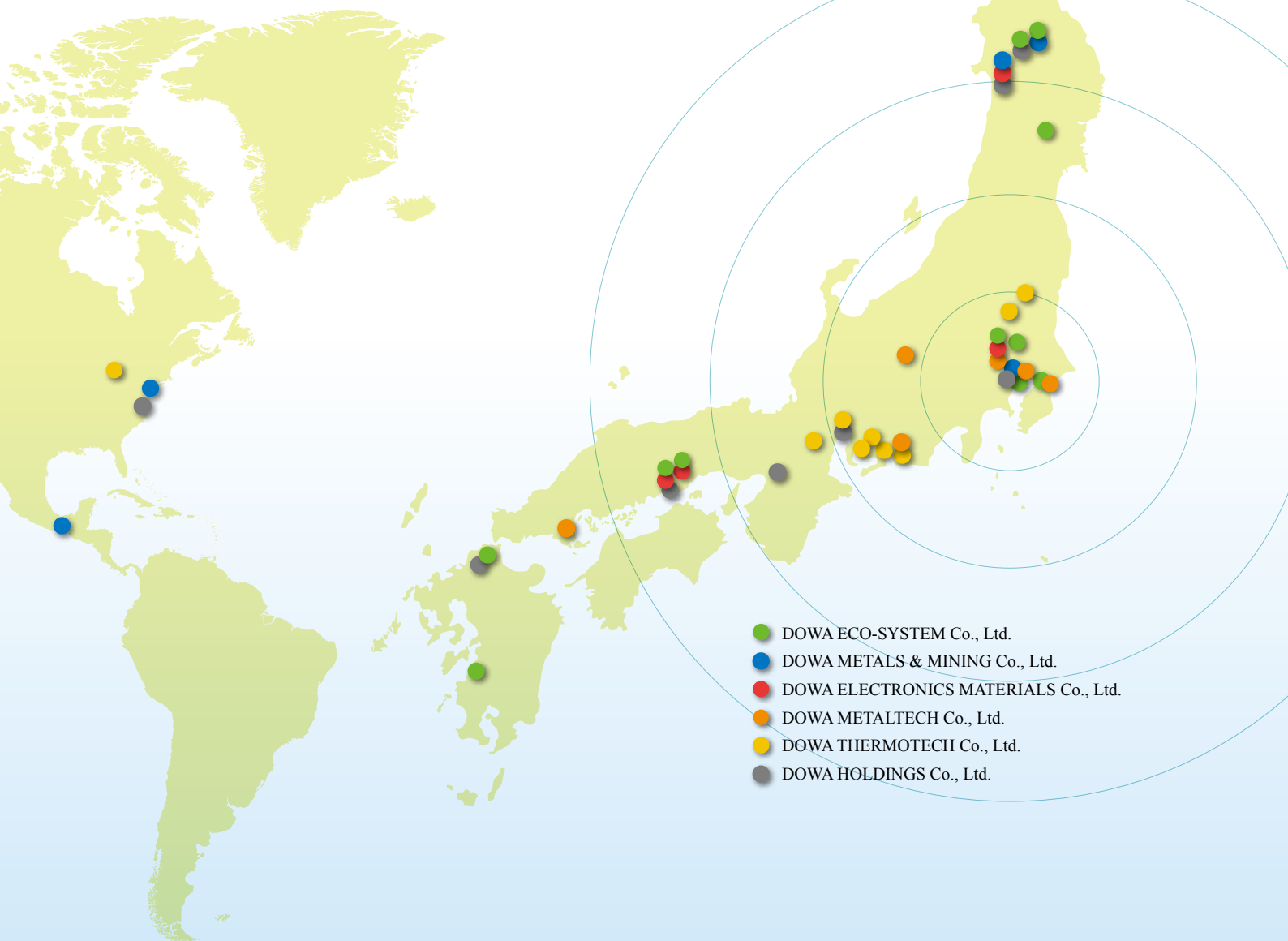
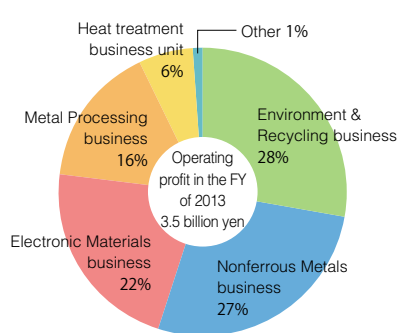
In 2013, we implemented a variety of measures for improving productivity and increasing orders including sales expansion of new products and investment in equipment and facilities, as demand for automobiles, multi-functional mobile devices and renewable energy sources has increased. Outside Japan, we enhanced our competitiveness in expanding overseas markets

by expanding waste disposal business in South East Asia and the starting up of a heat treatment business unit in Indonesia. Yen devaluation favorably contributed to our non-ferrous metals business, resulting in consolidated net sales of ¥443,985 million, 6% increase, consolidated net operating profit of ¥31,794 million, 29% increase and consolidated current income of ¥35,055 million, 29% increase from the previous year.

Change of Sales and Operating Profit



Operating Profit per Business Unit





Soil remediation work



Waste treatment plant



Dowa Environmental Management Co., Ltd in Suzhou, China



Mobile phones as recycling materials



Home appliance recycling plant



Silver



Final disposal site

DOWA ECO-SYSTEM

Environment and recycling business

DOWA ECO-SYSTEM has been engaged in environmental and recycling business since the 1970s, providing a complete service from delivery to final disposal in the fields of waste treatment, soil remediation and recycling. We started business related to environment outside of Japan earlier than any other Japanese companies focusing on Asia. This contributed to environmental improvement in Asia and making DOWA a leader among Japanese companies engaged in environment and recycling with our cutting edge technologies.

Business Fields

| | | |
|-------------------------|---------------------------|--------------------|
| Waste disposal business | Soil remediation business | Recycling business |
|-------------------------|---------------------------|--------------------|

Main Products and Services

Waste treatment and disposal, managed final waste treatment, soil remediation, recycling of metals, home appliances and automobiles, environment-related consulting and cargo transportation, etc.

Ten Years of Reliability and Achievements as the First Japanese Recycling Plant

We have recovered a cumulative amount of approximately 3,800 kg of gold through our recycling business.

We are committed to achieving both resource-recycling and conservation of environment in China as an advanced business model with cutting-edge recycling and environment-related technologies.

Dowa Environmental Management Co., Ltd.

Address: No.28 Sanlian Street, Suzhou New District,
Jiangsu 215129 CHINA

Employees: 76 (As of March 31, 2014)



Contributing to Resolving Social Issues in China by Serving as an Environmental Business Model Company

China faces lack of resources as a result of rapid economic growth, while increasing wastes and environmental pollution are becoming major social issues. We have been committed to actively reducing environmental burdens by introducing treatment facilities compliant with exhaust gases and effluent regulations including dioxin. These are aimed at achieving both effective use of resources and the conservation of environment.

In 2010 we started up the first recycling model plant in China that has three functions: home appliance recycling, hydro-metallurgical processing and pyro-metallurgical processing. This plant enabled not only metal recycling from a variety of types of materials, but also enabled pyro-metallurgical processing of CFC from home appliances and effluent from hydro-metallurgical processing. It has evolved into an ideal plant for optimal processing through combination of these processes. Since

there is no recycling plant in China that can recycle and process simultaneously, we accept requests from seven other recycling plants in Suzhou, thereby contributing to reduction of environmental load in China.

Safety Initiatives by the Three Chinese Home Appliance Companies of DOWA

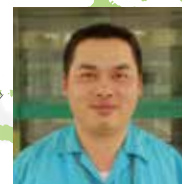
The Act on Management of Recovery and Treatment of Disposed Home Electric and Electronic Appliances was enacted in China in 2011. This act requires recycling of five kinds home electric and electronic appliances; TV sets, refrigerators, washing machines, air conditioners and PCs). Now DOWA group has deployed home appliance recycling plants also in Tianjin and Jiangxi. These three companies have started up the Chinese Home Electric and Electronic Appliance Association and are now jointly promoting workplace safety, one of important measures of our CSR policy. Local staff also participated in the association to review work

standards, select appropriate protective gear and conduct safety patrols. Education and training programs are put in place and selected local members are sent to DOWA plants in Japan to raise their safety awareness.

As the first recycling plant, we would like to play a leading role not only with technologies but also with safety, capitalizing on our accumulated know-how and technologies

VOICE

〈Hydro-metallurgical and pyro-metallurgical processing plant〉
Wu Chunfeng,
Assistant Division Manager



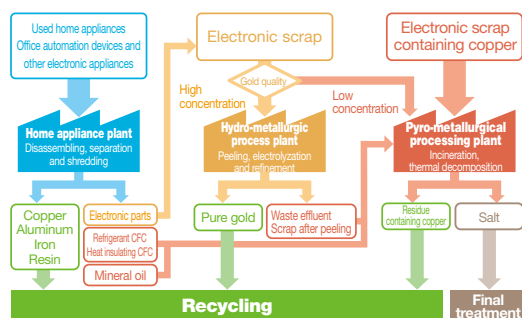
In the pyro-metallurgical processing plant, we contribute to environmental conservation of local communities by properly incinerating hazardous wastes. We also reduce amount of TV substrates from home appliance plants through incineration to make them materials for copper smelting. Those substrates have parts that contain valuable elements other than copper. Additional operation of a pre-treatment process has enabled us to recover elements much more than could have been by traditional incineration methods which also contributes to increased revenue. In the hydro-metallurgical processing plant, we focus on our gold washing and recovering business. We collect gold from LED and other electronic parts manufacturers' jigs that contain gold and contribute to increasing amount of recovered gold.

〈Home appliance disassembling plant〉
Tan Zunsheng,
Assistant Division Manager



I am now in charge of disassembling plant of used home appliances. Our monthly goal is to disassemble 50,000 units. The number of items that legally require disassembling will eventually increase from present five to fourteen categories. We will prepare a proper disassembling procedure, taking safety into consideration.

The temperature goes up close to 40°C in summer in Suzhou. I am involved in improving work environment during this hot season. We are also considering to achieve both safety and efficiency for improvement of TV set disassembling lines.



2013 Topics

The Tenth Anniversary of Foundation and Opening up of our Exhibition to Public

In 2013 we celebrated the tenth anniversary of foundation our facility. As a model recycling company in China, we have accepted many visitors including VIPs from the political and business worlds. Celebrating the tenth anniversary, we renewed our exhibition. We would like to use this exhibition space as a training facility in the Technical and Educational Center in Suzhou New District. The exhibition has a floor focusing recycling processing with videos, instructive panels and full-sized home appliances exhibition. The exhibit is designed for visitors to learn importance of resources and important aspects of recycling through the displays showing our environmental measures. As a cutting-edge company that co-exists with local communities, we would like to make full use of this exhibition in order to show the way of resource-recycling and contribute to raising environmental awareness of local people.





TSL furnace



Zinc electrolyzation plant



Indium



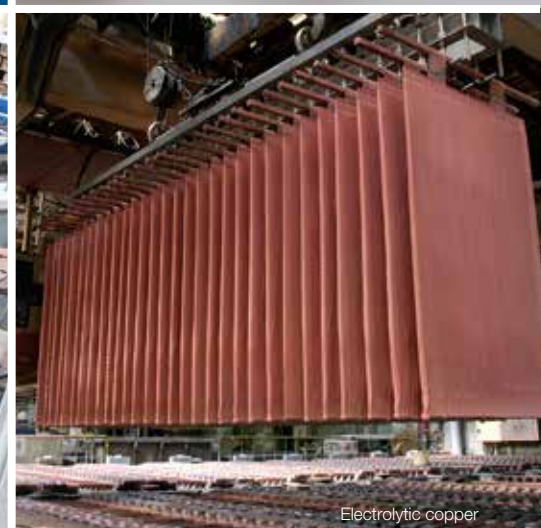
Kosaka Smelting & Refining Co., Ltd.



Gold



Zinc processing plant



Electrolytic copper

DOWA METALS & MINING

Refining and smelting business

DOWA Metals & Mining conducts refining and smelting, which is the core focus of the DOWA group. Metals & Mining has established a recycling, refining and smelting complex consisting of a network of several refining and smelting plants, based on our long cultivated technologies for mining, smelting and refining. Metals & Mining contributes to building a resource-recycling society through recycling, refining and smelting of twenty-some metals recovered from a wide variety of raw materials.

Business Fields

| | | |
|------------------------------------|---------------------|---------------|
| Precious metal and copper business | Rare metal business | Zinc business |
|------------------------------------|---------------------|---------------|

Main Products and Services

Gold, silver, copper, zinc, zinc alloy, lead, platinum, palladium, indium, gallium, germanium, tin, antimony, crude nickel sulfate, bismuth, tellurium, sulfate, etc.

A World-leading Combined Recycling, Refining and Smelting Plant that Handles Diversified Raw Materials

We have established an operation system with concerted efforts to tackle with an extensive transformation to shift to a refining and smelting process focusing on recycling materials.

Kosaka Smelting & Refining Co., Ltd

Address: 60-1 Otarube, Kosakakouzan, Kosaka-machi,
Kazuno-gun, Akita 017-0202
Employees: 314 (As of March 31, 2014)

Advanced Combined Recycling, Refining and Smelting Process

Kosaka Refining and Smelting changed its method from a blast furnace and flash smelter method to the TSL (Top Submerged Lance) furnace method in 2008. It was an extensive transformation that had not been accomplished before in Japan or in anywhere else in the world. Kosaka not only changed the process but also the materials from mined minerals to mainly recycled materials. The DOWA group overcame various problems with concerted efforts and was able to establish a safe operation. To be able to handle a wide variety of materials including recycled ones, Kosaka started to collect crude nickel sulfate and tin in the fiscal year of 2011 and is now increasing the number of recovered metals. In 2013, Kosaka succeeded in increasing production of silver through further improvement of silver refining and smelting process.



Conflict-free Mineral Refining and Smelting Plant

Kosaka Refining and Smelting carries out its social responsibility to a full extent as a company to supply non-ferrous metals at the upper stream of the supply chain. Kosaka was the first Japanese company that obtained the CFS (Conflict Free Smelter) (See P. 22) certificate from EICC/GeSI in 2012 and obtained the renewed certificate in 2013. Kosaka is committed to further conducting risk management of conflict minerals, in cooperation with suppliers of mineral and recycled materials, not only for its direct customers we supply gold bullion but also for end-user companies of gold at the lower end of the supply chain.

VOICE

〈Copper Smelting Department〉
Takehiro Muramatsu,
Precious Metal Division



Employees on our production site have been making concerted efforts to achieve improvements such as productivity of the material processing furnaces in the precious metal plants to increase silver production. As a result, material processing throughput increased 1.5 times, contributing to our being the top silver producer in Japan.

Although there are still many challenges in connection with shifting to recycled materials including diversification of the composition of raw materials, we are steadily working to overcome the problems.

〈Production Control Department〉
Tetsuro Tokumoto,
Production Control Division



Kosaka Smelting and Refining has transformed its usage of raw materials from mined minerals to recycled materials in connection with environment changes to produce non-ferrous metal bullion. To respond now to these changes and carry out our responsibilities appropriate to the times, Kosaka obtained the CFS certificate to be a responsible manufacturer.

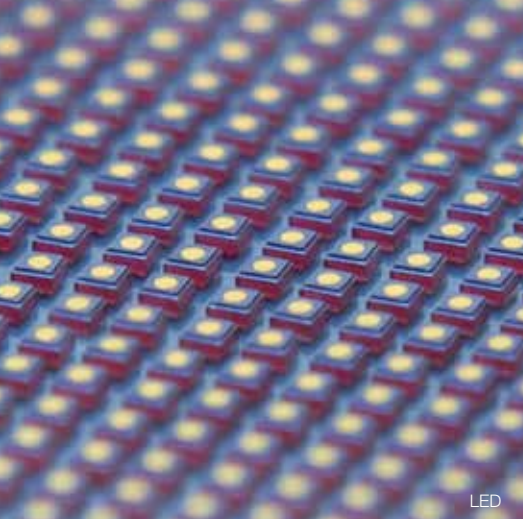
We will continue to respond to environmental and social needs agilely and flexibly to make reliable products.

2013 Topics

Donation of Locomotives and Station Building of Old Kosaka Railways to Kosaka Town

Kosaka Railways used to be the main means of transportation of minerals and sulfuric acid when Kosaka Smelting and Refining used the flash smelter. It ceased the operation in 2009. Kosaka assigned diesel locomotives, old station building and railway site of Kosaka Railways free of charge to Kosaka town in March 2014, in response to the request from local communities to make use of locomotives and Russel snowplows as tourism resources. The town will use these resources to show its industrial heritage and there are plans to build a railway theme park focusing on customer experiences of operating locomotives themselves as well as exhibitions.

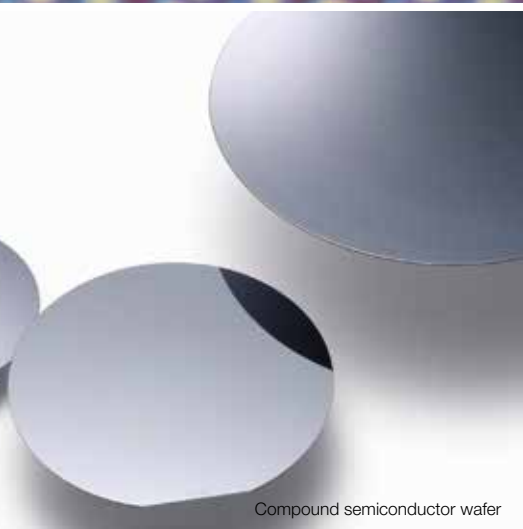




LED



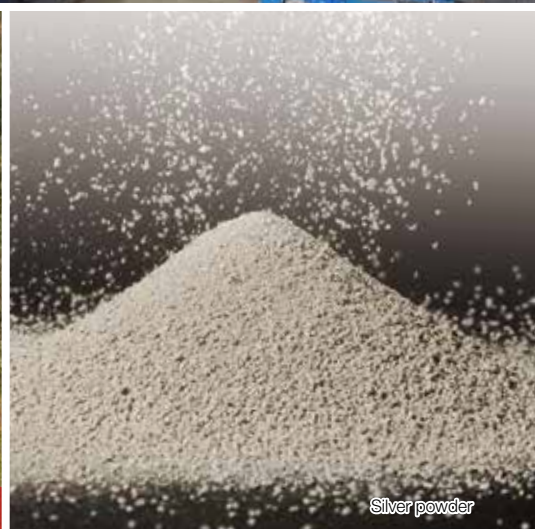
Carrier powder plant



Compound semiconductor wafer



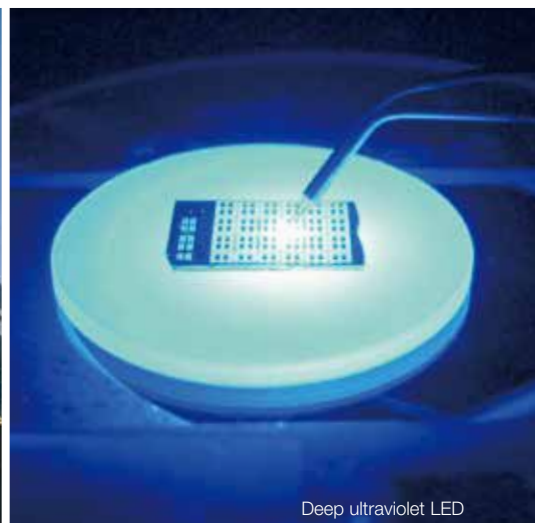
DOWA F-Tec Co., Ltd.



Silver powder



Nitride plant



Deep ultraviolet LED

DOWA ELECTRONICS MATERIALS

Electronic materials business

DOWA Electronics Materials started its business through development of new applications of diversified metal by-products that were collected in mining, refining and smelting business and making them into very fine powders with very high purity. Electronics Materials is now developing them for advanced electronic appliances, providing materials for semiconductors, conductive and magnetic materials that require high performance and function. DOWA accounts for a large share of these materials in the world.

Business Fields

| | | |
|------------------------|-------------------------------|-------------------------------|
| Semiconductor business | Electronic materials business | Functional materials business |
|------------------------|-------------------------------|-------------------------------|

Main Products and Services

Highly pure gallium, indium, compound semiconductor wafers, LED, silver powder, copper powder, silver oxide, metal powder, Carrier powder, ferrite powder, etc.

World Top Magnetic Property Using Ferrite Powder for Bonding

Magnetic ferrite is indispensable for manufacture of automobile and electric appliances. We are leading the world by deploying advanced technologies gained in our long history of making ferrite powder. We respond to the global needs for high performance products and innovative applications with our world's top technology of ferrite for bonding.

DOWA F-Tec Co., Ltd.

Address: 1045, Kichigahara, Misaki-cho, Kume-gun, Okayama 708-1523
Employees: 36 (As of March 31, 2014)

Contributing to Automobile Environmental Performance with Its Proprietary Technology

DOWA F-Tec uses hard ferrite powders for bonding magnets suitable for use mixed with resin. The powders are widely used for magnet rollers of printers and copying machines and for magnets for motor sensors of automobiles and home appliances. They have more advantages compared to the universally used sintered magnets in that it has:

1. More precise dimensioning
2. More flexible shaping
3. Hardly cracked or chipped

These properties enables them for use in an electrically driven water pump that is used for cooling engines of eco-friendly cars such as hybrid automobiles. Casting into one form enables to reduce the number and volume of pump parts to achieve a smaller size and less noise. Smaller size resulted in better fuel consumption and reduction of CO₂. Many motors and sensors are installed in automobiles for high environmental performance and comfort. F-Tec will continue to contribute to developing comfort and environmental performance through ferrite technologies.



Our Challenge for Energy Reduction through Heat Recovery System of Our Own

Ferrite powders are made by heating ferric oxide and then making them react with alkali earth metals. This process requires a large amount of fossil fuel, which causes a major problem in terms of energy saving and reduction of CO₂. To solve this problem, F-Tec has developed its own heat recovery system to recover heat to the maximum extent.

There were a variety of problems to solve at the start of development; however after repeated trial productions and improvements F-Tec started the full operation in the summer of 2013. The system recovers exhaust heat made in the process of treating raw materials under high temperature. This heat is used to preheat combustion air required in the other process, resulting in less fuel consumption. It is also used to dry the sediment recovered from effluent and this action contributed to reducing wastes from production. Combination of F-Tec's creative and innovative mind-set and manufacturing technologies enabled energy saving and reduction of CO₂.

VOICE

<Development Department>
Yasunobu Mishima,
Department Manager



Ferrite powders developed and manufactured by F-Tec are only used for compound that is mixed with resin. Developing ferrite powders with high flow properties using particle size distribution and particle shape control technologies enabled dense filling and high orientation (higher magnetic intensity brought by aligning orientations of crystal faces) improved by approximately 20%. These powders are now being used in the fields where only ferrite sintered magnets and rare earth magnets can be used. We will try to widen the possibility of ferrite powders through continuous improvement.

<Production Department>
Hideki Katayama,
Department Manager

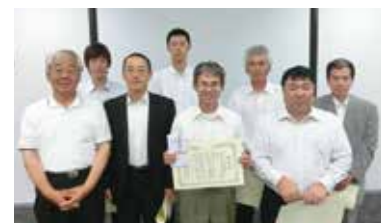


A large amount of heat and electricity are used for reaction and crushing in the production process of ferrite powders. Not only the cost but also the environmental burdens could change, depending on how effectively energy is used. In addition to the improvements in heat recovery we made last year, this year we will try to improve our quality control system by further achieving energy savings. To meet the increasingly rigorous demands from customers. We would like to remain a company that can contribute to society, by manufacturing world-leading products both in cost and quality while reducing environmental burdens.

2013 Topics

Risk Assessment Initiative

DOWA F-Tec is committed to improving workplace environment by our risk assessment method of sampling and improving hazardous facilities and equipment, and endeavors to achieve employees' safety. In June 2013 F-Tec's "Measures Preventing from Being Caught in and Stuck in when Demineralized Pellets are Recovered and Returned from Bucket Conveyers" was awarded as the best measure among 69 applicants in the DOWA group's risk assessment presentation. We will continue to make improvements, aimed at achieving safety workplace without any accident or disaster.

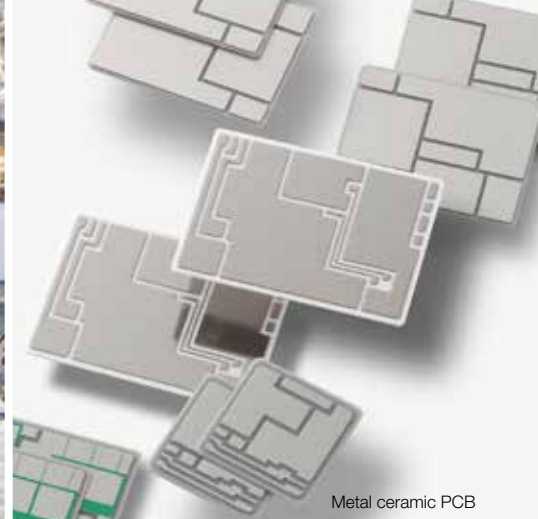




Copper alloy strips



Silver plating facilities



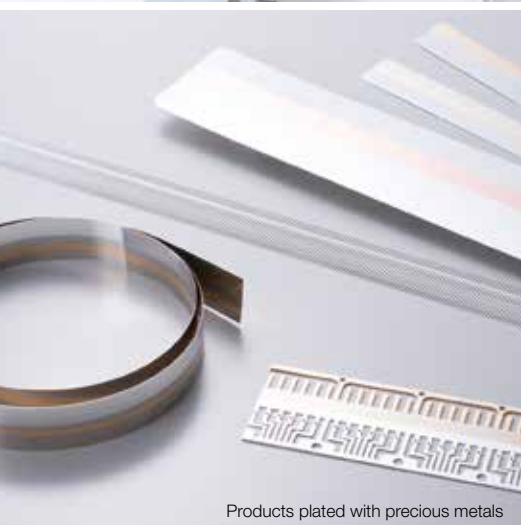
Metal ceramic PCB



DOWA METALTECH THAILAND



Forged products from brass bar



Products plated with precious metals



Metal rolling equipment

DOWA METALTECH

Metal processing business

DOWA METALTECH provides high quality copper alloy, plated products and metal ceramic PCBs focusing on automobile and electronic parts. Metaltech is developing cutting-edge technologies and products while watching over what our customers need as well as keeping an eye on market trends related to new materials and electroplated coating. Metaltech has established a global supply system that can respond to market needs on a timely basis by expanding business bases focusing in Asia.

Business Fields

| | | |
|---------------------------|------------------|--------------|
| Metal processing business | Plating business | PCB business |
|---------------------------|------------------|--------------|

Main Products and Services

Copper, brass, copper alloy strip, nickel alloy strip, brass bar, forged product from brass, products plated with precious metals, metal ceramic PCB, etc.

Diversified Plating Lines, Responding to Wide Range of Needs

In 2006 DOWA METLTECH participated in Thai market where Asian electric, electronic and automobile manufacturers gather. As a wide-ranging manufacturer of metal solutions, METALTECH established an agilely responsive, local production and supplying system, with wide variety of silver, nickel and tin plating lines.

DOWA METALTECH (THAILAND) CO., LTD.

Address: Gateway city Industrial Estate, Chachoengsao Province, Thailand
Employees: 66 (As of March 31, 2014)

Supporting for Globalization of Japanese Companies

DOWA METALTECH (THAILAND) is located in Gateway city Industrial Estate, Chachoengsao Province, processes coil-shaped copper and copper alloy called copper and copper alloy strip and provide silver, nickel and tin to local Japanese automobile parts manufacturers. Metaltech Thailand has the cutting-edge equipment and facilities equivalent to those in Japan, Metaltech Thailand supports Japanese companies in Thailand through promoting local procurement by offering the same level of mass-production quality found in Japan. Imported copper materials from companies within the DOWA group ensures consistent quality from raw material to the end plated products.

Metaltech Thailand will expand its plant and increase its equipment and facilities, responding to Asian automobile markets that are expected to have continuous growth. The new plant will be twice as large as the present one and employ environmentally-friendly design, with all LED



lighting system and also use of natural ventilation and light.

Building a Resource-Recycling System on a Global Basis

Metaltech Thailand has established a recycling flow of metal scrap generated in the production process utilizing the network of the DOWA group. Precious metals for plating are recovered in the smelting and refining plants in Singapore and Japan, while copper is recovered as base material in Dowa Metal in Shizuoka Prefecture and used again in Metaltech Thailand as raw material. This wide-range recovery system covering Thailand, Singapore and Japan is the strength of the DOWA group that conducts its business on a global basis.



Metaltech Thailand reports to Thai Government every year on traceability from transportation to transshipment, delivery to plants and each recycling process clearly and promotes recycling under properly managed recycling system.

VOICE

<Supervisor in Charge of
Production>

Pattaya Krongwaeng



I am responsible for the line for precious metal plating where copper strips are plated with silver and nickel. As a supervisor, I handle any abnormal conditions that occur in the process for quality improvement. For example, we added a new equipment that has a separate mechanism from the existing drying facility and reduced in-process losses. This enabled us to achieve zero defects related to insufficient drying that used to occur after the plating process. I will handle the expansion of existing lines or starting up of new lines, capitalizing on my experience.

<Safety Officer in Charge of
Environment>

Napaporn Bootamkha



Promoting “Reduce, Reuse and Recycle” systematically is an important philosophy of our company that aims at being a sustainable and eco-friendly company. For example, as part of customer service, we buy back copper and brass scrap for recycling of the material that we originally sold to them. Proper preparation of documents and permits for this purpose is part of environmental conservation and at the same time increases the trust from customers. It is one of our environmental initiatives based on our business policy: “to comply with laws, continue to save energy and promote 3R’s activities as part of environmental conservation and aim at an eco-friendly company.”

2013 Topics

Employing Intern Students from a Local University

DOWA METALTECH (THAILAND) puts in place a paid internship program and accepts several intern students from a local university (Rajabhat Rajanagarindra University) in Chachoengsao every year. We accepted three students in 2013 and they experienced on-the-job training for three years in the machine maintenance department and accounts department. We employed intern students in past and some of them are still working in the maintenance department DOWA stays rooted deep in local communities and we work together on developing local communities. We are committed to creating employment and improving nurturing human resources, aimed at to be a workplace where local staff want to work for a long time.





Heat treat furnace



Heat treated products



Plasma nitriding treated products



CEMM Co., Ltd.



Heat treat furnace



Heat treated products



Heat treatment process

DOWA THERMOTEC

Heat treatment business

DOWA THERMOTEC provides the top notch service in Japan to manufacture and process industrial furnaces for both size and quality. THERMOTEC is a pioneer of heat treatment technology that is indispensable for improving durability of metal parts. THERMOTEC promotes development of competitive and productive heat treatment furnaces and new surface treatment technologies in the industrial furnace business. In the heat treatment and processing business we aim at being an integrated global heat treatment manufacturer, armed with cutting-edge technologies including carbonizing heat treatment, and we actively promote worldwide deployment.

Business Fields

Heat treatment and processing business

Industrial furnace business

Main Products and Services

Heat treatments, surface treatment, designing, manufacturing, selling and maintaining heat treatment equipment and facilities and ancillary equipment

Top Class Plasma Nitriding Processing in Japan

CEMM has established a dominant place for its diversified heat treatment lineup in Nagoya, the center of heat treatment since 1956. This heat treatment lineup includes proprietary plasma nitriding treatment. After becoming the member of the DOWA group in 2006, CEMM plays a leading role of the DOWA heat processing business.

CEMM Co., Ltd.

Address: 19-1, Ukishima-cho, Miizuho-ku,
Nagoya-shi, Nagoya 467-0854
Employees: 98 (As of March 31, 2014)

Focusing on Plasma Nitriding Treatment

CEMM succeeded in developing the plasma nitriding treatment in 1974 and started to offer the treatment services to other companies using the special furnace dedicated to the treatment. As of now, DOWA THERMOTECH has the only one plasma treatment plant: CEMM treats 5 million units a year focusing on automatic transmission parts for automobiles. It is the largest in Japan as a single treatment plant. CEMM deploys all-around nitriding treatment, responding to needs of the automotive industry in terms of cost and scope of treatment.

Besides the automotive industry, uses range from construction machines, industrial robots, ships and aviation. Proper systems are put in place to respond to the various needs of a wide range of industrial needs, including a variety of heat treatments for aluminum alloys as well as gas carbonizing treatment, in addition to plasma nitriding treatment.



The Renewal of the plant have improved Safety, Quality and Productivity

It has been already half a century since the establishment of CEMM. CEMM had difficulty in coping fully with the current needs from industry due to aging of its plant buildings that were constructed thirty or forty years ago. Also the layout of the plant buildings were not suitable for responding to its current expanding business. In 2011, CEMM started the three-year renewal project for major two plants (S2 plant for plasma nitriding and N2 for gas carbonization) to ensure a long lasting business base in the Chukyo metropolitan area centered on the city of Nagoya in Aichi Prefecture.

In S2 Plant, sixteen plasma nitriding furnaces used to spread over three different locations, but in the renewal project, they will be integrated into one place, to eliminate wasteful movement of operators and increase productivity through enhanced equipment management. We will stop lifting of products by cranes from the first floor to the second floor for higher safety. In N2 Plant, a layout review enabled us to eliminate wasteful in-plant transportation, separate in-process products from finished products as well as heat treatment equipment from workplace. This improved the workplace environment to a great extent and increased safety, quality and productivity.

VOICE

<Quality Control Department>
Kotaro Kawamura



We reconstructed the plasma nitriding treatment and the carbonizing plants and reconstructed the aging buildings in our three-year project. For smooth progressing of the reconstruction schedule, in our concerted efforts, we succeeded in constructing buildings, proposing process changes to our clients, checking quality and managing changes along with the request simultaneously.

We will take the momentum from this renewal project to further improve quality and respond to a wide range of industry needs.

<Production Technology Department>
Naruhiro Kono



I was mainly in charge of construction of S2 Plant in 2011 and of N2 Plant this time, for a total of three years. We had to construct a new plant while continuing operation of the plant. As a result we had to operate under a range of restrictions in terms of time and areas. The work did not progress as planned; however, we were able to complete the work successfully. I would like to thank all concerned.

I am sure all the members of CEMM who helped successful construction will be able to improve their plants even further. I would like to continue to make improvement together with all the members.

2013 Topics

Won Gold and Silver Awards at the QC Activity Presentation Conference in 2013

CEMM encourages employees to obtain qualifications such as heat treatment specialist certificates and the like. CEMM has three female heat treatment specialists (Class 1) and ranks No.1 in the DOWA THERMOTECH in terms of the number of employees with specialist certificates. Capitalizing on these qualifications and skills of employees, CEMM aggressively conducts improvement activities. As a result, CEMM team won the Gold and Silver awards last year at the QC activity presentation conference. CEMM also submitted the largest number of proposals for the past four years. We will promote these activities, aimed at achieving better goals.



DOWA's Business and Social Issues

Recognizing Business Risks

The DOWA group addresses risk management to properly control risks that may hinder realization of our business philosophy and achieving our business plans: To carry

out our social responsibilities and further increase our sustainable corporate value. The board of directors is mainly responsible for handling business risks and the CSR

Department is responsible for the CSR risks in cooperation with other departments.

Business risks

External risks that may affect business results, stock price and financial conditions are as described to the right. For details, visit our website for the Annual Report of the DOWA group.

http://www.dowa.co.jp/en/ir/library_results.html

Global economic status

Metal exchange, currency exchange

Public regulation

Stock price movement

Interest rate change

Disaster and/or electric power failure

CSR risks

The DOWA group started identifying and reevaluating risks related to our concerns for the Environment, Society and Governance to assure further sustainable business activities. The CSR department conducted the risk survey for each business entity in the group to find out existing risks, their measures and the possibility of

increase of mid- and long-term risks. We identified major risks for each business entity and operating company. Major risks identified in 2013 are as follows:

○ Risk of overseas business establishment

In addition to the above mentioned risks, crisis management and prevention of fraud in terms of governance are considered to be major risks in our businesses

outside of Japan.

We will identify every major risks of each company within the group, and plan and implement their measures, based on the results of the survey. We will strive to enhance and improve risk measures of each company by monitoring the progress of the measures and conducting improvement activities continuously.

Major Risks

| Aspect | Risk | Measure |
|-------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environment | Legal | Changes in domestic laws, changes of regulations and standards, and collecting information and responding to international regulations including REACH rules/RoHS directives and laws and regulations concerning business establishments and products as a whole. |
| | Environmental conservation | Air quality, water quality, noise, odor measures, chemical substance control, measures to fight against global warming, etc. |
| Social | Safety, hygiene and health | zero accidents, zero fatality, measures for mental health, etc. |
| | Product Quality | Ensuring and improving quality, establishing a quality control system, etc. |
| | Education | Employee education, preparation of a training system, transferring knowledge, support for careers, etc. |
| Governance | Large scale disaster | Prevention and reduction measures for fatality from earthquakes, tsunami, floods, etc. |

Initiative to Resolve Social Issues through Business Activities

Initiative for “Sustainable Utilization of Limited Metal Resources”

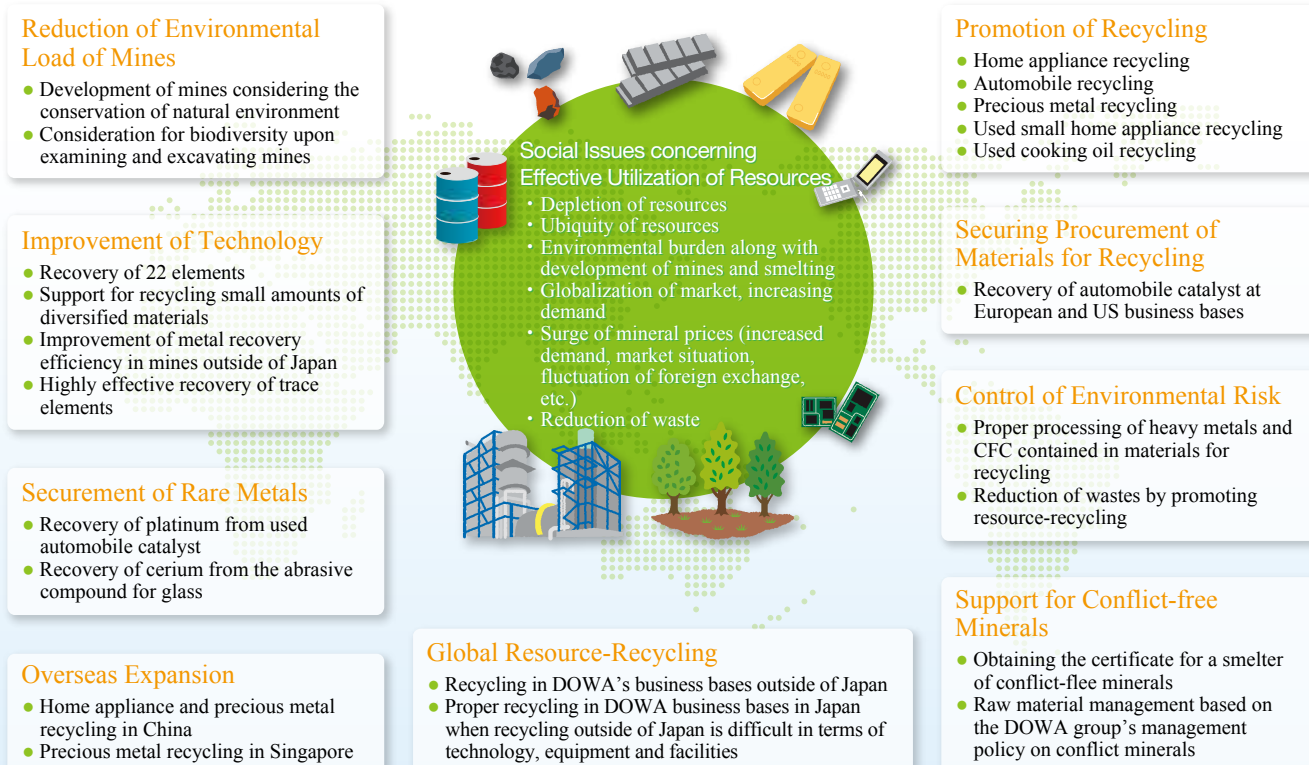
The purpose of social responsibility is defined as “to contribute to sustainable development” in the international standard of CSR, ISO 26000 in 2010. Society faces diversified problems, including environment, water, food, poverty and the like. “Effective utilization of resources” is the most relevant issue to DOWA, as utilization of metal resources is the core of our business. It is also an important social issue.

Multidimensional Approach to Resource-Recycling Society

Mineral ores are natural resource and will be eventually exhausted if people continue to use them. Resource-recycling is an important solution; however it requires technologies and infrastructure to effectively recover metals, and to properly treat the hazardous substances and non-usable substances produced in the recovery process. This includes technical and economic issues which need to be solved

such as a proper establishment of a social system which enables effective collection of recycle materials, and cost and efforts put into treatment of diverse materials. The DOWA group conducts a wide range of recycling business in and outside Japan, including precious metals, home appliances, cars and used small home appliances. In addition to recycling, DOWA strives to solve issues related to effective utilization of resources, considering various aspects, by making best use of its own waste from its intermediate processing facilities, laboratories and transportation business units.

Examples of DOWA’s Approach to Social Issues



The DOWA group is committed to contributing to sustainable utilization of metal resources through its business activities, by directly confronting and solving these issues.

CSR Policy and Plan

CSR Policy and Focus Measures

The DOWA group's CSR Policy was prepared to promote CSR activities from a long-term point of view, based on the Dowa Group's Corporate Philosophy and Standards of Conduct, referring to the rules of United Nations Global Compact guidelines. We will carry out our responsibilities for society through our CSR activities with the management based on this policy. We endeavor to share the policy across the whole group, utilizing the group's in-house newsletters and the Intranet to implement our CSR efforts in a practical manner.

We evaluated ourselves based on the key focus of ISO 26000 when we set forth our CSR Policy. We then set forth a priority list of CSR that the DOWA group should address in implementing the policy. We are committed to promoting sound business management through implementation of the policy as a responsible company.

| | CSR Policy | Focus Measures |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Governance | <ul style="list-style-type: none"> • We will aim to be an open and transparent company. • We will endeavor in anti-corruption efforts including anti-bribery measures taking into consideration international agreement. • We will take CSR into consideration in our procurement. | <ul style="list-style-type: none"> • We will strengthen internal control and governance • We will prepare the CSR procurement guidelines. |
| Safety | <ul style="list-style-type: none"> • All employees will take part spontaneously in safety activities to improve the level of health and safety in the workplace, based on our basic philosophy of "Safety is the top priority." • We are committed to preventing accidents at work and supporting health of our employees. | <ul style="list-style-type: none"> • We will improve our risk assessment. • We will enhance our safety education program throughout the group. |
| Environment | <ul style="list-style-type: none"> • We will provide customers with products and services that contribute to building a resource-recycling society. • We will reduce environmental burdens and risks in our business activities. • The management and employees together take part in environmental conservation activities. • We will promote business activities considering biodiversity. | <ul style="list-style-type: none"> • We will promote environmentally-friendly products and renewable energy fields. • We will conduct a survey on biodiversity and prepare guidelines. |
| Society | <ul style="list-style-type: none"> • We will promote social contributions, reflecting unique characteristics of each local community. | <ul style="list-style-type: none"> • We will promote diversity and work-life balance. • We will promote CSR education. • We will contribute to local community. |

Main Activities in 2013

The DOWA group sets up the goals of our CSR activities in four areas, based on our CSR Policy and Priority List of CSR to promote CSR activities.

We will continue to improve our activities, based on our achievements and progresses made in 2013. We will report the details of major initiatives in 2013 and major issues in 2014 on the next page and for each initiative.

〈Main activities in 2013〉

| Focus | Goal | Measures | Evaluation* | Main Results | Page |
|-------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Governance | Strengthening of internal control and governance | Enhancement of internal control of overseas business establishments | A | <ul style="list-style-type: none"> Support for internal control activities of newly in cooperated companies to our consolidated accounting Encouragement to visit to our business establishments in China and South East Asia for training Conducting a briefing on internal control (approximately 260 persons participated) | P21 |
| | Promotion of CSR procurement | Formulation of CSR Procurement Policy | A+ | <ul style="list-style-type: none"> Preparation of the basic policy on procuring conflict minerals Obtained Certificate for the Gold Conflict-Free Smelter program Preparation and publication of CSR Procurement Policy | P22 P26 |
| | Promotion of CSR activities across the group | — | — | — | |
| Safety | Enhancement of risk management | Starting up of the Group Safety Activity Project | A | <ul style="list-style-type: none"> Briefing across the group (Kick off meeting) Starting up of district meetings | P28 |
| | Enhancement of safety education program throughout the group | Strengthening the programs outside Japan | A | <ul style="list-style-type: none"> Support for safety activities on logistics in South East Asia Improvement of activities related to Safety Conference in China | P29, 30 |
| | | Continuous implementation of educational courses to experience risks | A | <ul style="list-style-type: none"> Support for educational courses to experience risks (306 persons took the course.) | P27 |
| Environment | Global warming measures | Reduction of total amount of greenhouse gas emission | C | <ul style="list-style-type: none"> Emission of greenhouse gas: 1.718 million CO₂ ton. Emission of greenhouse gas for domestic companies: 16% increase compared to last year | P35 |
| | | Promotion of information sharing on global warming measures in the group | B | <ul style="list-style-type: none"> Questionnaire on progress status of global warming measures by business entity and present status | P35 |
| | Promoting resource-recycling | Enhanced development of recycling technologies | A | <ul style="list-style-type: none"> Increased production of silver Improvement of copper electrolytic techniques Increased collection of materials for recycling from North America and Asia | P10 P31 |
| | Promoting environmentally-friendly products and renewable energy fields | Selection of LCA items | C | <ul style="list-style-type: none"> LCA not implemented | P31 |
| | | | A | <ul style="list-style-type: none"> Increased production of metal ceramic PCB for renewable energy related products Increased orders related to solar power generation and offshore wind generation in the environmental consulting field | P38 |
| | Conservation of biodiversity | Formulation of Biodiversity Conservation Policy | A+ | <ul style="list-style-type: none"> Conducted biodiversity survey and formulated biodiversity conservation guideline | P32 |
| | | Continuous afforestation and forest management | A | <ul style="list-style-type: none"> Promotion of Forest management (Planted 5,400 broad-leaf trees in Kosaka-machi, Akita Prefecture and promotion of forest management) | |
| Society | Promoting diversity management | Promoting employment of elderly people | A | <ul style="list-style-type: none"> Revision of the re-employment system to hire experienced retired employees for them to work with motivation across the group. | P45 |
| | | Promoting employment of disabled people | B | <ul style="list-style-type: none"> Implemented measures to achieve the legally stipulated employment rate Increased number of re-employed employees after mandatory retirement | |
| | Promotion of work-life balance | Preparation of the action plan to support fostering the next generation | A | <ul style="list-style-type: none"> Preparation and publication of the action plan to support fostering the next generation Raising awareness of childcare program Promotion of joint efforts of labor and management to reduce working hours and thorough management of working hours by introducing a new system | P46 |
| | | | A | <ul style="list-style-type: none"> Implementing the questionnaire to the newly employed Implementing initiatives to increase the number of employees to take paid leaves of absence, including scheduled annual leaves of absence | P46 |
| | Contribution to local communities | Promoting social contribution, reflecting unique characteristics of each local community | A | <ul style="list-style-type: none"> Collecting information on local contribution by business entities outside Japan | P40 |
| | | | | <ul style="list-style-type: none"> Holding and operating events with local communities (Marathon, cross-country ski competition, cherry blossom festival) | P43 |
| | Promoting in-house CSR education | Improvement of in-house CSR portal site | A | <ul style="list-style-type: none"> Publication of E-mail news Publishing explanation on focus measures of CSR (CSR procurement or safety labor, etc.) | P39 |

*Evaluation: A+: More than expected, A: accomplished, B: Fair, C: Not Accomplished

Governance

The DOWA group puts enhancement of corporate governance as one of the top priority of the management and strives to set in place and operate an efficient and effective internal control system, based on the Dowa Group's Values and Standards of Conduct. Recently importance of our activities through the supply chain has increased along with our globalization.

- CSR Policy**
- We will aim to be an open and transparent company.
 - We will endeavor in anti-corruption efforts including anti-bribery measures taking into consideration international agreements.
 - We will take CSR into consideration in our procurement.

Progress of Activities Following is the progress of our corporate governance activities and issues in 2014.

| Goals of corporate governance/ Governance | FY of 2013 | | | FY of 2014 | |
|--------------------------------------------------|---------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| | Measures | Evaluation* | Main results | Issues | Target |
| Strengthening of internal control and governance | Enhancement of internal control of overseas business establishments | A | <ul style="list-style-type: none"> • Support for internal control activities of newly incorporated companies to our consolidated accounting • Encouragement to visit to our business establishments in China and South East Asia for training • Conducting a briefing on internal control (approximately 260 persons participated) | Support activities for individual business establishment in and outside Japan | 10 business establishments in and outside Japan |
| Promotion of CSR procurement | Formulation of CSR Procurement Policy | A+ | <ul style="list-style-type: none"> • Preparation of the basic policy on procuring conflict minerals • Two companies obtained Certificate for the Gold Conflict-Free Smelter program • Preparation and publication of CSR Procurement Policy | Preparation of CSR Procurement Guideline Promotion of in-house CSR procurement education Operation of conflict minerals management system | Holding a briefing |
| Promotion of CSR activities across the group | N/A | N/A | N/A | Establishment of mid-term CSR goals Review of focus measures | |

*Evaluation: A+: More than expected, A: accomplished, C: Not Satisfactory, D: Not Accomplished

Strengthening of Internal Control and Governance

We conducted on-the-place training at the companies in China and South East Asia in 2013. We also held a briefing to the Japan-based companies to deepen understanding of internal control and approximately 260 persons participated. In 2014 we will support individual companies both in and outside Japan according to their needs as part of our initiative to strengthen internal control.

CSR Procurement

We reviewed our procurement policy, prepared and published a new one, taking CSR into consideration. In 2014 we will enhance internal education and explanation to our suppliers in order to put the CSR Procurement Guideline in place and implement this based on the policy.

Eco-System Recycling, following Kosaka Smelting and Refining, obtained the Certificate for the Conflict-Free Smelter program. We started offering conflict-

free recycled gold to our customers who are committed to procuring conflict-free minerals.

Promotion of CSR Activities across the Group

We will review the mid-term CSR goals and focus measures, based on the results and progress status of CSR activities so far, to strengthen them through our business activities.



Governance Focus Measures

Conflict Free Smelter was awarded

The DOWA group is promoting “CSR procurement” as a focus measure of our entire supply chain. We obtained the CFS (Conflict Free Smelter) certificate from EICC/GeSI* to promote conflict-free minerals together with our customers, as we mainly handle metal resources.

*Note
EICC: Electronic Industry Citizenship Coalition
GeSI: Global e-Sustainability Initiative



Conflict Minerals

Conflict Minerals refer to gold, tantalum, tin and tungsten that are produced in the Democratic Republic of the Congo and the surrounding countries where revenues from their sale may be used to finance armed groups and anti-government groups in those countries. In USA, the Securities and Exchange Commission (SEC) adopted the Dodd-Frank Wall Street Reform and Consumer Protection Act in August 2012 and the final rule requires manufacturers who file reports with

the Securities and Exchange Commission to disclose whether or not their products contain Conflict Minerals.

Our Initiative through Our Supply chain

The DOWA group is not listed with the US SEC. Therefore, we are not obliged to comply with the reporting rule on conflict metals. Even so, our products are used in a vast number of products including automobiles, electronic and electric appliances. Tracing the origin of raw materials will eventually reach to suppliers of raw materi-

als and smelters.

We started to prepare measures for conflict minerals in 2011. We prepared our policy on conflict minerals and published in August 2012. We also started to establish a management system to implement a survey on our use status and our suppliers of those minerals and suppliers. We also started our initiative as a responsible smelter to offer metals that are not from conflict minerals by obtaining the third party's certificate.

DOWA's Conflict Mineral Management Policy

The DOWA group disclosed “Conflict Free Mineral Procurement Policy” (no use declaration) in 2012 which was revised to “DOWA's Conflict Mineral Management Policy”, disclosed in December 2013.

DOWA's Conflict Mineral Management Policy

www.dowa-csr.jp/en/csr/procurement_policies.html (in English)
www.dowa-csr.jp/about/procurement_policies.html (in Japanese)

CFS Obtained for Responsible Mineral Procurement

As it is difficult to investigate whether conflict minerals are contained or not in a huge number of products, EICC, which is an organization to promote CSR in the electronic industry, and GeSI, which is an organization to promote economic, environmental and social sustainability in the ICT sector, offer the Conflict Free Smelter (CFS) certificate program to audit smelters that are closest to the upper stream of minerals. In this program metals shipped from these certified smelters are regarded as conflict free. Third party organizations evaluate procurement activities of smelters and refineries and determine whether all minerals handled by those are from conflict-free mines or recycled. More specifically, these orga-

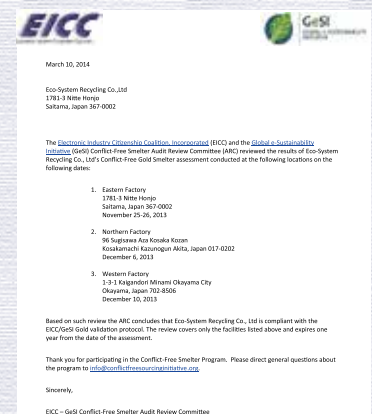
nizations inspect procurement policies, standards of conduct, analytical processes of procured materials and how to select suppliers. They confirm whether the definition of materials for recycling of those smelters are appropriate or not through local auditing and relevant documents.

We started preparation to obtain the gold certificate as a smelter to offer conflict-free minerals in 2012.

Kosaka Smelting and Refining obtained the CFS certificate for Gold in August 2012 and cleared the renewal audit in August 2013. Eco-System Recycling that is engaged in precious metal recycling (secondary refining) obtained the CFS certificate for gold in December 2013.

Understanding and cooperation from our suppliers enabled DOWA to obtain the certificate for conflict-free minerals.

We will continue to promote risk management, monitoring of business activities and education not only across our business establishments but also across the entire group.



Governance

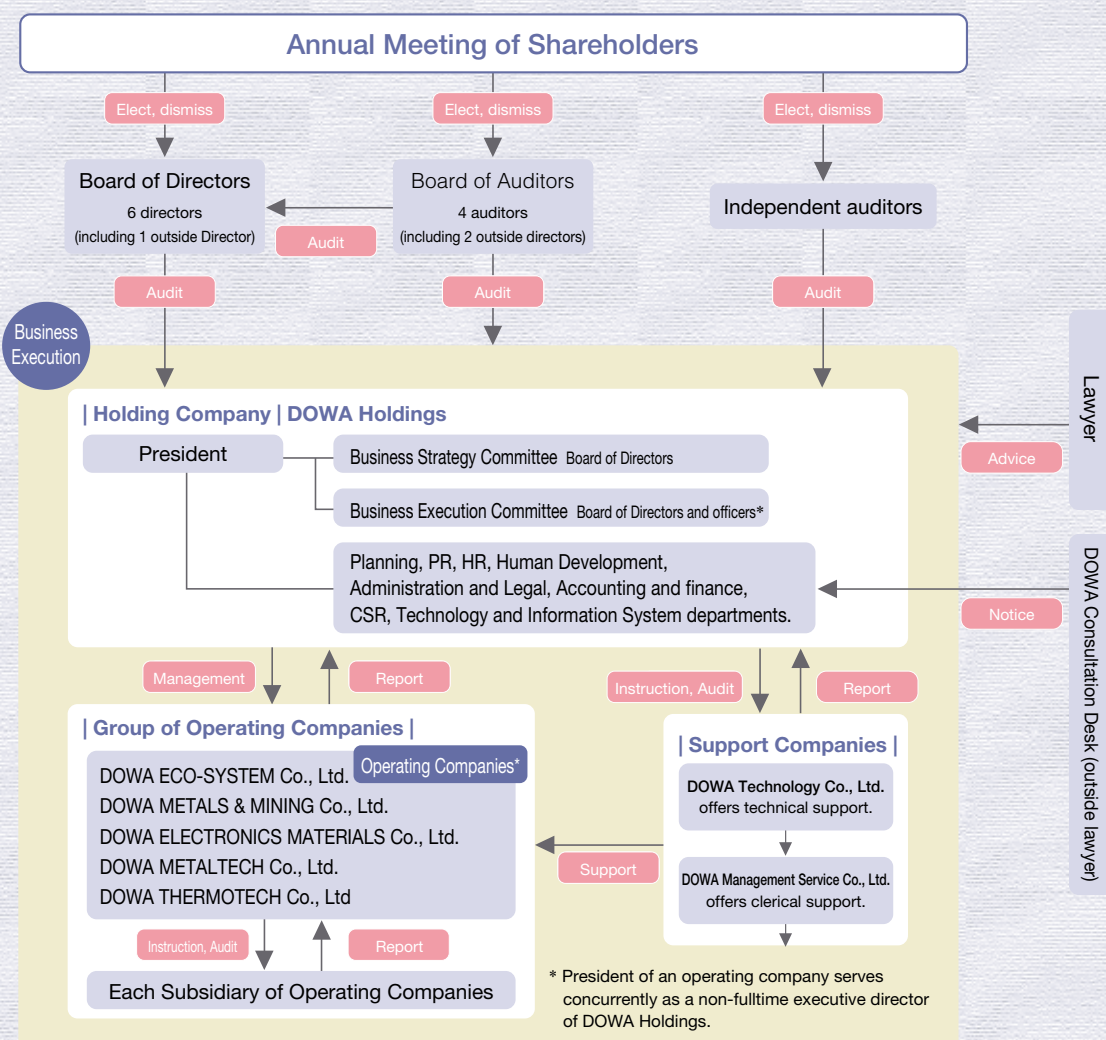
Corporate Governance System

The DOWA group adopted the executive officer system to soundly and effectively operate organizations, fasten decision-making and for effective management. The group also adopted the holding company system to separate business units from the holding company as subsidiaries.

We also strive to ensure sound business management, focusing on enhancement of corporate governance through internal controls. This is done to improve quality and efficiency of management to implement open, highly transparent management, based on the Dowa Group's Values and Standards of Conduct.

Corporate Governance System (As of March 31, 2014)

| Type of organization | Company with auditors |
|------------------------------------------------------------------------|---------------------------------------------------------------------|
| No. of directors | 6 (No. of directors designated in the article of incorporation: 13) |
| Of which are outside the company directors | 1 (Designated as independent officer) |
| Term of office of directors designated in the article of incorporation | 1 year |
| Chairman of board of directors | President |
| No. of auditors | 4 (No. of auditors designated in the article of incorporation: 5) |
| Of which are outside the company | 2 |



Internal Control Activities

To strengthen corporate governance, we encourage each company in the group to share the basic policy and the system of internal control with DOWA Holdings and also entrust each company to conduct

their own activities which shall exploit each company's uniqueness. This ensures effective and efficient internal control based on the holding company system.

As part of implementing and operating internal control, we set up DOWA Consultation Desk and conduct internal con-

trol to prevent and discover errors and unfair conduct at an earlier stage. We will continue to promote proper implementation of the system, responding flexibly to changes of our business and social environments.



Relations with Stakeholders

The DOWA group communicates in many ways at each offices and sections with our stakeholders, which are mainly our customers, shareholders, investors, partners, local communities and employees.

| Main stakeholders | | Our Responsibility | Activities |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customer | All customers who use the products and services offered by the DOWA group | <ul style="list-style-type: none"> Ensuring quality and safety of our products and services Providing eco-friendly products Pursuit of Customer Satisfaction (CS) Protection of customer information | <ul style="list-style-type: none"> Seminars and exhibits Plant inspection events PR activities on environment Disclosure of information on our website |
| Shareholders and investors | Individual or institutional investors including our shareholders | <ul style="list-style-type: none"> Maximization of corporate values Dividends Disclosure of information and dialogue | <ul style="list-style-type: none"> General shareholders' meeting Results briefing and periodic presentations to investors Preparation of annual reports and business reports Disclosure of information on our website |
| Partners | All partners who collaborate with us for provision of the products and services offered by the DOWA group | <ul style="list-style-type: none"> Selection of procurement sources based on fair and unbiased basis Support for CSR and environmental activities in our supply chain | <ul style="list-style-type: none"> Seminars and exhibits Plant inspection events Presentations to partners including green procurement Quality and environment audit Corporate ethics contacts |
| Local communities | People in local communities who we interact with through our offices and main business activities | <ul style="list-style-type: none"> Environment conservation activities Contribution to regional development through support for cultural and sports activities Educational activities Disclosure of information and dialogue | <ul style="list-style-type: none"> Plant inspection events for local people Participation in local groups Hosting, participation in and support for local events Risk communication |
| Employees (including their family members) | Employees who work in the DOWA group and their family members | <ul style="list-style-type: none"> Proper evaluation and treatment Ensuring diversified human resources Promotion of work/life balance Ensuring health and safety of workplace Human development Respect for human rights | <ul style="list-style-type: none"> Management meeting Management-labor interviews Human resource education and environmental education In-house newsletters & portal site Events for family members of employees |

Relationship with Central and Local Governments and Industrial Groups

The DOWA group participates in committees and forum sponsored by central and local governments and the industrial community and promote activities related to public policies including reviewing proposals and measures, formulating and reviewing legal systems and international cooperation, aimed at resolving social concerns.

Example of participation

President and representative director Masao Yamada

February 2013 until present: Member the Central Environment Council, Ministry of the Environment

December 2012 until present: Chairman of the Waste Recycling Subcommittee, the Environmental Safety Committee, Nippon Keidanren (Japan Business Federation) April 2012 until present: Director of the Center for Eco-Mining

We actively participate in international conferences held by Japanese and other overseas governmental agencies and contribute to preparing policies from the viewpoint of the industrial world.

Lecture at the 3rd EU, US, Japan Critical Materials Workshop

The 3rd EU, US, Japan Critical Materials Workshop was held in Brussel, Belgium, under the sponsorship of EC, US Department of Energy and Japanese Ministry of Economy, Trade and Industry in May 2013. In the workshop, Mr. Shiratori, head of the Environmental Solution Office, DOWA Eco-System delivered a lecture on characteristics and comparison of recycling in EU, US and Japan as well as the latest trend of recovery of critical metals.

In this workshop, it was confirmed that technical development of rare earth excavation and extraction, reduction and recycling and alternate technologies are important. It was agreed upon that a trilateral cooperation system should be put in place through a concerted effort of government officials, industries and researchers.



Participation in International Organizations and Consortiums

The DOWA group has been participating in the UN Global Compact (UN GC) since March 2009. The DOWA group is committed to respecting and implementing the GC's ten principles in four areas of the Global Compact of human rights, labor, environment and anti-corruption—these are geared towards sustainable development of society.

○ Global Compact Japan Network <http://www.ungcjin.org>

Governance

Our Efforts for Human Rights and Corruption Prevention

The DOWA Group is committed to prohibiting discrimination against nationality, race, ethnic group, religion, sex, age and disability; child labor; forced labor; and tackling corruption under the ten principles of the UN Global Compact.

We strive to understand the circumstances relating to human rights by conducting surveys in our subsidiaries both in Japan and other countries.

In 2013 we did not receive any report of discrimination relating human rights, child labor, forced labor and actual cases of corruption. The DOWA group will continue to respect human rights and promote anti-corruption measures.

Compliance

The DOWA group places strict “Compliance” as the basis of our corporate management and is promoting such measures as strengthening of internal control and education, based on the standard of conduct of our group.

Standards of Conduct of the DOWA group http://www.dowa.co.jp/en/about_dowa/cvision.html

The DOWA group set forth Standards of Conduct to attach importance to the philosophy that a company is part of society, which comply with laws and regulations and take a sensible course of action, and continues to work independently towards creating a good life for all and building a resource-recycling society.

Our efforts in Japan

- Established an in-house corporate ethics office.
- Hold a monthly compliance meeting to confirm compliance status.
- Notify various regulations and guidelines without fail in in-house group meetings.
- Offers in-house study sessions, lectures to the public, correspondence education programs on compliance.
- Prepares and notifies manuals on the handling of non-compliance cases.

Our efforts outside Japan

- Delivers in-house educational programs on the DOWA group policies and standards to all employees (in China).
- The Standards of Conduct of the DOWA group was translated into Chinese and posted on the wall of each of our business entities (in China).
- Built a system for employees to directly communicate and consult with management (in China and Thailand).
- Set out a comment box for any employee to make proposals and complaints (in China).
- Prepared a company rulebook (in USA).

DOWA Hotline Desk

We set up the DOWA Hotline Desk and inform the existence of the Desk through in-house posters for the purpose of making

workplace safer and more comfortable. Through this Hotline Desk employees can consult their problems in the workplace directly with corporate lawyers. The DOWA Hotline Desk is open even for our customers

and partner companies for those employees to use and thus be able to build sound relationships outside our company.



Supply Chain Management

The DOWA Group, as part of our CSR management that we promote together with our stakeholders ,aims for the CSR supply chain management that involves our partners,.

In 2013 we revised our procurement policy to promote CSR across the entire supply chain.

We discussed the matter with the CSR department and other relevant departments. We established our CSR procurement Policy by adding “Sustainability” to existing “Quality, Cost and Delivery (QCD),” as our effort for social responsibility for environment, human rights and labor safety.

We will establish a guideline based on this policy and deliver the guideline in-house as well as our partners.

CSR Procurement Policy

The DOWA group endeavors to deepen understanding of our partners of CSR procurement policy. When we select our partners, we will consider Q (Quality), C (Cost) and D (Delivery) plus S (Sustainability) that is their social responsibility effort for environment, human rights and labor safety. With this in mind, we will evaluate and select

our partners comprehensively, fairly and impartially.

We will strive to build a mutually reliable relationship with our partners who produce excellent products properly meeting the needs of our customers, aiming at mutual prosperity.

1

Legal compliance and fair trade

We consider not only compliance but also fairness and impartiality as the top priority and we endeavor to conduct fair trade with our partners. We ask all our partners to comply with relevant laws and in-house rules and regulations before starting trading with us.

2

Optimal quality and fair price

We will ensure quality required by our customers and provide our products at a fair price in collaboration with our partners. We ask our partners to put their quality assurance system in place and provide us with materials and services that are competitive in the market.

3

Establishing a stable supply system

We endeavor to prepare Business Continuity Plans (BCP) in each business entity in the group and ensure stable supply of products to our customers even in emergencies. We ask our partners to build a stable supply system of materials and services and conduct risk management for emergencies to ensure timely delivery.

4

Sustainability

We will try to recycle resources based on 3R's (Reduce, Reuse and Recycle) to contribute to sustainable society and promote purchasing of resources and materials with less environmental burdens (Green Procurement). We ask our partners to ensure environmental conservation, respect for human rights, and workplace health and safety. When we select our partners, we place value on the management system that can continuously improve sustainability.

5

Information Protection

We will not disclose confidential information of our partners to third parties without permission. We ask our partners to keep confidential and personal information obtained in the course of business with our group in strict confidence and not to disclose such to in-house and external third parties without permission from us.

6

CSR Procurement Guideline

We are promoting procurement, based on the DOWA group's CSR Procurement Guideline. We ask our partners to implement CSR procurement as part of our supply chain, notify their relevant parties of this policy to deepen their understanding and obtain cooperation from them.

Safety

The DOWA group put in place a “safety and health committee” in each of its business entities in Japan and other countries to promote safety activities according to the annual health and safety plan, based on our basic philosophy of “Safety is the top priority.” We started up the Safety Activity Project across the Group last year and enhanced joint efforts per district. We are committed to raising the level of safety activities across the group.

CSR Policy

- All employees will take part in safety activities with their own initiatives to improve the level of health and safety in the workplace, based on our basic philosophy of “Safety is the top priority.”
- To prevent work-related accidents and support the sound health of employees.

Progress of Activities

Following is the progress of our safety activities and issues in 2014.

| Safety/Goals of Safety | FY of 2013 | | | FY of 2014 | |
|------------------------------------------------------|-------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| | Measures | Evaluation* | Main results | Activity | Target |
| Enhancement of risk management | Starting up of the Group Safety Activity Project | A | <ul style="list-style-type: none"> • Briefing across the group (kick off meeting) • Starting up district meetings. | To enhance district activities. Follow-up the development of the project of each business entity. | Half the number of accidents causing absence of work |
| Enhancement of safety education throughout the group | Strengthening the programs outside Japan | A | <ul style="list-style-type: none"> • Support for safety activities of logistics in South East Asia • Improvement of activities related to Safety Conference in China | Start programs to visit Japan for training | Accepting 20 persons for the first trainees |
| | Continuous implementation educational courses to experience risks | A | <ul style="list-style-type: none"> • Support for educational courses to experience risks (306 persons took the course.) | To continuously implement educational courses to experience risks To promote such education to business entity outside Japan | 300 persons take the course annually |

*Evaluation: A+: More than expected, A: accomplished, C: Not Satisfactory, D: Not Accomplished

Enhancement of Risk Management

We held the briefing across the group as a kick off for the first half of Fiscal year 2013 to develop the Safety Activity project across the group. We set up a secretariat (sponsoring business entity) per district in the latter half of FY and started up district meetings to share information on the status of the activity of each company in each district and for mutual consultation.

In 2014 we will promote these activities per district mainly focusing on those district meetings.

Enhancement of Safety Education across the Group

Outside Japan, we promoted support for safety activities for logistics business in South East Asia (Thailand and Indonesia) and encouraged all of our business entities in China to participate in the Safety Conference.

In 2014 we will start up a training program for local employees outside Japan in the Technical Training Center of the DOWA group (Handa City, Shizuoka Prefecture), Japan.

The program shall provide safety educa-

tion to local employees of business entities of DOWA outside Japan and to raise safety awareness of those in charge of safety outside of Japan.

We will continue offering safety courses that TABMEC has been providing since 2010 as part of educational courses to gain understanding of risks, improve sensitivity to these risks and raise safety awareness. We are planning to offer educational courses to gain understanding of risks, utilizing Safety Training Center of DOWA Metals and Mining for local employees outside Japan in 2014.



Safety Activity Project across the Group

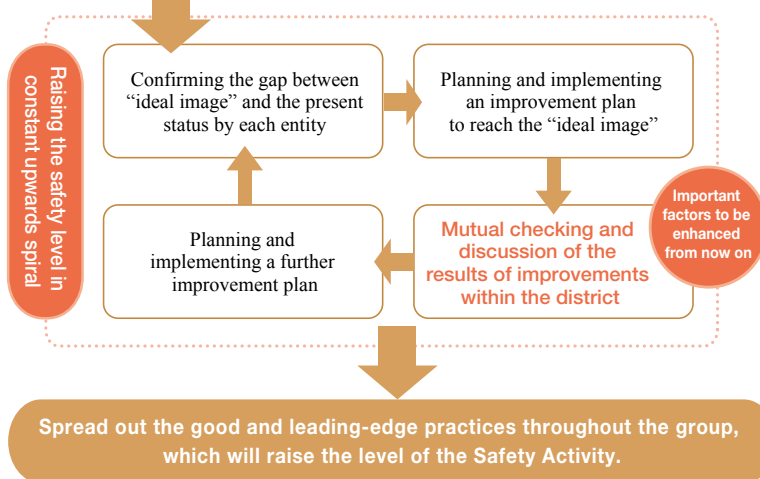
The DOWA group started the “Safety Activity Project across the Group” in September 2012 and placed this project as a focus project for safety. Safety activities are being implemented in all business entities in and outside Japan including health and safety committee and patrols. However, some business entities have more accidents than others. We reviewed such differences and discovered a great gap between the attitudes and methods of safety activities employed at each entity. This discovery made us define across the group what the most effective safety activity is, based on the successful cases. We formulated a policy to raise the level of safety of the DOWA group by adopting the most effective activity for all the establishments across the group.

Safety Activity Project

| | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Policy | To determine standard activities and their details, based on good practice cases of safety activity in the group and develop them across the group. |
| Key ideas | <ul style="list-style-type: none"> • Integration of the “top down” (instantaneous effect) and the “bottom up” (continuous effect). • Improvement of effectiveness of the safety activity. • Safety activities in which all employees participate and can clearly identify of their roles. |



Formation of the safety standards of the DOWA group which is the “ideal image” of safety activities, worked mainly by the project members



With the slogan of “No One Is Hurt—No One Hurts Others” the person in charge of safety activities in major business entities in Japan was appointed as a member of this project. They discussed under the supervision of a director from the headquarters in charge of safety, the “ideal image” of safety activities, including potential accident prevention measures, risk assessment and safety patrols for almost a year. We held a whole group briefing on the standard in August 2013 as a kick-off event to fully spread out the safety standard of DOWA that consists of 10 items such as: potential accident prevention measures, risk assessment and safety patrols.

We started up a district meeting, discussion group organized according to districts, in the latter half of 2013 to

follow up the individual activities in each of our business entities. Our companies in Japan were organized into district blocks, regardless of their operating company, and in each district a secretariat for safety was established. The secretariat shall function as a place to share information of safety activity status of each company by district and also for mutual consultation. This will further strengthen deployment and spreading out of safety activities in each company and also raise the level of safety of each district through mutual consultation.

In 2014 we will further enhance activities of each district (joint patrol and audit in each district) centering on the district meeting.

Safety

Our Efforts for Occupational Health and Safety

Promotion of safety activity

We had offered “Joint Cross-Checking Safety Patrol” sessions, safety environmental compliance seminars and risk assessment presentations jointly with our business entities in Japan every year on a periodic basis and promote safety activities throughout the whole Holdings group even before the this Safety Activity Project started.



Risk assessment presentation

Our activities in Japan

Environment and Safety Compliance Seminars

We strive to raise awareness of employees on the environment and safety through Compliance Seminars for safety and environment by outside lecturers, through case studies of environmental accidents of other companies, and role-play exercises of environmental accidents. These compliance seminars have been held since 2010. In 2013 we held them at four places and a total of 81 persons participated.

| Place | Date | No. of Participants |
|------------------------------|--------------|---------------------|
| Eco-System Chiba | July 27 | 23 |
| Eco-System Sanyo | September 10 | 13 |
| Kosaka Smelting and Refining | November 28 | 30 |
| CEMM | January 22 | 15 |

Details of 2013 compliance seminars



Environmental safety compliance seminar

Joint Cross-Checking Safety Patrols

Joint safety patrol sessions are held jointly with our business entities in the Northern, Kanto, Chukyo and Western districts in Japan once a year as a rule. We try to raise the safety level of each establishment and increase sensitivity to risks of participants in safety patrol by identifying un-safe situations and behaviors from the third party's viewpoint. This patrol is organized beyond the boundary of an operating company to which each business belongs. Sixty-one participated in the patrol in 2013.

| Place | Date | No. of Participants |
|------------------------------|--------------|---------------------|
| Eco-System Chiba | August 23 | 17 |
| Kosaka Smelting and Refining | September 19 | 13 |
| DOWA Hightech | October 29 | 17 |
| Handa Plant, Thermotech, | December 17 | 14 |

Description of 2013 safety patrol



Joint Cross-Checking Safety Patrols

Our activities outside Japan

Thailand

The four operating companies of the DOWA operate in five different places in Thailand, where many industries gather as a major marketplace in South East Asia. Safety activities similar to those in Japan also started as a joint activity of all five companies in Thailand. Each company organizes joint safety patrol and holds safety related conferences in turn. Local employees in charge of safety have built a human network beyond the boundaries of

The DOWA group promotes safety activities also outside Japan, especially in Asia where our presence has increased dramatically. We promote exchange and communication on safety activities among our business entities outside Japan, especially in Thailand and China.

the company they belong to. Concluding the activities of last year, a conference to present the results of safety activities called “DOWA Safety Award” was held in a hotel in Bangkok, Thailand. Some applications for this award were from Indonesia and China. All participants rated the presentations and top three were awarded. We shall continue to promote exchange and communication programs among those companies and we are committed to raising the level of safety all over Thailand.



DOWA Safety Award in Thailand



China

The DOWA group has seven business entities in China. They have held the “Safety Conference in China” in turn two or three times a year since 2011. The management and employees in charge of safety in all DOWA businesses in China participate in the conference. There they deliver presentations about joint safety patrols and recent cases of

accidents from each company and discuss the problems. The CSR department of DOWA Holdings sent people to the conference in 2013 and delivered a presentation on the safety activities in Japan and exchanged opinions with local employees. We will further promote exchange programs on common issues and concerns among all of those companies and joint study session for local employees.



Joint Cross-Checking Safety Patrols (China)

Status of Occupational Accidents

[2013 accident incidents at the DOWA group’s production sites]

The frequency of accidents at DOWA group’s production sites was compared to that of other companies of similar scale listed in the occupational accident statistics by the Ministry of Health, Labor and Welfare. DOWA’s frequency rate was 1.30 compared to that of the 2.89 of other companies and the severity rate was 0.06 which other same scale companies was 0.28, which showed that the accident rates were lower than the same scale companies.

Note: These rates are compared to those confirmed values of the accident statistics in 2012 for a company with 30 to 99 employees (average number of employees in each one of DOWA group’s production bases).

Evaluation from Society

The Industrial Safety and Health Administrator Award for Groups Conferred

DOWA Okayama (9 operating subsidiaries in the same site) received the Group Industrial Safety and Health Administrator Group Award from the Okayama branch of the Okayama Labor Standards Associations in May 2013. The DOWA Okayama was

awarded because there were no occupational accident occurred in 2012. Also recognized was its contribution to preventing labor accidents in constituent production sites, including presentation on supervisor education by a unique curriculum and studies on risk assessment of shipment of fuming sulfuric acid in the National Safety and Health Conference held in Toyama that the company delivered last year.



The Labor Standards Associations Chairman Award for Individuals Conferred

The 60th Akita Industrial Safety and Health Conference was held in October 2013. Mr. Sato, Work Group Leader, Production Department, Akita Zinc Solutions received the Labor Standards Associations

Chairman Award for Individuals. Mr. Sato, in charge of safety and health has been engaged in planning and implementing the annual activity plan since 2002. He has been promoting safety education such as risk assessment to employees enthusiastically and endeavored to prevent accidents. His dedication is the reason of the award.



We will continue to maintain the group’s record of no accident or disaster, ensure safety and health of employees and increase business results by promoting and improving safety and health activities.

Environment

The DOWA regards environmental conservation as a key issue in our business management and is committed to its promotion. In our environmental activities we are responding to environmental and social issues directly through our main business and at the same time we are reducing the environmental burden produced by our business. We will strive for environmental conservation and to create economic value of the conservation activity at the same time.

- CSR Policy**
- We will provide customers with products and services that contribute to building a resource-recycling society.
 - We will reduce environmental burdens and risks in our business activities.
 - The management and employees together take part in environmental conservation activities.
 - We will promote business activities considering biodiversity.

Progress of Activities

Following is the progress of our social activities and issues in 2014.

| Environment/Goals of Environment | FY of 2013 | | | FY of 2014 | |
|--------------------------------------------------------------------------|-------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| | Measures | Evaluation* | Main results | Activities | Target |
| Global warming measures | Reduction of total amount of greenhouse gas emission | D | <ul style="list-style-type: none"> • Emission of greenhouse gas: 1,718 ton of CO₂. • Emission of greenhouse gas for domestic companies: 16% increase compared to last year | Reduction of total amount of emission of greenhouse gas Increase of electricity generated by renewable energy sources (solar, water) | Total emission and electricity generated |
| | Information sharing on global warming measures in the group | C | <ul style="list-style-type: none"> • Questionnaire on progress status of global warming measures by business entity and present status | Sharing by information visualization | System implementation |
| Promoting resource-recycling | Enhanced development of recycling technologies | A | <ul style="list-style-type: none"> • Increase of silver production • Improvement of copper electrolysis technologies • Increase collection of recycling materials from North America and Asia | Expansion of material recycling | Amount of recycling |
| Promoting environmentally-friendly products and renewable energy fields. | Selection of LCA items | D | <ul style="list-style-type: none"> • LCA not implemented | | |
| | | A | <ul style="list-style-type: none"> • Increased production of metal ceramics PCB for renewable energy related products • Increased orders for services on solar generation and offshore wind generation on the ocean | Expansion into renewable energy field | Sales |
| Conservation of biodiversity | Formulation of Biodiversity Conservation Policy | A+ | <ul style="list-style-type: none"> • Conducted biodiversity survey and formulated a biodiversity conservation guideline | To conduct a survey on present status of biodiversity Conservation Conduct water risk assessment | Implementation of survey and assessment |
| | Continuous afforestation and forest management | A | <ul style="list-style-type: none"> • Promoted forest fostering (Planted 5,400 trees in Kosaka-machi, Akita, Promotion of forest management) | To continue afforestation and forest management | Numbers of trees to be planted |

*Evaluation: A+: More than expected, A: accomplished, C: Not Satisfactory, D: Not Accomplished

Global Warming Measure

Emission of greenhouse gas increased to 1,718 tons of CO₂ as compared to 1,490 last year, although we tackled with global warming measures focusing on energy saving in the production process. Increase of emission of greenhouse gas for companies in Japan is mainly due to increased fuel usage in connection with expansion of production and processing throughput. However, the increase of the commercial electricity emission factor contributed to the increase partially. We are committed to further reducing fuel usage and at the same time increase usage of in-house renewable power generation such as hydraulic and solar generation.

Promoting Resource-Recycling

Kosaka Smelting and Refining recovers copper, gold and silver using furnaces dedicated for recycling. Those furnaces can even recover electronic scraps. Kosaka ranked the top in Japan for silver recovery. Kosaka also stabilized its operation by improving the copper electrolysis process in 2013. In 2014 we endeavor to improve recycling technologies and expansion of resource-recycling within the group.

Promoting Eco-friendly Products and Renewable Energy Fields

We planned to promote LCA (Life cycle assessment), aimed at expansion of eco-

friendly products; however, we were unable to successfully select the targeted products in 2013. As for the renewable energy field, production of silver for PVs recorded the highest and the survey on and technology due-diligence of solar power generation expanded in our environmental consulting business. These contributed to introduction and implementation of renewable energy sources. We strive to develop innovative technologies and energy saving technologies as well as diversify our business fields.

Conservation of Biodiversity

We formulated DOWA's basic policy and course of action of biodiversity in 2013. In 2014 we will acquaint all employees of the policy thoroughly and conduct a survey for preparation of biodiversity conservation plan.



Environment Focus Measures

Our activities towards Biodiversity

DOWA enjoys the blessings of nature through purchasing raw materials and consuming water and energy, but, on the other hand, our business activities affect nature directly and indirectly in terms of emission of wastes, effluent, chemical substances and CO₂. We recognize both sides of our business and conduct our business activities in a way to contribute to biodiversity and environmental conservation.

Sustainable Use of Biodiversity and Ecosystem Service

Our activities on biodiversity and ecosystem conservation have been concentrated on protection of nature and local contribution through management of our own forests and planting trees. We once destroyed forests in our mining business.

Greening and reconstruction of vegetation of those areas is our mission and we have been actively engaged in those activities. These conservation activities also played a great role to increase communication and exchange between DOWA and local communities.

Increasing importance of biodiversity requires business to quickly respond to conservation needs and sustainable use of

biodiversity.

For this purpose we formulated DOWA's basic policy and course of action of biodiversity in 2013. We will help make our employees understand the relationship between our business activities and the ecosystem as well as trends on biodiversity. We also will reflect the contents of the policy and the course of action into our business activities across the group.

The Basic Policy of Biodiversity

DOWA recognizes that it enjoys the blessings of nature brought by biodiversity for its business activities and that it is important to conserve biodiversity to enjoy them on a sustainable basis. DOWA strives to continuously and vigorously promote biodiversity conservation and its sustainable use.

Our Action Policy on Biodiversity Conservation

1

Identification of business impacts on biodiversity and implementation of activities

We identify and analyze what type of ecosystem services* our business activities depend and have impact on, and make an effort to avoid and reduce the impacts.

2

Awareness of employees

We carry out education and awareness-raising of biodiversity on our employees.

3

Corporate management for sound material cycles

We strive to create a culture of sound material cycles through sustainable resources use, energy saving and 3R, and to conserve biodiversity through such comprehensive business activities.

4

Collaboration with various stakeholders

We promote communication and information sharing on biodiversity conservation, and seek sustainable use of biodiversity with various stakeholders related to our business activities.

In 2014 we will review which activities we should place priority on; how we should conserve biodiversity from the standpoint of relationship between our business activities and ecosystem.

We will continue to hold a tree-planting ceremony and educational courses on forests for parents and children, in cooperation with local communities to deepen their understanding of our business and ecosystem conservation activities.

We will conduct multidimensional activities including CSR procurement through our supply chain and understanding of risks involving water that is our very important natural resource.

Environment

Material Balance of DOWA Group

The DOWA group identifies the input of resources and energy into the business activities of the DOWA group (“INPUT”) and the output of products produced and the discharged amount of substances imposing environmental burden (“OUTPUT”) in each stage of its lifecycle in a quantitative way and conduct business considering material balance.

Resource-Recycling in Society and Our Resource-Recycling

We can look at our business from two sides: product manufacturing business where metal materials and semiconductors are produced and environmental business of wastes recycling, processing and soil remediation.

We not only contribute to society through our business activities but also make use of most of the waste generated in the product manufacturing business as raw materials after they are recycled in the environmental business. Also in the environmental business we effectively utilize heat generated when waste are incinerated in the waste treatment process. This waste heat is recovered as steam and electricity and we use them in other processes as energy. These examples show we use materials and energy within the group and conduct our business with consideration of resource-recycling.

Material Balance of 2013

Environmental burden outside Japan increased compared to last year, as three new companies started operation outside Japan in 2013.

○ INPUT

The amount of purchased power and fossil fuel consumption increased in connection with increased production and treatment. Total amount of energy input increased by 11% compared to previous year. As for total material input, accepted waste increased by 9% and amount of materials used increased by 4% compared to previous year.

○ OUTPUT

Total emission of GHG (greenhouse gas) increased by 16% compared to previous year as a result of increased energy input and worse electricity emission factor in Japan. As for total waste recycling that occurred, material recycling increased dramatically by 29% compared to previous year, while the amount of wastes decreased by 5 % compared to previous year.

For details of each item, see following pages.

INPUT

Energy 17.4 PJ

Compared to previous year
+11%

| | |
|----------------------------|----------------|
| Fossil fuel consumption | 124 (1,000 KL) |
| Electricity | |
| Purchased power | 1,266 GWh |
| Thermal power generation | 1.4 GWh |
| Hydraulic power generation | 67.8 GWh |
| Solar power generation | 303 MWh |
| Purchased steam | 578 GJ |

Raw and Packaging Materials 1,006 (1,000 t)

Compared to previous year
+6%

| | |
|---------------------------------------------|---------------|
| Raw material | 792 (1,000 t) |
| Subsidiary material | 142 (1,000 t) |
| Materials for heat treatment on consignment | 69 (1,000 t) |
| Packaging material | 2.3 (1,000 t) |

Water resource 1.03 million m³

Compared to previous year
-2%

Accepted wastes 1,122 (1,000 t)

Compared to previous year
+9%

| | |
|-------------------|---------------|
| Wastes | 991 (1,000 t) |
| Contaminated soil | 131 (1,000 t) |
| Destructed CFC | 41 t |

Recycled



DOWA group

R & D

Procurement of raw materials

Product
Manufacturing
Business

Environmental
Business

Power generation
by waste heat

74 GWh

Compared to
previous year
+19%

Power generated
from recovered heat

719 TJ

Compared to
previous year
+8%

Amount of material

OUTPUT

Greenhouse gas

1,718 (1,000 t)
(as converted to CO₂)

Compared to
previous year
+16%

Derived from electricity 752 (1,000 t)
(as converted to CO₂)

Derived from fuel 343 (1,000 t)
(as converted to CO₂)

Derived from wastes 624 (1,000 t)
(as converted to CO₂)

Discharged chemical
substances 2,526 t

Compared to
previous year
+10%

Products 569 (1,000 t)

Sold power 2.2 GWh

Compared to
previous year
+1%

Amount of waste and recycling

1,362 (1,000 t)

Amount of recycling 845 (1,000 t)

Thermal recycling 471 (1,000 t)

Directly from the DOWA group 438 (1,000 t)

Outside the DOWA group 33 (1,000 t)

Material recycling 374 (1,000 t)

Directly from the DOWA group 156 (1,000 t)

Outside the DOWA group 218 (1,000 t)

Treated Waste 517 (1,000 t)

Effluent 104 million m³

Compared to
previous year
+8%

In-house recycling

Environment

Our Measure to Fight against Global Warming

The DOWA group set a goal of “15% reduction of specific consumption of CO₂ by 2020, compared to 1990” according to the Action Plan to Implement Low Carbon Society by Nippon Keidanren (Japan Business Federation) and the Japan Mining Industry Association (published as of January 2013) as a measure to fight against global warming.

○ Changes of Emission of GHG

The CO₂ emission derived from GHG in 2013 was, 1,718,000 t-CO₂ (1,677,000 t-CO₂ in Japan and 40,000 t-CO₂ outside Japan). The CO₂ emission from GHG in Japan increased by approximately 16%. It is attributable to increase of power consumption resulted from the increased zinc production in Akita Zinc and increase of fossil fuel consumption in connection with the increased processing of wastes in Eco-System Okayama. Outside Japan, mainly CO₂ emission derived from fossil fuel increased. This is attributable to addition of three plants in Asian countries in 2013.

We will continue to promote measures for effective use of energy and conduct activities to reduce CO₂ emission on a daily basis.

We accept wastes from other companies outside the DOWA group for incineration in our plants. Therefore, their CO₂ emission accounts for a large part of our CO₂ emission. As it is difficult to control the amount of wastes we receive from other companies and reduce CO₂ emission, we try to increase thermal recycling through power generation using heat and steam from incinerating those wastes.

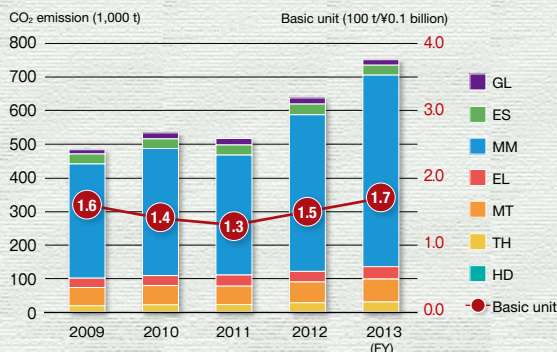
We also use heat from incinerated wastes for destruction of CFC that destroys the Ozone layer and alternative for CFC such as HFC and PFC, which are the cause of global warming.

Our CO₂ Reduction Efforts in 2013

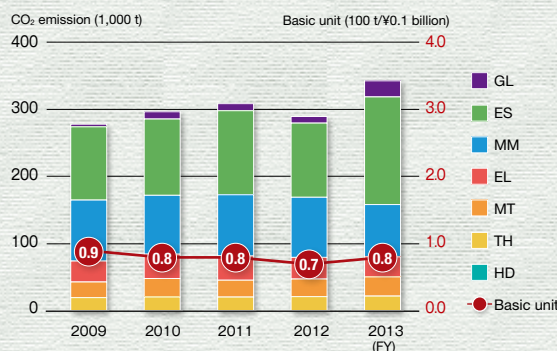
We changed the type of fuel and introduced LED lighting for our equipment and facilities. We stopped a new capital investment and reduced the temperature of air conditioning to save energy. We made a modal shift to railways and ships that emit less CO₂. We also tried to collect and deliver products more effectively.

| | |
|-----------------------------------------------------------------------------------|-------------------------------------------------|
| ● Conversion of fuel for equipment from heavy oil to natural gas | Amount of CO ₂ reduction 116t/year |
| ● Replacement of compressors to new ones to reduce the number of compressors used | Amount of CO ₂ reduction 7,600t/year |
| ● Energy saving by recovering heat from incinerated wastes | Amount of fuel reduction 37.9 kl/year |
| ● Increased cooling efficiency of air cooling chillers by sprinkling water | Amount of CO ₂ reduction 8.6t/year |

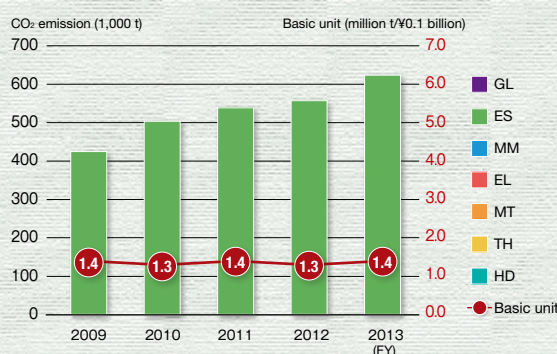
〈Derived from electricity〉



〈Derived from fossil fuel〉



〈Derived from wastes only in Japan〉



Note: CO₂ is calculated by multiplying grid-purchased electricity, fossil fuel consumption and amount of accepted waste by emission factor set forth in the Act on Promotion of Global Warming Countermeasures. However, CO₂ emission derived from accepted waste does not always correspond to the value submitted to administration authorities, because part of the prerequisites used in the method for this report differ from that for the reports to administration authorities. As segregation of waste differs between Japan and other countries, it is difficult to set a proper emission factor to such emission. Therefore CO₂ emission derived from waste shown here are only from our business entities in Japan.



Utilization of Renewable Energy

The DOWA group is aggressively promoting use of renewable energy that has less environmental burden as well as energy saving and conversion of fuel as part of global warming measures.

Renewable energy is produced from natural power and by effective use of disposed energy. This enables reduction of fossil fuel usage and CO₂ emission.

■ Power generation from wastes

Power generation from wastes effectively utilizes wasted heat. Heat generated when wastes are incinerated is used to generate steam and in turn steam run turbines to generate electricity. It is an excellent system to reduce consumption of fossil fuel such as oil, resulting in reduction of CO₂ emission. Four business entities in Japan and one outside Japan are engaged in power generation in the DOWA group. Amount of electricity generated from wasted heat increased by approximately 20%, amounting 74.3GWh compared to previous year in 2013.



■ Hydraulic power generation

This utilizes water flow to generate electricity, and is purely a domestic energy with less environmental burden. Kosaka Smelting and Refining started power generation in 1879 to produce gold, silver and copper. Kosaka has six hydraulic power plants in Akita Prefecture now. Power generated in 2013 increased by approximately 13%, amounting to 67.8GWh compared to previous year. These are major power sources of smelting business of DOWA.



■ Solar power generation

Four companies of DOWA implemented the solar power generation system in Japan. The total power generated by these four companies is approximately 300MWh in 2013. Despite the fact output from the solar power generation system is dependent on weather conditions, output can be visualized in a display, thus, helping to raise employees' awareness of energy-saving and to enlighten visitors on global warming and energy issues.



■ Biodiesel

Biodiesel Okayama recovers used cooking oil from homes, convenient stores, restaurants and food manufacturing plants and produces BDF (Biodiesel fuel) jointly with Okayama City. The fuel is used for garbage trucks and buses of Okayama City and trucks and forklifts within the premises of DOWA companies as alternative fuel for diesel oil, contributing to CO₂ reduction. The quality certification system of the Zenkoku Biodiesel Nenryo Suishin Kyogikai (National Biodiesel Fuel Promotion Council) recognized that the BDF of Biodiesel Okayama is of top quality.



Evaluation from Society


“Okayama Environmental Grand Prize” Awarded to Biodiesel Okayama's Initiative

Biodiesel Okayama received the Okayama Environmental Grand Prize for the field of promoting to build resource-recycling society in October 2013. The reason of the award is as follows: Its initiative to convert used cooking oil to biodiesel fuel contributed to building resource-recycling society; and its active environmental education program helped to enlighten people on importance and mechanism of recycling.



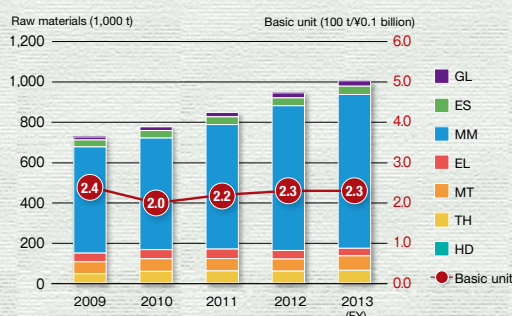
Environment

Promoting Resource-Recycling

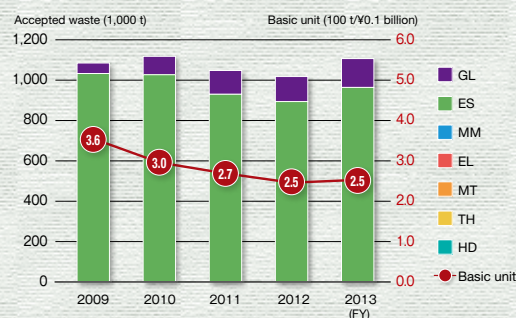
The DOWA group is committed to contributing to build a sustainable society by restricting consumption of natural resources and promoting recycling of used resources. 

○ INPUT

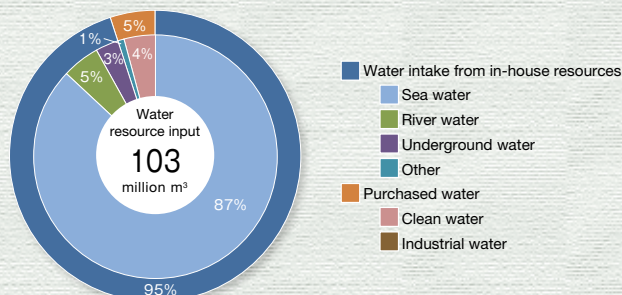
〈Raw material〉 The amount of raw materials used in 2013 is 1,006,000 t, increase by 6% compared to previous year.



〈Accepted wastes〉 The amount of accepted wastes in 2013 is 1,122,000 t, an increase of 9% compared to previous year. This is attributable to increase of accepted wastes of Eco-System Chiba and Eco-System Hanaoka.



〈Water resource〉 Water resource input in 2013 is 103 million m³, decrease by 2% compared to previous year. The top water usage is cooling water, accounting for approximately 87% of the entire water usage. Sea water is used for cooling. Fresh water usage accounts for approximately 13 % of the entire water resource input. Fresh water is used for production and clean water.



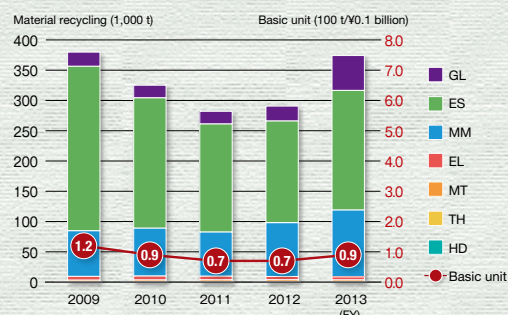
Resource Saving and Recycling Efforts in 2013

- Thorough operation control
 - Expansion of usage of raw materials smelted in-house for iron manufacturing
 - Reduction of variation of plating thickness
 - Recycling of face milling and shaping scraps
- Reduction of usage of coke by 7%
- Reduction of purchased raw materials by approximately 16%
- Reduction of raw material for tin by approximately 2%
- Increase of recycled materials by 1,837 kg

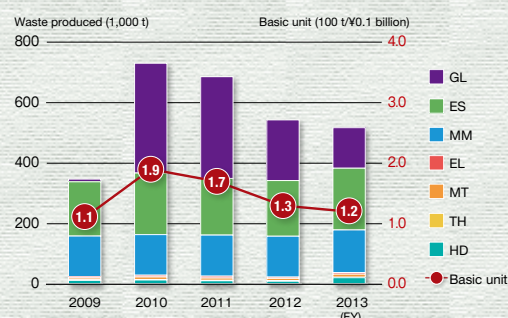
○ OUTPUT

〈Products〉 Products manufactured in 2013 is 569,000 t, 4% increase compared to previous year. It is attributable to increased shipment of zinc and processed zinc products.

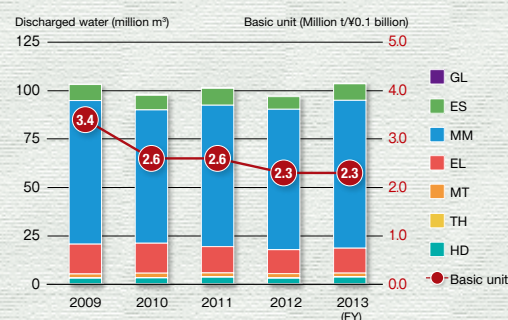
〈Material recycling〉 The amount of material recycling in 2013 is 374,000 t, a dramatic increase by 29% compared to previous year. The material recycled within the DOWA group accounts for 156,000 t, while that outside the group accounts for 218,000 t. It is mainly due to the increased soil recycling and recycling of used oil.



〈Waste〉 The amount of wastes produced in 2013 is 517,000 t, 5% decrease from previous year.



〈Discharged water〉 Total discharged water in 2013 is 104,000 t, 7% increase from previous year. It is caused by the increase of discharged rain water as a result of increased rainfall. It is also attributable to the increased use of sea water for cooling in connection to the increase zinc production.





Expanding into Eco-friendly Products and Renewable Energy Fields

The FIT (Feed in Tariff) system started in Japan in 2012 for the purpose of expanding the use of renewable energy including solar power, wind power or biomass. This system has been steadily propelled implementation of solar and wind power generation.

The DOWA group is committed to spreading renewable energy by providing products and technologies for various equipment in the field.

○ Metal Ceramic Printed Circuit Board (PCB) by DOWA

DOWA's metal ceramic PCB circuit board is an insulating substrate for semiconductor devices that effectively control electricity. Our product is reliable with excellent insulation and heat dissipation properties and used widely for pressure resistant power modules used in industrial machinery. Power modules used for wind or solar power generation require better performance. As such, we endeavor to mass-produce products with high pressure resistance and reliability such as substrates integrated with aluminum bases to respond to expanding demands.



DOWA's Eco Products Contributing to Environmental and Energy Fields

We are trying to develop materials that contribute to reduction of environmental burden and improve their technologies across the entire supply chain so that our client companies manufacture products that use our materials; and thereby realizing energy saving, resource saving and hazardous substance-free society.

〈Nitride-based HEMT epitaxial substrates〉

Material for power semiconductor devices

| | |
|---------------------------|-------------------------------------------------------------------------------------------------------------|
| Applications | Power supply of home electric appliance, server and hybrid car |
| Environmental performance | Energy saving, electric resistance lower than silicon-based substrates and power loss control of one third. |



〈Deep ultraviolet LED〉

LED that can output deep ultraviolet of 350 nm or less

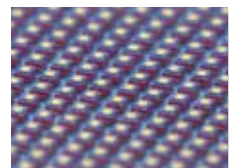
| | |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applications | Resin hardening, adhesion, drying, medical treatment, analysis, photocatalyst or water purification |
| Environmental performance | Energy saving, high efficiency, long life cycle, reduction of hazardous substances (lead-free) and wavelength (300nm or less) to realize disinfection and sterilization of water or material surface efficiently |



〈MR (laminate) LED〉

High output infra-red LED chips with a bonding technology that bonds a highly functionalized epitaxial thin film substrate consisting of several tens of crystalline layers in a nanometer order to the substrate with a metal reflection part.

| | |
|---------------------------|-----------------------------------------------------|
| Applications | Proximity sensors for smart phones |
| Environmental performance | Energy saving/less power consumption by high output |



Evaluation from Society

The Harunari Inoue Award for Nitride-based HEMT Epitaxial Substrates

The nitride-based HEMT epitaxial substrates developed by the Semiconductor Business Unit of DOWA Electronics received the Harunari Inoue Award* in July 2013. DOWA Semiconductor Materials Laboratory developed the substrate as material for power semiconductor devices, based on the joint research with Professor Egawa of Nagoya Institute of Technology. Akita Semiconductor succeeded in commercial production. All those achievements are the reason for this award.

The power semiconductor devices using the nitride-based HEMT epitaxial substrates are the core parts of eco-friendly home appliances and eco-friendly cars to enable reduction of power loss and contributing to energy saving.



*Harunari Inoue Award: This award is to recognize scientific technologies that are developed and commercially produced by business entities, based on the research and technologies developed by research institutions such as universities. The award is given twice a year.

Society

The DOWA group enhances the relationship with society through CSR activities, aimed at being a company trusted by all stakeholders. We believe it important that not only each of our business entity but also each employee of DOWA is aware of his/her responsibility as a corporate citizen. We also regard that promotion of activities in local society is one of our focus fields.

CSR Policy Promoting social contribution considering unique characteristic of each local community together with local people

Progress of Activities Following is the progress of our social activities and issues in 2014.

| Society/Goals of Society | FY 2013 | | | FY 2014 | |
|-----------------------------------|------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| | Measures | Evaluation* | Main results | Issues | Target |
| Promoting diversity management | Promoting employment of elderly people | A | ●Revision of the re-employment system to hire experienced retired employees for them to work with motivation across the group. | To offer information on life planning after retirement (Holding seminars) | Number of reemployed persons |
| | Promoting employment of disabled people | C | ●Implemented measures to achieve the legally stipulated employment rate | To implement the plan to promote employment of the disabled | Progress rate of plans |
| Promoting work-life balance | Preparation of an action plan to support for fostering the next generation | A | ●Prepared and published an action plan to support for fostering the next generation ●Raised awareness of the childcare program ●Promotion of joint efforts of labor and management to reduce working hours and thorough management of working hours by introducing a new system | To promote implementation of the action plan to support for fostering the next generation | Progress rate of plans |
| | | A | ●Implemented the questionnaire to the newly employed. ●Implemented initiatives to increase the number of employees to take paid leaves such as scheduled annual leaves. | To increase the number of employees to take paid leaves such as scheduled annual leaves | The number of employees who took paid leaves |
| Contribution to local communities | Promoting social contribution, reflecting unique characteristics of each local community | A | ●Collected information on contribution to local communities in the business entities outside Japan ●Holding and operating events with local communities (Marathon, ski competition, cherry blossom festival) | To conduct interviews in our business entities outside Japan and support for local contribution activities in the business entities outside Japan To continue to promote events with local communities | Survey on business entities outside Japan and the number of visits there |
| Promoting in-house CSR education | Improving in-house portal site | A | ●Published E-mail news ●Posted explanation on focus measures of CSR (CSR procurement or safety labor, etc.) | To expand CSR education To improve in-house portal site To use group news letter | Frequency of renewal |

*Evaluation: A+: More than expected, A: accomplished, C: Not Satisfactory, D: Not Accomplished

Promoting Diversity

We reviewed the existing system to reemploy the retired and experienced employees and changed a flat wage system to a wage system according to job rank. We believe the new system will better serve in terms of skills of each employee. We are committed to improve the system so that the retired and experienced employees can demonstrate their skills again.

Employment of disabled people increased in the DOWA group; however, it has not reached the legally stipulated rate. We will review the issue and consider more effective measures.

Promoting Work-life Balance

We formulated a new action plan to support for fostering the next generation in 2013. As mentioned above, the new

plan contains plans to raise awareness of existing support system and stricter control of working hours. We implemented the questionnaire to the newly employed on what system they want to take such as volunteer vacation or flex time or how easily they can take leaves. We will introduce new systems to balance work and life of employees and promote those initiatives.

Contribution to Local Communities

We held various events with local communities, including a marathon, a cherry blossom festival in Okayama Prefecture and a junior cross country ski competition in Akita Prefecture in 2013. Many people participated in these events. We also conducted a survey and collected information on the present status of social contribution

activities of our business entities outside Japan. Our CSR Department conducted interview in our business entities outside Japan and extend support for social contribution according to unique local cultures and characteristics in each country.

Promoting In-house CSR Education

We tried to publish our policies, related laws and our initiatives on our website in 2013. We will deliver CSR education on international standards such as Global Compact and ISO26000 and other topics such as CSR issues in the supply chain. In addition to offering information, we aim at raising awareness of each employee on concepts and initiatives on CSR by expanding bidirectional educational opportunities.



Society Focus Measures

Social Contribution outside Japan

DOWA started mine development in more than twenty countries outside Japan in the 1920's. This was DOWA's first business deployment outside Japan. DOWA has continued business activities aggressively outside Japan, responding to changing markets and users. We have been expanding our business focusing on Asian countries who enjoy high economic growth, including China and South East Asia, especially since 2000. Survival and growth of DOWA's business depend on sustainable development of those countries and regions where DOWA's business entities are located. As such, we try to resolve social problems that those countries and regions face in cooperation with local communities.

Local Contribution of Waste Treatment and Recycling Plant in Thailand

Eastern Seaboard Environmental Complex (ESBEC) is engaged in waste treatment and recycling business of used oil and classification of valuable resources. This DOWA's final treatment site meets the standard of US EPA (Environmental Protection Agency). The Complex conducts safe and stable operation as a facility considering environment around the site by completely processing effluent, recovering methane and preventing odor.



Major Local Contribution Activities in 2013

ESBEC participates in the local community as a corporate citizen and believes it an important social responsibility to contribute to development of the local community through communication. Through various types of relationship with local stakeholders, ESBEC supports children who will play an important role in the next generation, and is aggressively propelling activities related to local contribution, emphasizing environment and health field that has a close connection to its main business.



Education fund

Provided financial support to an education fund to dispatch sufficient number of teachers to three local schools.



Environmental education

Offered environmental education through plant visits and held an art event to make an eco-bag.



Communication with local community

Held many dialogue sessions and plant visits by local people to deepen their understanding and promote communication with them.



Scholarship

Offers scholarship to six local elementary and junior high schools to support for poor children to take school education.



Recycling

Donated segregation garbage boxes to promote recycling in schools.



Hygiene activities

Conducted sterilization and cleaning of school facilities on a voluntary basis to improve hygiene environment of schools.

Relations with Society

The DOWA group promotes communication with major stakeholders including our customers, shareholders, investors, partners, local people and employees using various tools in each business entity and department.

Together
with our
customers

The DOWA group endeavors to contribute to realization of a better society and also making good relationship with our customers through our products and services. We strive to improve satisfaction of our customers by providing products and services of high quality.

Quality control

The DOWA group positions “quality” as the core of our business in manufacturing products. The group’s major plants obtained the ISO9001 certificates, the international standard on quality management system. We endeavor to improve quality of products and services by continuously operating this quality management system based on PDCA (Plan Do Check Act).

○ Technology Center

Products provided by DOWA range from smelting to powdering, plating, semiconductor, heat treatment and recycling. We must respond to defects, improve quality and develop new products with high level evaluation technology to maintain top class quality in each area mentioned above. For this purpose, we have a technology center within each business entity with advanced analytical and evaluation facilities and human resources to conduct chemical analysis, surface analysis and physical property evaluation.

○ Contact and Response to Comments and Opinions

We make improvement responding immediately to opinions and comments from our customers and strive to offer products that satisfy them. We put the information sharing and management system in place,

classify, analyze and evaluate information collected from each entity for improvement and development of products and services.

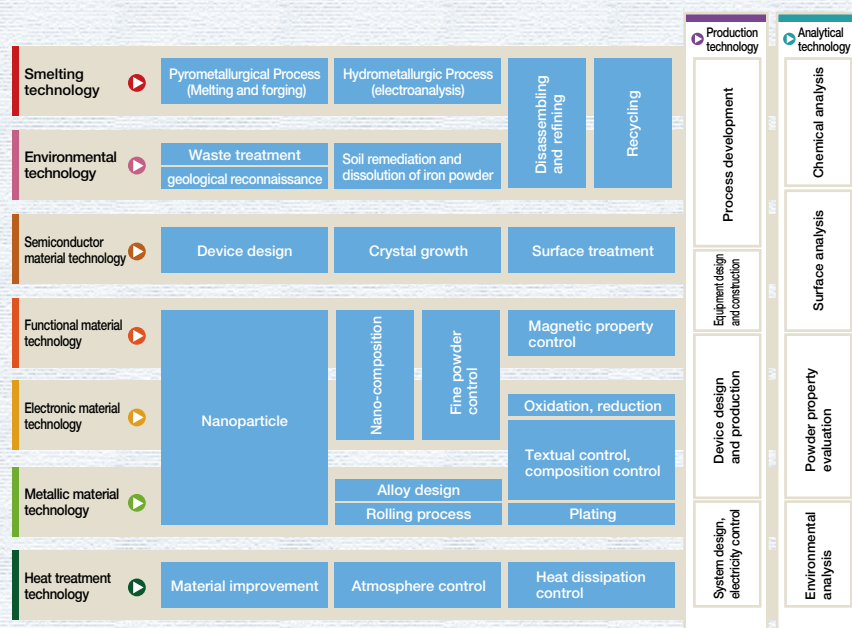
Technology

Our clients are assemblers who assemble parts and components as end products or

those who manufacture parts and manufactures who manufactures components required for assembling. We endeavor to provide technology in advance of needs from our clients, looking ahead of future markets of our clients and future needs of consumers.

【Technical Areas and Element Technologies of the DOWA Group】

In our business management policy we set forth that we positions our cutting-edge technologies as the main driving force of our business. We seek for technologies that strengthen our competitiveness. We believe that R & D is one of the most important corporate differentiation strategies.



Evaluation from Society

The Japan Institute of Metals and Materials Technical Development Award Received

The technology center of DOWA Metaltech received the Technical Development Award by the Japan Institute of Metals and Materials for “Development of the Technology to Control the Texture of Precipitation Hardening Copper Alloy” in September 2013. The institute is one of the largest in Japan for materials. Every year this award is given to excellent new technologies and

products selected among applicants who submitted articles on their new technologies and products. This control technology of texture is an important technology to improve trading-off properties to achieve strength versus workability required for copper alloy used for connectors of electronic parts.





**Together
without
stockholders
and
investors**

The DOWA group recognizes that explaining corporate and business management information to our stakeholders including shareholders and investors is one of the important points in terms of our corporate governance and we are committed to timely and proper disclosure of the information.

Our management holds results briefings on quarterly basis. We also offer opportunities to communicate with both Japanese and international investors directly on our business information. We try to make proper and highly transparent disclosure of information, by publishing our annual report and IR reports in Japanese, English and Chinese.

○ **General Shareholders' Meeting**

The DOWA group holds a general shareholders' meeting in June at the Four Seasons Hotel Chinzanso, Tokyo every year and approximately 500 shareholders attended the meeting in 2013. After the meeting we hold a party so that we can better communicate with shareholders and they can talk to our directors. We have a booth at the venue exhibiting our products.



○ **DOWA HD website (IR Information)**

<http://www.dowa.co.jp/en/ir/>

Information on DOWA Holdings is posted in this website in an easy-to-understand way to our shareholders and investors.



**Continuous
support for
the Great
Eastern Japan
earthquake**

The DOWA group set up a Great Eastern Japan earthquake reconstruction team in Sendai City in May 2011 as part of our support initiative for the earthquake and has been supporting disposal and decontamination of wastes from the disaster. Each business entity continues support activities in 2013. Following are some of the examples:

○ **Support for the Mobile Library Project with Our Original Eco Bag**

The DOWA group supports activities of the Shanti Volunteer Association that operates mobile libraries in areas affected by disaster. These mobile libraries deliver books and provide opportunities for communication to the temporary housing in Miyagi Prefecture and Fukushima Prefecture in addition to the drastically affected area along the coast of Iwate Prefecture. The DOWA group delivers a CSR report to shareholders in an eco-bag at the Annual General Meeting of Shareholders every year, so we used these original eco-bags for the visitors to put the borrowed book from the mobile libraries. Part of the expense for production of these eco-bags were donated.



○ **Support for the Great Eastern Japan Earthquake Miyagi Child Raising Fund at the In-house Bazaar.**

E&E Solutions, Inc. has been supporting reconstruction from the earthquake since 2011. All employees participate in the support activities for the affected people with their own initiatives. In 2013, they brought in used books and held an in-house book bazaar for two days. They gathered more than 500 books for the bazaar and many employees visited the bazaar. The money was donated to the Miyagi Child Raising Fund together with the monetary donation from the company for orphans from the earthquake.



Together with local communities

The DOWA group positions contribution to local communities as a focus measure in our relationship with society. Every business establishment both in and out of Japan are actively participating in CSR activities including: participation in local get-togethers for communication and tree planting festivals, sponsorship and support for sports events, accepting visitors and interns to our plants, sponsoring various sports events, aimed at growing together with local communities.

○ Our Activities in 2013

Sponsoring Local Events

| | |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------|
| July | The seventh Kosaka Household Town Afforestation Planting Ceremony and the “Akita Northern Happinets” basketball clinic (Akita Prefecture) |
| November | The 3rd Kojima Lake Blossom Corridor Exciting Health Marathon (Okayama Prefecture) |
| February | The twenty-fourth DOWA Cup Jr. Cross Country Ski Competition at Lake Towada (Akita Prefecture) |
| March | The 5th Kojima Lake Blossom Corridor Cherry Blossom Festival (Okayama Prefecture) |

In addition to the above mentioned we take part in a wide range of activities rooted in local communities, including: cleaning of public spaces, planting trees, cooperation with traffic safety campaigns, and voluntary participation in local festivals and sports events by employees.



○ Corporate Visits

Company visits by high school students on their school excursion

Thirty-nine third graders of Kosaka Jr. High School, Kosaka-machi, Akita Prefecture visited the headquarters of DOWA in Tokyo in May 2013 on their school excursion. The educational goal of the school is to, “grow up strong, spiritually rich, communicate with friends and nurture dreams.” The school sends students on their school excursion to companies where the graduates of the school work to deliver a presentation on a predetermined topic as part of its social education. DOWA, being a locally oriented

company, was chosen for this in 2013.

After a briefing session and visiting inside the building of the headquarters, the students delivered the group presentation on the topic of, “How do we want to change Kosaka-machi in ten years’ time?” Their ingenious presentation was full of ideas to make their hometown better. Kosaka-machi was the place of foundation of the DOWA group. In addition to the DOWA’s main plant of Kosaka Smelting and Refining, many of our business entities engaged in environmental and recycling business gather there. We learned and were stimulated a lot from those next generation

students who have concrete ideas on the future of their town.

After the presentation, all students performed their original dance named “ONE”. It was an excellent performance like a professional. A Hip Hop teacher of the school choreographed the music composed by Mr. Jiro Oma, a musician of famous Japanese Pop group “Off Course”.

We will continue to accept visits of students as part of our support for school education to make students understand what companies are.



Evaluation from Society

“Contribution to Beautifying Local Environment Award” to Kojima Blossom Corridor Supporters Club

Bizen Citizen Bureau of Okayama Prefecture conferred the “Contribution to beautifying Local Environment Award” to Kojima Blossom Corridor Supporters Club in November 2013. Planting Kawazu cherry trees (4,703 trees) and spider lilies (120,000 bulbs) together with local people was recognized as contribution to environmental improvement along Lake Kojima in Okayama City. We will continue those activities to beautify and revitalize local communities through events such as the Blossom Corridor marathon race.





Together with our employees

The DOWA group sets forth in Standards of Conduct that human resources are the basis of business activities and employees should be evaluated with their ability to conduct their jobs regardless of education, age and gender. We are promoting various activities with the following goals so that employees can exercise their full potentials.

- Go back to the origin of organization function to create a competitive team.
- Make company a place where employees want to work, with their own initiatives.



Employment Status

The DOWA group tries to promote proper allocation of employees, considering our business plan and employ diversified human resources who have talents and

capabilities necessary for our business.

As of March 31, 2014 we have total 5,411 employees, increase of approximately 100 persons compared to previous year. Of those who were employed in Japan, 88% (4,397) are male and 12% (608) are female.

The number of employees outside Japan, mainly in Asia, increased due to our global business deployment. There was an increase of approximately 100 employees involved including those from Thailand and China.

〈Employment status in Japan〉

| Classification | | FY | | 2011 | | 2012 | | 2013 | |
|--------------------------------|-----------------------------------------------------------|----|--|-------|--------|-------|--------|-------|--------|
| | | | | Male | Female | Male | Female | Male | Female |
| Regular employees in Japan | Directors | | | 123 | 1 | 124 | 0 | 121 | 0 |
| | Managers | | | 681 | 8 | 707 | 8 | 715 | 9 |
| | Ordinary employees | | | 2,699 | 288 | 2,727 | 294 | 2,703 | 296 |
| Non-regular employees in Japan | Dispatched employees | | | 432 | | 318 | | 405 | |
| | Part-time workers, temporary workers and seasonal workers | | | 826 | 265 | 846 | 291 | 859 | 405 |
| Total | | | | 5,323 | | 5,315 | | 5,411 | |

〈Number of employees per region〉

| Region | FY | 2011 | 2012 | 2013 |
|-------------------------|----|-------|-------|-------|
| Japan | | 5,323 | 5,315 | 5,411 |
| Other Asian countries | | 1,325 | 2,520 | 2,622 |
| Europe | | 4 | 4 | 10 |
| North America | | 78 | 92 | 80 |
| Central & South America | | 3 | 1 | 1 |
| Total | | 6,733 | 7,932 | 8,124 |

Fair Evaluation and Treatment of Human Resources

Under the philosophy to evaluate employees based on their ability to conduct business as stipulated in Standards of Conduct, the DOWA group strives to evaluate and treat employees in a fair manner. We make use of our evaluation system in fostering employees under the following policies.

- Both an evaluator and an employee should deepen understanding of the evaluation system and the criteria and make best use of the system in evaluating and fostering employee development.
- Employees should share organizational goals and understand the skills and capabilities required for each rank and

improve skills required for conducting their jobs.

We offer training to newly appointed managers as an evaluator this year and we will try to promote proper evaluation, treatment and fostering by continuously offering training opportunities.

Development and Utilization of Human Resources

The DOWA group aims at developing professionals who can play an important role in global markets and establishing a corporate culture to foster and develop human resources. In this effort, we en-

deavor to educate employees in each workplace continuously, promote measures to enhance On-The-Job Training (OJT) programs for young employees and offer opportunities for practical experience and

different job experiences (both planned and adaptable personnel reshuffling) to our employees.

■ Main Achievements in 2012

【Education】

○ Education according to work levels

- | | |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| • Next generation business leader (On going) | Training to foster business leaders (16 persons for the period from April through December) |
| • Manager (On going) | Training for new managers (Approximately 30 persons) and coaching training (Approximately 30 persons for the period from October through December) |
| • Mid-Career (On going) | Proactive (leadership) training for newly promoted employees to Grade 5 (Approximately 50 persons for the period from October through December) |
| • Mid-Career Engineer (New) | Strengthening the ability to think (7 persons for the period from October through August) |
| • Employees up to the third year of employment (Continued) | Training for newly employed (from April to the middle of May), I – IV follow-up training and enhanced OJT (Approximately 130 persons) |
| • Global (On going) | English presentation (Approximately 40 persons) and intensive training before being dispatched (Approximately 10 persons) |
| • Female career (On going) | Basic career training (21 persons) |

○ Exchange Program between Young Engineers and Universities

We prepared an exchange program between our young engineers and Tohoku University in the Functional Materials Laboratory at DOWA Electronics Materials in July 2013. This program is offered every year, as a place for DOWA's young engineers to discuss with outside researchers and gain new knowledge and insight from a different angle. Approximately twenty engineers in Okayama district participated in this program this year and actively discussed and presented research results.

【Utilization of Human Resources】

○ Career Matching System

We put the Career Matching System in place as part of our career support activities for our employees. Qualified employees can apply for in-house job opportunities directly without going through their supervisors or their own department.

Promotion of Diversity

Employees must respond diversified values and make use of diversified strengths to respond to global business deployment and expanding business areas. We believe that employees with diversified talents exercising their full potential will lead to the growth of a company. The DOWA group is now propelling forward the following activities.

○ Consideration at the Time of Recruitment

The DOWA group is now building a framework for employees to work on a global basis regardless of nationality from the recruiting stage.

○ Active Utilization of Experienced Employees

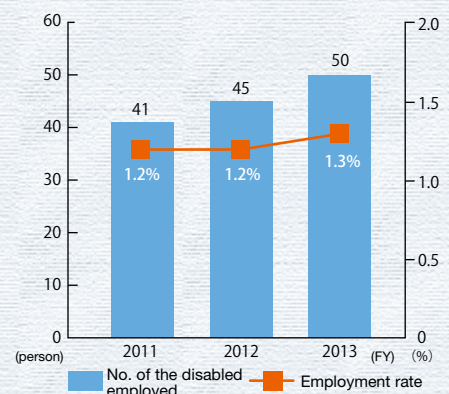
We reemploy experienced retired em-

ployees who want to continue working in the DOWA group. We revised the re-employment system by newly adopting a job rank system so that employees can continue to fully exercise their skills and capabilities they have cultivated. In 2014 we will further improve the system, for example, offering a seminar to provide information on how to spend life after retirement.

○ Employment of the Disabled

The number and the rate of employment of the disabled both increased in 2013 across the DOWA group and some of companies achieved the employment rate stipulated by law; however the DOWA group as a whole has not achieved the rate. Our production sites are not built for the disabled to work comfortably. Therefore, we do not require each business entity of DOWA to achieve the same rate equally.

Instead, we try to increase the employment rate across the entire group by improving environment for the disabled in business entities that have already had those people working or encouraging them to experience a workplace.





Promotion of Health

The DOWA group considers it important for all employees to enjoy an active life both in terms of body and mind and health as the foundation of developing human resources.

○ Physical Examination

DOWA offers opportunities for employees to take periodic physical examinations and also subsidizes expenses for gynecological examinations for female employees. We also strive to increase the number of employees' dependents to take specific physical examinations.

In 2013 we offered compensation for the expenses for influenza vaccination.

○ Mental Health Initiative

The DOWA group has put the mental health counseling in place and we have educated management on mental health issues to protect the health of employees. We are now considering to introduce a system for each employee to check his/her mental condition by a self-checkup.

Work-Life Balance

The DOWA group endeavors to improve the workplace for employees. Our work-life balance program aims at helping all employees to exercise their abilities to the fullest extent according to their life style both at work and at home. We implemented a more flexible working system like flexible working hours and leave of absence system for raising children and caretaking of family members.

○ Utilization of the System

As a result of these efforts, users of these systems are increasing every year. In 2013, 12 employees took child-raising leaves of absence and four employees used shorter working hours for raising children. Ten male employees and five female employees took caretaking leaves for their children.

○ Action Plan to Support for Fostering the Next Generation

We prepared a new action plan to support fostering the next generation in 2013.

In addition to legally stipulated systems, we introduced specific support measures

such as paid leaves of absence for taking care of sick children (up to five days) and a system to limit relocation of employees that results in moving from their present residence if they have reasons related to raising children. In 2014 we will raise awareness of the system so that more employees can use it.

We also try to reduce total working hours of employees through strict control of working hours by promoting initiatives agreed upon between labor and management and implementing a new control system of working hours, in addition to the existing system of flex-time working hours without specified core working hours.

○ Questionnaire

The CSR Department conducts a survey targeted for newly employed every year. More than 40% wanted to use the flex-time system and a day for no overtime work in 2013, because they wanted to use their time more for their career development, including improving language skills or obtaining qualifications. We will continue to promote work-life balance, considering those opinions.



Family members of our employees are also DOWA's important stakeholders. We plan plant visits and events not only to notify our employees of CSR activities across the DOWA group but also for their family members to deepen their understanding of the DOWA group.

○ Communication through an Eco-event for Parents and Children during Summer Vacation

The DOWA headquarters in Tokyo held an eco-event for family members of employees in August 2013. Seventy-one (40 children and 31 parents) participated in this event from Akita and Kumamoto Prefectures and enjoyed a workshop called "Dream Factory" produced by an event company, "Chemical Entertainment." In the workshop, children participated in an experiment of air foams and made LED lights turned on by wind power.

This event started as part of our environmental education activities where children of our employees visit the workplace of their parents to gain insight on environment and also to raise environmental awareness together. Every year the CSR Department plans an event related to

environment such as biodiversity and recycling. We enjoy planning and operation of such events.

We will not only hold such events in

the headquarters but also encourage our business entities outside Tokyo to hold such events.



Questionnaire Results

Comments, Opinions & Requests for the DOWA group's CSR Report 2013

We distributed our CSR reports to our stakeholders including shareholders, investors, partners, customers and local people at the general shareholders' meeting, exhibits and environmental events.

In addition, we also post all of our CSR reports published so far on our website.

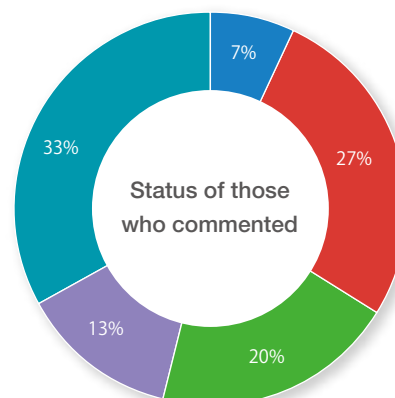
The DOWA group conducted a survey to ask comments and opinions from the readers of our CSR reports. We reflect

them and the opinion of a third party expert of last year in preparation for this report as follows.

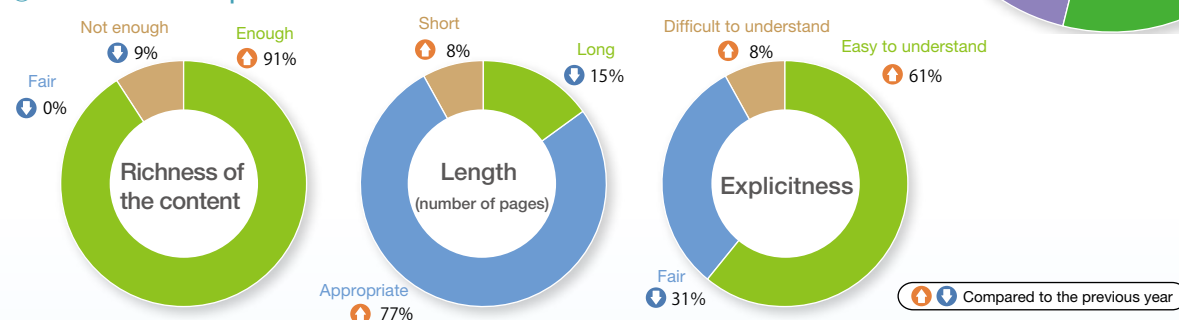
Comments and Opinions for the Questionnaire

We received many valuable comments and opinions from readers and we appreciate those replies very much. Following are those comments and opinions (overall comments were summarized).

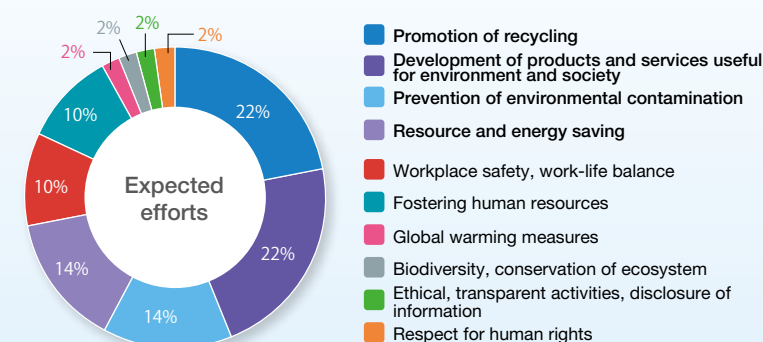
- Customers and partners
- Shareholders and investors
- People who live near DOWA's business entities
- DOWA's employees and their family
- Other comments



About our CSR report



What is Expected from Our Efforts for CSR



<Overall comments>

- I can see the image of recycling business vividly in the pages that illustrate eco-products.
- I'm impressed with your all your efforts in addition to your main business.
- I want you to combine the report with the business report.

Main Improvements in CSR Report 2014, Reflecting Comments from Our Stakeholders

We edited CSR Report 2014, reflecting the valuable comments from our stakeholders.

■ From Questionnaire Results

- I have difficulty focusing on which items to read.
 - More specific description is necessary on the focus measures.
- ⇒ We changed the structure of our CSR report this year to describe our activities per area of our CSR Policy and tried to be more specific on the focus measures.

■ Third Party's Opinion

- Only titles are stated for Goals and are not specific goals
- ⇒ In 2014 a new column title of "Target" is added per issue in four areas of "Governance", "Safety", "Environment" and "Society".
- ⇒ We added examples of our philosophy and initiatives in Relationship with Central and Local Governments and Industrial Groups on P. 24.

We will review thoroughly your comments and opinions on our CSR efforts and reflect them in our CSR activities.

Opinion of a Third Party

DOWA CSR Report 2014



Chief Executive, E-SQUARE

Hiro Motoki

E-SQUARE Inc. is a consulting company, aimed at realizing a sustainable society by supporting strategic CSR and environmental management of companies. The company supports many leading business establishments in the fields of strategy, communication, education and BoP business in developing countries. Mr. Motoki assumed his office of Chief Executive in October 2011. He has been working as a special lecturer for the Graduate School of Environment Studies, Tohoku University since 2005 and also is a frequent lecturer on CSR.

About the CSR Report 2014

President Yamada explained in Message from the Management that DOWA's business has evolved into a unique resource-recycling company consisting of five core business areas, responding agilely to changing external environment. The DOWA group continues to achieve increased revenue and profit as he mentioned. I presume the company does meet diversified needs for building a resource-recycling society through its business in the age when depletion of resources is anticipated as a result of worsening pressures of world population.

I think a characteristic of the CSR report this year is the description of DOWA's approach to social issues related to effective utilization of resources on the page titled as "DOWA's Business and Social Issues." However, it was positioned only as one of many features last year. I can see DOWA's emphasis on CSV (Creating Shared Value) this year, where a company contributes to resolving social issues, while it connects its contribution to profit making. I am certain that more detailed explanation of the relation between its business and social issues will further promote reader's understanding of how much DOWA is needed in society and that DOWA is a vital entity in society.

Another characteristic is the reorganization of main achievements in 2013 and the entire structure of the report according to four areas of CSR Policy. This way the CSR activities that the DOWA group propels are presented in a more consistent way than before. Reorganization made the report simpler and easier to understand.

As for DOWA's measures per topic, responding to conflict minerals is requisite as a company engaged in mining in the upper stream of the value chain in society. The DOWA group set up "DOWA's Conflict Mineral Management Policy" and has worked to obtain CSF Certificates as a conflict-free smelter. Those are extremely important steps forward in conducting sustainable business.

The DOWA group is engaged in various other activities in each business field. Among others, it is worth mentioning that DOWA Metals and Mining succeeded in obtaining their raw materials from the tailings of mineral ores to recycling materials for the first time in the world.

Towards Further Improvement

The list of achievements are far easier to read than last year, as goals, measures and achievements are clearly separated and described. However, only titles are listed for goals. I think more detailed description is necessary, listing specific points to be reached by DOWA.

It says that the CSR Procurement Guideline will be prepared in the future as a focus measure of CSR Procurement Policy. On the other hand in the CSR Procurement Guideline, it says, "We promote procurement, based on the DOWA group's CSR Procurement Guideline." It seems that the guideline is already put in place and misleading. I also think it better to mention something on "DOWA's Conflict Mineral Management Policy" in the CSR Procurement Guideline. I believe that it desirable to report how the CSR Procurement Policy will be implemented specifically in the CSR Procurement Policy.

My Expectation to DOWA's Initiatives in the Future

The DOWA group will review the mid-term goals of CSR and focus measures in 2014 and I am looking forward to their progress. I can see DOWA's approaches to social issues and also awareness to connect them to revenue, through messages from managers and persons in charge in each business entity. I assume that support from those employees on site is the present strength of DOWA. I sincerely hope DOWA continues to pursue business development, by facing social issues directly.