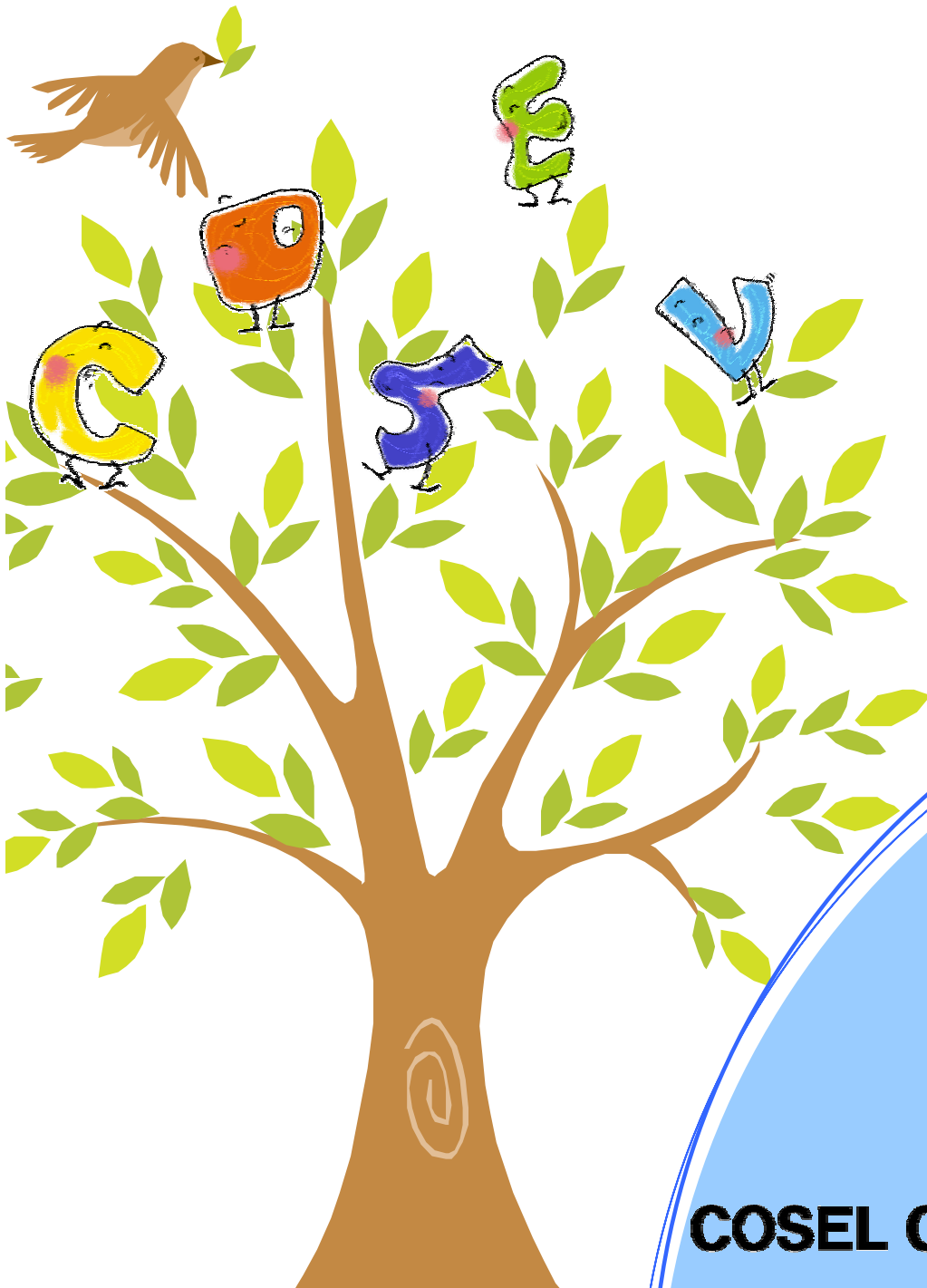


Environmental Report2013

Toward Environmentally Friendly Manufacturing



COSEL CO., LTD.

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From Our Editors

Every year at Cosel Co., Ltd., we are preparing and disclosing Environmental Report so that more people understand our environmental activities.

We are more than happy if this report helps you understand our environmental initiatives and activities.

In preparing this report, we have referred to "Kankyo Hokokusho Gaidorain 2007 (Guideline to Environmental Reports 2007)" issued by the Ministry of Environment.

Organizations Covered by this Report:

Cosel, Co., Ltd.

Head Office and Plant/Tateyama Plant

Period Covered by this Report:

May 21, 2012 to May 20, 2013

("FY 2011" in this report refers to above period)

Issue Date of the Next Environmental Report:

July, 2014

Last Issuance: July, 2012



Taken from our Digital Photo Club

Message from the President

Since nuclear plant accident happened at Fukushima regarding the Great East Japan Earthquake, we have seen a chronic situation of energy supply shortage due to finding new direction of nuclear energy policy. Further more, under the economy expansion of developing countries, it is getting more serious which source of energy and biodiversity have been drained

As a developer and manufacturer of equipment related to electricity, we believe that we can contribute to energy saving for the entire society through business activities. Practically we are promoting by supplying energy saving product for power loss reduction of customer's system operation.

We also believe that it is our mission and responsibility to pass on this precious earth's environment in healthy conditions to our next generation.

We will promote activities to reduce environmental burdens further and aim to become a company on which our customers would say "we could like to use Cosel products" for both our quality and environment.

Keeping the idea of protecting global environment and passing it on to the generations to come to our heart, we would like to steadily advance as a trusted company. Please feel free to contact us with your honest opinions and input for our further improvement.

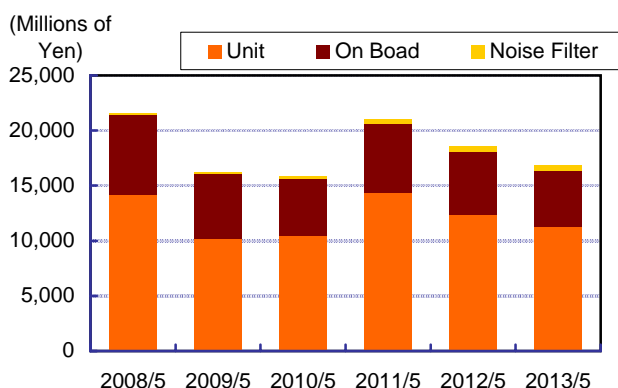


President and Representative Director
Keiichi Fukumura

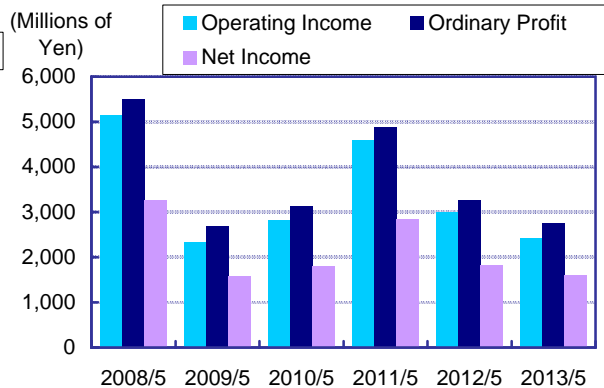
Company Overview

Trade Name:	Cosel Co., Ltd.
Headquarters:	1-6-43 Kamiakae-machi, Toyama City, Toyama Prefecture, 930 0816, Japan TEL : 076-432-8151 FAX : 076-441-5324
Business:	Manufacturing and Sales of Electric Devices and Electrical Machine Equipment
Main Products:	Regulated Power Supplies (such as Switch Mode Power Supplies)
Representative:	Keiichi Fukumura
Date of Establishment:	July 26, 1969
Paid-in Capital:	2,055 Million Yen
Annual Sales:	16,843 Million Yen (Non-consolidated basis for the period ended May 2013)
Number of Employees:	431 (Non-consolidated basis as of May 20, 2013)
Affiliates:	Taiyoudenshikougyou CO.,LTD. (Tsukioka-machi, Toyama City, Toyama Prefecture) COSEL U.S.A.INC. (San Jose, USA) COSEL EUROPE GmbH (Frankfurt, Germany) COSEL ASIA LTD. (Hong Kong, China) Cosel (Shanghai) Electronics Co., Ltd. Shanghai Cosel International Trading Co., Ltd. Wuxi Cosel Electronics Co., Ltd.

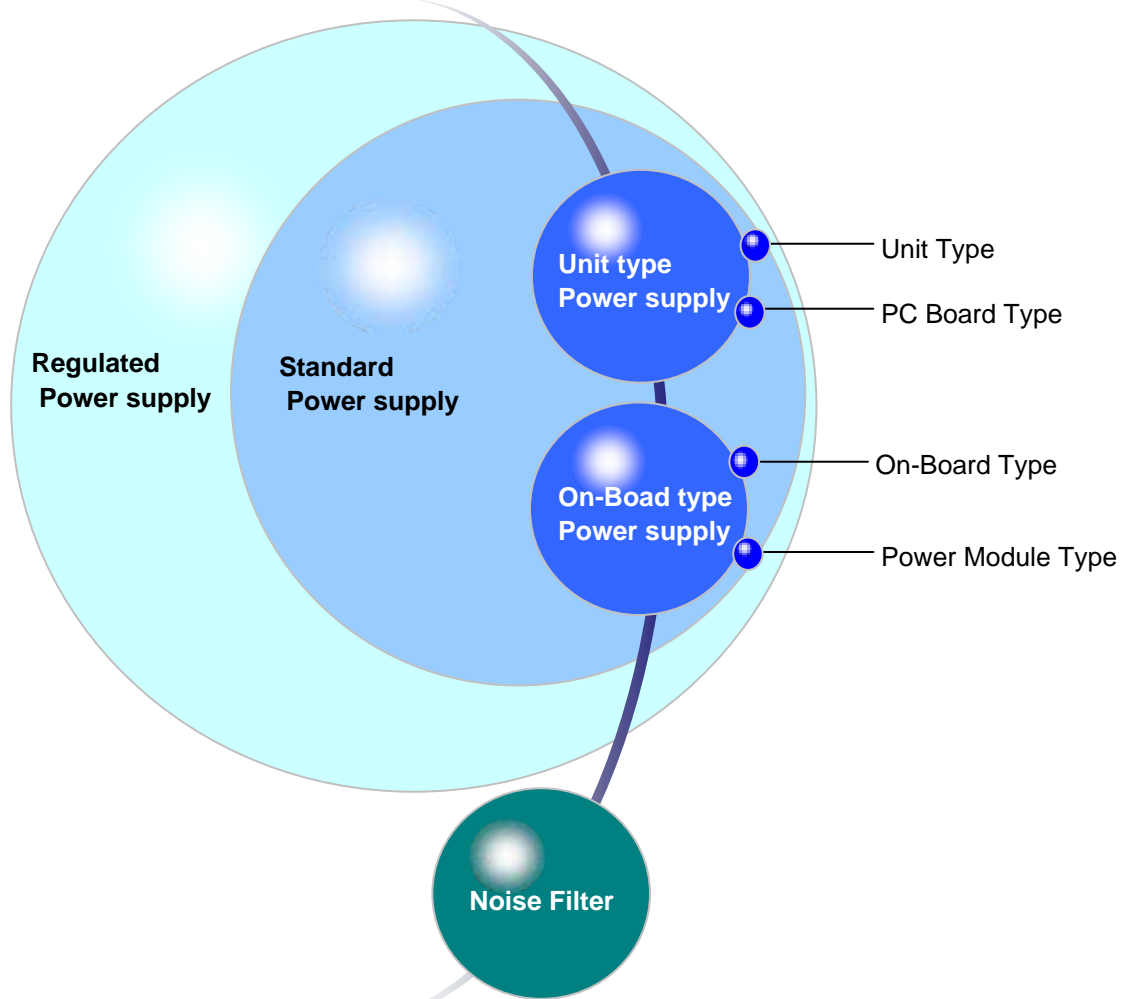
Sales (Non-consolidated Basis)



Operating Profit/Current Profit/Net Profit for the Period



Outline of Our Business

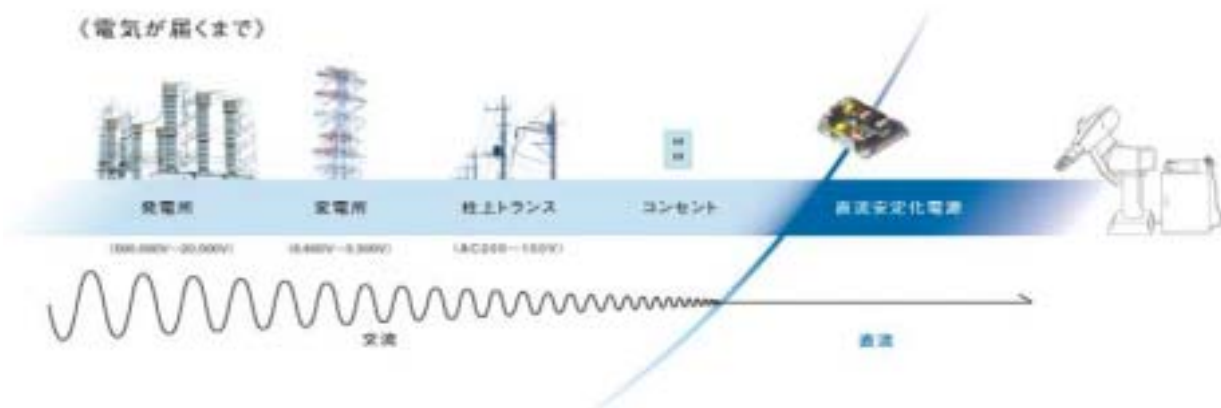


Many electric components including semiconductor devices are used in electronics products such as industrial and commercial equipment. For these equipment to operate, electrical power delivered to factories and households needs to be converted from alternating current (AC) to direct current (DC). Our regulated DC power supplies make this possible.

In particular, switch mode power supplies are our main products. They are used in many electric devices such as information and telecommunications, medical and FA equipment because they are compact, light weight and highly efficient.

We can say that switch mode power supplies are the hearts of these equipment and hold a key to the future of the electronics era.

We will continue our dialogue with new technologies and make highly reliable products which will help build the future of electronics.



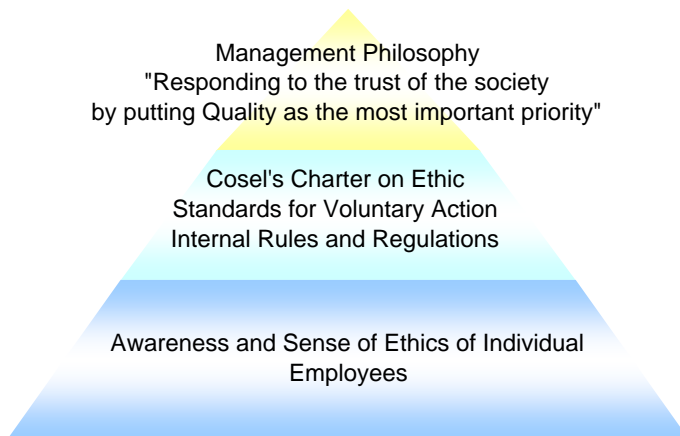
Management Philosophy/Environmental Policies

Management Philosophy

"Responding to the trust of the society by putting Quality as the most important priority"

We are trying to improve ourselves by using the idea and methodologies of Total Quality Management (TQM) based on our management philosophy of "meeting up with expectations from society by putting quality above anything else."

In order to achieve this, we are striving to secure our position in the increasingly competitive switch-mode power supply market by clearly presenting goals and measures and applying them on the company-wide basis to live up to expectations from society by providing attractive products.



Positions of Cosel's Charter on Ethics and Standards for Voluntary Action

Cosel's Charter on Ethic and Standards for Voluntary Action are established so that all the management and employees of Cosel group become fully aware of their social responsibilities, completely comply with laws and regulations in settings of various business activities and act in a socially ethical manner in order to achieve our management philosophy of "responding to the trust of the society by putting Quality as the most important priority" (established in September, 2006).

Environmental Policies

Environmental Principle

Harmonize production and product development with environment, endeavor to maintain and improve global environment and thereby contribute to the society

Action Guidelines

- (1) Offer environmentally friendly products.
- (2) Avoid unnecessary consumption of resources and promote reuse of wastes.
- (3) Reduce and eliminate the use of environmentally unfriendly chemicals and Endeavour to improve global environment.
- (4) Set and review goals and objectivities to control our activities, work for continuous improvement and prevent contamination.
- (5) Comply with national and local environmental regulations and respond to the needs of customers and local communities.
- (6) Enlighten employees about environmental preservation including biodiversity conservation through environmental trainings of all employees.

This environmental policies are made public.

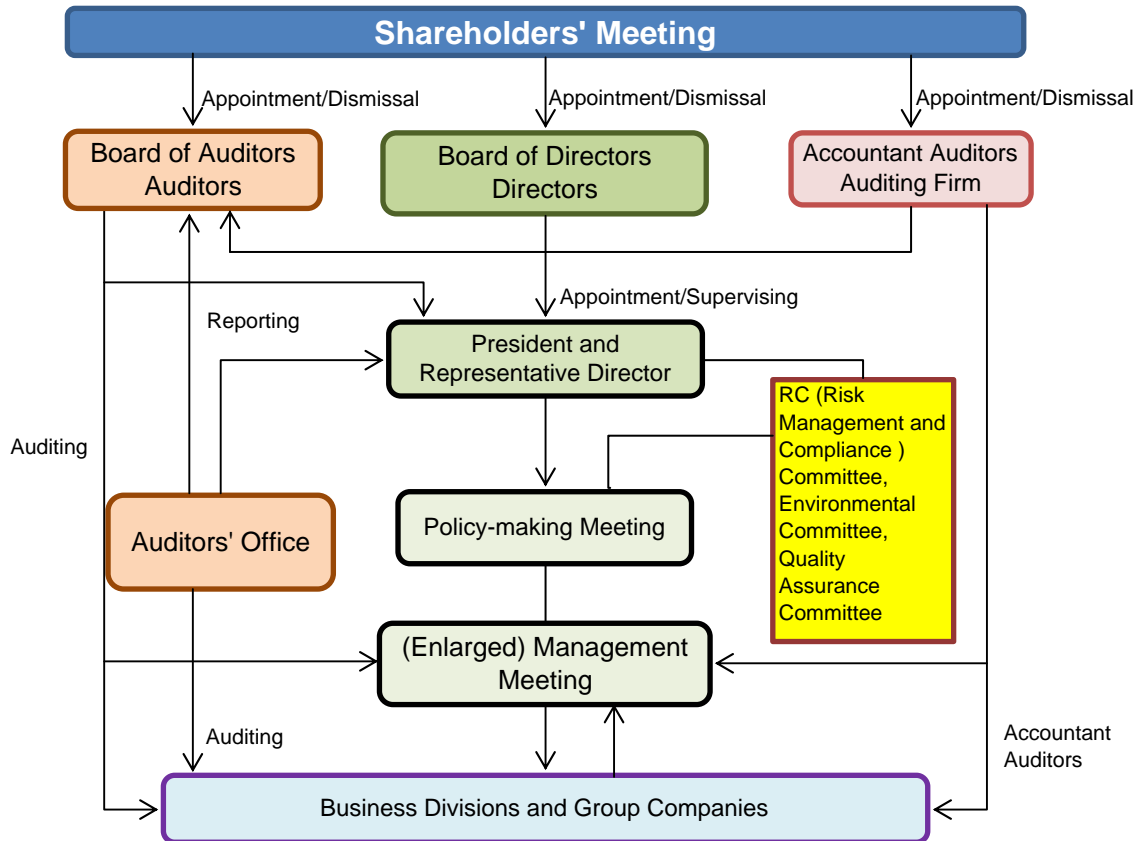
Set forth on May 21, 1999
 Revised on July 24, 2012
 Keiichi Fukumura
 President and Representative Director
 Cosel, Co., Ltd.

Corporate Governance

【Basic Concept】

We take corporate governance as important business challenge. We are trying to improve our management efficiency to become a company which lives up to the trust and expectations of various stakeholders. We have adopted the Corporate Auditor System so that we have better management monitoring and compliance with laws and regulations.

< Outline of Corporate Governance Organizations >



Corporate Governance System

We are adopting the **Board of Auditors** System. Two of our three auditors are external auditors as defined in paragraph 16, Article 2 of Companies Act. Currently, Cosel does not have any external director. There is no department that supports our external auditors.

However, information is communicated to our external auditors at our monthly board of auditors.

【Board of Directors】

The Board of Directors makes decisions on matters for which their decisions are required by laws, regulations and articles of incorporation. They also make decisions on management policies and business operations and supervise execution of duties by representative directors.

The Board of Directors comprises of seven directors. The meetings of the Board of Directors are usually held once a month. Directors execute businesses in the area of responsibility under direction of President based on the management policies decided on at meetings of Board of Directors.

【Board of Auditors】

The Board of Auditors comprises of three auditors; one standing auditor and two external auditors (out of which one is an attorney). They attend meetings of board of directors and other meetings and audit execution of duties by representative directors.

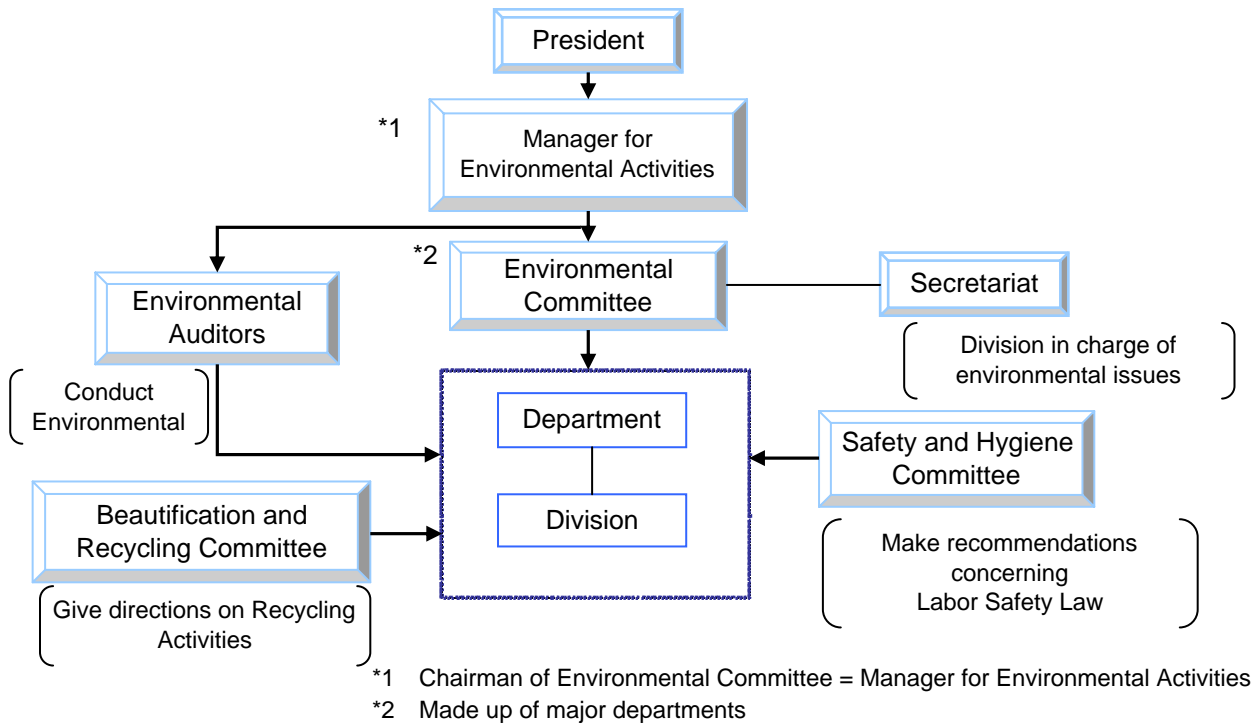
【Auditors Office】

Auditors' Office (comprising of two people) is established to enhance internal governance function in collaboration with auditors, the Board of Auditors and accounting auditors.

Management System

Organizational Structure

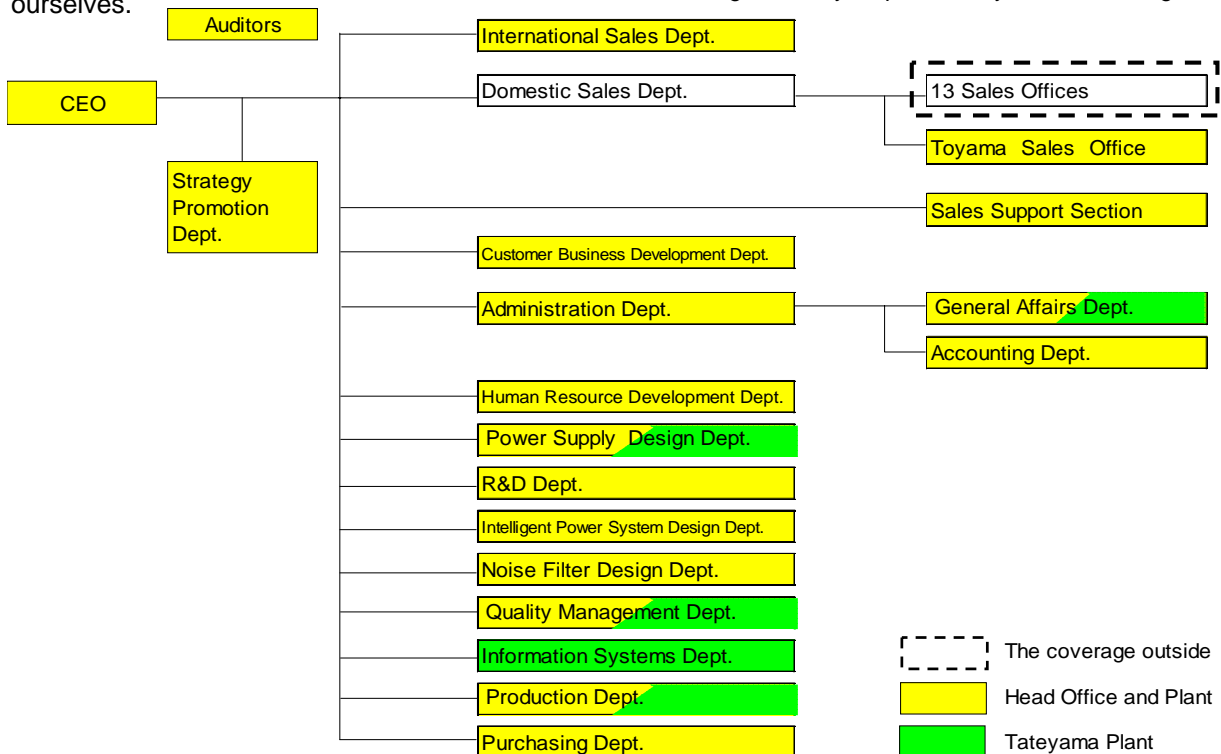
The following is our organizational structure to promote the activities to reduce Environmental burdens.



ISO14001

We have complied with ISO14001 on Head office and Tateyama Plant, and are promoting continuous activities to improve ourselves.

Date of Acquisition: December 17, 1999
 Area Covered: Head Office and Plant/Tateyama Plant
 Registered by: Japan Quality Assurance Organization



Management System

Legal Compliance and Others

We are keeping abreast of changes and revisions of the environmental laws and regulations which we need to abide by in our environmental management activities monthly. If necessary to apply to us, we inform it to all employees through our internal Environmental Committee,

Regarding other requests, we input them in our computer system so that all the employees and the relevants can refer to for their references every time in need.

We are reflecting all the laws, regulations, requirements and evaluation results in our internal rules, regulations and standards and evaluating our legal compliance every year to make sure we do not violate any laws, regulations or requirements.

Environmental Audit

We are conducting an environmental audit every year to confirm our compliance with ISO14001, implementation and performance status.

Our internal auditors form a team comprising of those who have taken internal and external audit trainings and deemed qualified to audit each department.

Currently, there are 25 internal environmental auditors.

Each auditor reports audit results including areas of improvement to each department manager. Each department reviews their activities and engage in activities for continuous improvement.

In FY 2012, 5 non-compliance cases were observed. Corrective actions were completed for all cases.

Prevention of Accidents

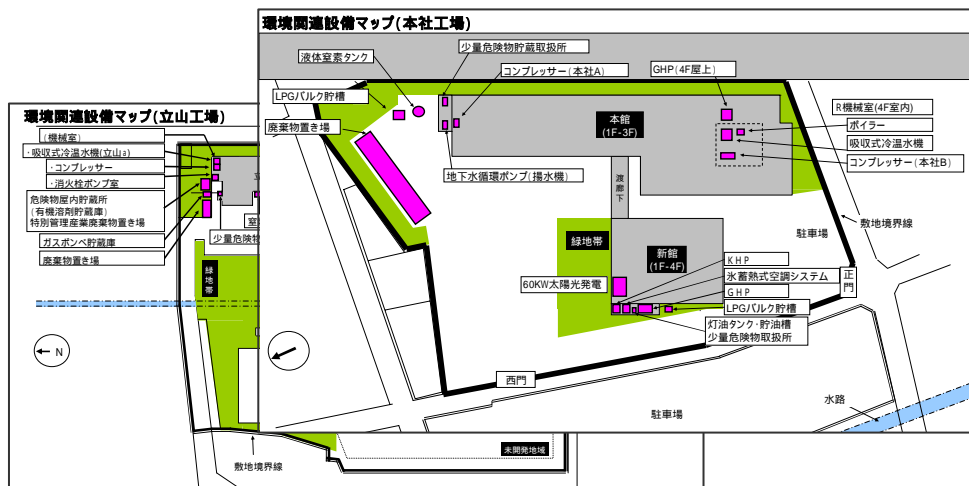
We have developed a "Environment-related Equipment Map" which shows where those environment-related equipments are in Head Office and Tateyama Plant to prevent and detect accidents caused by them abnormally.

If we determine that a certain equipment needs more control, we check if the procedure set forth in the case of emergency are put in place, and if the regular maintenance and measurement are conducted. In this manner, we are well-prepared to cope with an unexpected incident.

We have received no complaints from our stakeholders about the environment-related issues.

We have confirmed that all our measured environmental data, including vibration and noise level, do not exceed legal and regulatory maximum limits.

(Example) We are checking kerosene and oil tanks every month to see if there is any cracks or damages to prevent soil contamination.



FY2012 Achivement of Environmental Goals and Objectives

The following table shows our achivements of Environmental goals and objects for FY2012.

We were able to meet the goals in the areas of reduction of CO₂ in production floors and improvement of recycling rates. However, we were not able to meet all of the goals for new product development because some of them were quite challenging.

【Results: : Goals Achieved, x: Not Achieved】

No.	Objectives	Control Item	Results	Evaluation
1	Reduction of Power Consumption	Amount of CO ₂ Emission from power consumption per 1 million yen of sales: 0.111t or less	0.107t/million yen	
2	Reduction of Industrial Wastes	Amount of Wastes per 1 million yen of sales: 0.40kg or less	0.42kg/million yen	x
		Recycle rate: 95% or more	95.3%	
3	Establishment of technologies to make new product A meet ErP directive	Input Power with no load 0.4w or less	Not achieved	x
4	Reduction of CO ₂ by new products	Efficiency improvement of new product B 90% or more	90.1%	
5	Establishment of new production methods for new product C	Process capability index of the transformer structure Cpk > 1.67	Not achieved	x
		Establishment of production conditions Creation of PC board design standards	Completed	
		Design life 10 years or more	Achieved	
6	Establishment of design technology for small and reinforced insulation for transformer for new product C	Long-term pressure resistance design life 10 years or more	Achieved	
7	Reduction of power consumption in On-board Production Department	Reduction of Power Consumption in Base Unit 5% or more	8.3%	

Environmental Goals and Objectives for FY2013

Progress in each area for FY2013 is confirmed at environmental committee, which is held every other month

No.	Objectives	Control Item
1	Reduction of Power Consumption	Amount of CO ₂ Emission from power consumption per 1 million yen of sales: 0.101t or less
2	Reduction of Industrial Wastes	Amount of Wastes per 1 million yen of sales: 0.40kg or less
		Recycle rate: 95% or more
3	Reduction of CO ₂ by new products	Efficiency improvement of new product A 90% or more
		Efficiency improvement of new product B 90% or more
4	Reduction of power consumption in On-board Production Department	Reduction of Power Consumption in Base Unit 5% or more

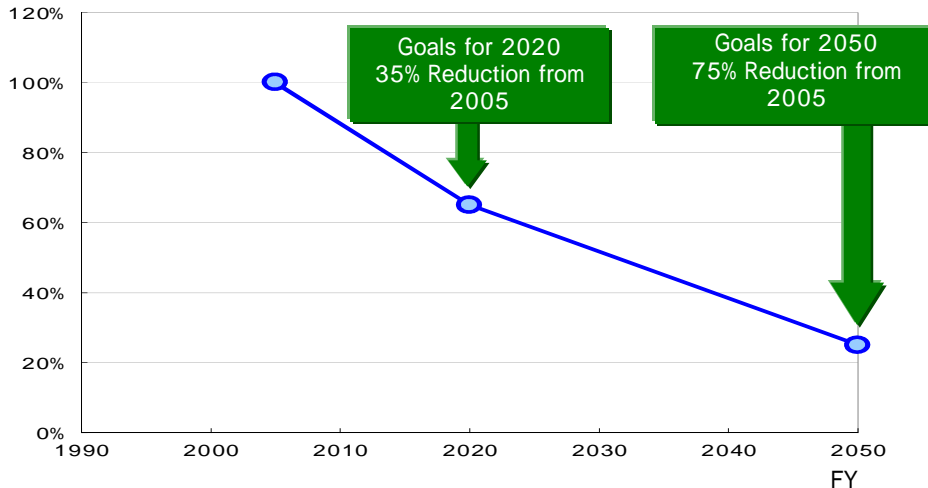
Setting Mid and Long-term Goals for CO₂ Reduction

Setting Mid and Long-term Goals for CO₂ Reduction

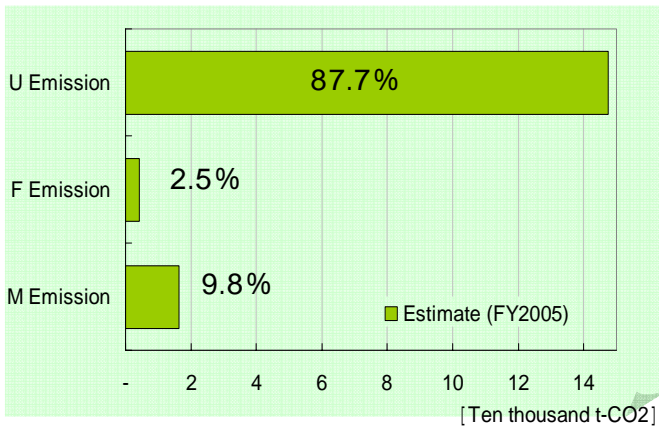
In FY2009, "CO₂ Reduction Project" led by a manager class person was launched and mid/long term reduction goals and action plans were established.

To realize the goals and plans, we have developed energy saving products for improving customers' system energy consumption. A project team has been leading project implementations to save daily energy consumption at COSEL facilities.

Mid and Long-term Goals for CO₂ Reduction



3 Categories of CO₂ Emission



The amount of CO₂ emitted directly or indirectly from Cosel was divided into 3 categories.

U Emission: Emission from Product **U**sing Process

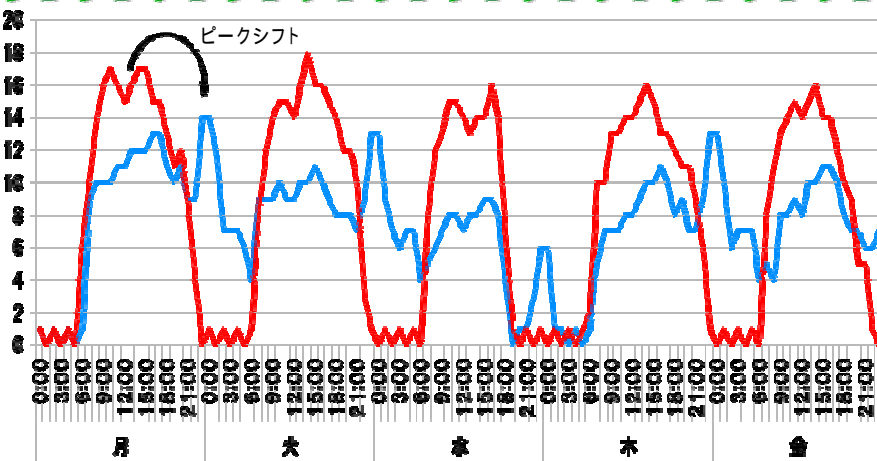
F Emission: Emission from **F**actory process

M Emission: Emission from **M**aterials/Parts manufacturing process

The left graph shows the estimated CO₂ emission as of 2005.

Introduction of Power Monitoring System

~ Research of peak shift effect by ice storage chilled water supply apparatus ~



— Operation 8/6-8/10
 — Non-operation 8/27-8/31

A chart on the left, it is an example of using energy management system (Elco).

It shows us peak shift effect data by ice storage chilled water supply apparatus.

We have created actions and implemented energy saving actions by using the data in efficient.

Highlights of Our Environmental Activities

Development of Smaller Highly Efficient Power Supplies

When we develop new products, we conduct their environment assessment from the standpoints of energy-saving, recyclability, use or non-use of toxic substances and environmental friendliness of packing materials to develop more environmentally friendly products.

Furthermore, we have established our internal evaluation criteria based on which environmentally friendly products are recognized and registered as "eco model." We have created the following symbol for our eco models and promote these products to our customers (please see page 11).



Low Loss Low Cost Design with Renovated Circuit Architecture PLA Series



Dramatically Reduced Stand-by Power Consumption!

Energy Saving

Internal Standby Loss	
PBA100/150 (Previous Model)	6W
PLA100/150	1W
with option R	0.5W
90% Reduction from previous model	



Dramatically Reduced Depth Space!

Resource Saving

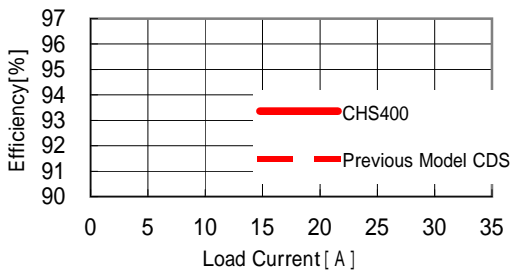


CHS400 Series which Achieved World-class 96% High Efficiency



3~4% Efficiency Improvement from Our Previous Model !
50% Reduction of Internal Loss !

Energy Saving



70% Smaller than Our Previous Model !

Resource Saving

Previous Model
400W (CDS)



CHS 400W



Noise Filter FT Series which Achieved Dramatic Space and Weight Reduction



Energy consumption improvement when applying current !

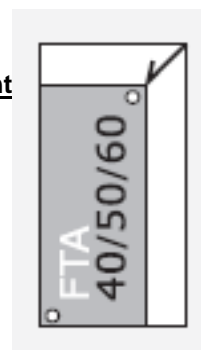
By optimization of construction materials, Reduction of energy consumption

-10%



Space and Weight Reduction !

Resource Saving



[Footprint Comparison with Our Previous Model]

-38%

[Weight Comparison with Our Previous Model]

-14%

Highlights of Our Environmental Activities

Establishing Eco Products: Environmentally Friendly Products and its Symbol

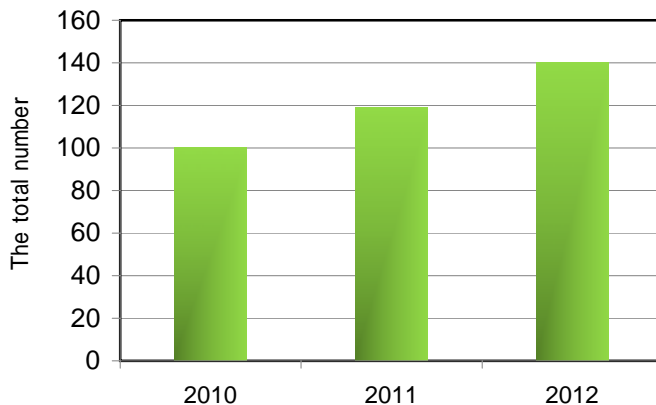
We have developed a new internal evaluation system on environmental burdens in order to provide our customers with information on our products and our efforts to promote the development of environmentally friendly products since 2010.

We are looking at the following 3 items in evaluating our products to reduce their environmental burdens.

- (1) Environmental burdens generated when our products are in operation at customers' site
- (2) Environmental burdens generated when our products are manufactured at our factories
- (3) Environmental burdens generated when materials and components we purchase are manufactured.

Based on the above 3 items, we set our own criteria to certify and register products which satisfy our criteria as "Eco Products." These Eco Products are highly efficient in reducing environmental burdens. To promote Eco Products, we developed the following symbol which represent Eco Product

The total number of the eco-model



Cosel Co., Ltd. Eco Product Symbol Mark

We will proactively expand our Eco Products to create an environmentally friendly low-carbon recycling-oriented society and to continue to grow with our customers.

This symbol mark is used in our product catalogue on pages covering Eco Products to provide information to our customers.



Example of a page in Our Catalog where this Symbol Mark is Used

Highlights of Our Environmental Activities

Reducing Environmental Burden in Production Floor:

~ Reducing Power Consumption of Soldering Pots ~



57% of power consumption by production equipment at our Tateyama Plant is accounted for by our use of soldering pots.

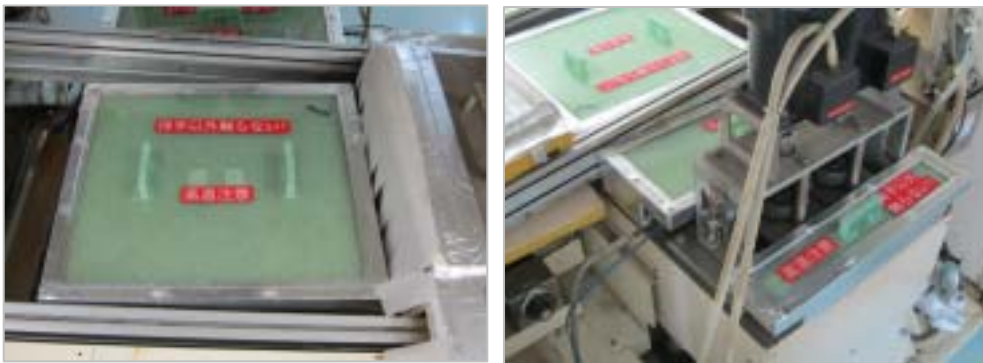
Therefore, in FY2010, we tried to reduce power consumption of soldering pots and achieved about 20% reduction by lowering power consumption in the pre-heater area.

In FY2011, we took the following three measures to reduce power consumption in the pot area.

- (1) Cover the top surface of the pots with insulating material during the night
- (2) Cover the top surface of the pots with insulating material during lunch break
- (3) Partially cover the pots with insulating material during production hours

With these measures, we were able to reduce power consumption by the soldering pots at Tateyama Plant about 15%.

In FY2011, we took these measures for our 13 internal soldering pots. In FY2012, we have applied to further 6 of other soldering pots, finally all soldering pots have been implemented energy saving measures.



Covers of Soldering Pots

Reducing Environmental Burden in Production Floor:

~ Culling of fluorescent light ~



We culled 23% of the fluorescent lights which were always on because we concluded that culling them would not cause any problem.



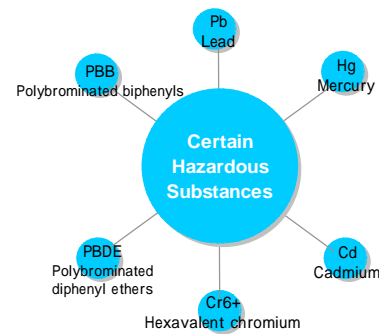
Production Floor After Culling Fluorescent Lights

Controlling Environmentally Unfriendly Chemicals

EU RoHS Directive (*1) came into effect on July 1, 2006.

Cosel had achieved 100% compliance with RoHS Directive in February, 2006 (*2).

REACH(*3) and PFOS came into effect in FY2007 and FY2008, respectively. Requirements to control environmentally unfriendly chemicals became even stricter. We have established the systems to control environmentally unfriendly chemicals and using these systems so that environmentally unfriendly chemicals are not used in our products.



Green Procurement

At Cosel, we are facilitating "Green Procurement" in which we procure environmentally friendly components and materials in order to deliver environmentally friendly products to our customers.

We have defined "prohibited materials," "materials targeted for elimination" and "materials targeted for reduction" for components and materials which comprise our products. By doing this, we can prevent the entry of environmentally unfriendly chemicals into our products.

Education on Environmentally Unfriendly Chemicals

In FY2006, we conducted an educational campaign on environmentally unfriendly chemicals.

Not only people working at our headquarters and Tateyama Plant, but also people who are involved with Cosel's products as our contractors and at transportation companies also participated in our test and training sessions.

Using a training material developed by our department which is responsible for environmental issues, training sessions were held by department and tests were given to participants to check their understanding about environmental issues. This enabled them to deepen their understanding of the objectives and the importance of managing environmentally unfriendly chemicals as well as activities taken by Cosel.

Supplier Management

We are evaluating the risk of use of environmentally unfriendly chemicals by our suppliers and ranking them at 3 levels.

This ranking is used for the "Measurement of Environmentally Unfriendly Chemicals of Purchased Materials" and "Audit of Suppliers' Management of Environmentally Unfriendly Chemicals." This ranking is reviewed once every year.

Under this system, we audit and review how environmentally unfriendly chemicals are controlled by high risk suppliers and how high-risk components and materials are controlled by suppliers. We also facilitate registration of high-risk suppliers, materials and components.

(*1)What is RoHS Directive?

RoHS Directive is an EU directive that will restrict the use of certain hazardous materials in electrical and electric equipment. The use of six substances, mercury (Hg), cadmium (Cd), lead (Pb), hexavalent chromium (Cr6+), polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), will be prohibited from July, 2006.

(*2) Excluding Maintenance Items

(*3) What is REACH?

REACH is a regulation in which manufacturers or importers of chemical substances are obliged to register and evaluate chemical substances in manufacturing or importing them and, in the case of chemical substances of very high concern, an authorization from relevant authorities is required and high risk substances are subject to limitation including ban. REACH entered into force in June 2007.

Controlling Environmentally Unfriendly Chemicals

New Components, New Products and Mass Production Management

Since FY2006, we have been conducting fluorescence X-ray tests (*4) by target measurement area to prevent the entry of environmentally unfriendly chemicals into our products. The fluorescence X-ray test allows us to confirm and verify whether or not a component is complying with our "Green Procurement Standards."

The evaluation is performed at the following 3 levels.

We have four X-ray fluorescence instruments in total, two units at our headquarter plant and another two at our Tateyama plant.

New Product Launch

In the past when we adopted a new component, we conducted a "Quality Evaluation" to prevent the use of defective components. However, we decided to conduct fluorescence X-ray tests for mass production components to check the presence of environmentally unfriendly chemicals in newly adopted components. Test results are compared to the data about environmentally unfriendly chemicals which are submitted from suppliers before components are officially registered.

Acceptance of Purchased Components

We also conduct fluorescence X-ray tests by target measurement area when we accept purchased components.

After Shipping Mass Production Products

After we ship mass production products, we evaluate the presence of environmentally unfriendly chemicals to make sure that Green Procurement Standards are met on an ongoing basis, in addition to our longstanding electrical quality and mechanical quality evaluations.

(*4)What is fluorescence X-ray test?

It is an analytical method in which information on the existence of an atom is acquired based on the wavelength of a specific X-ray and the intensity of the energy of the X-ray which is generated when X-ray is irradiated to an atom which comprise molecules.



Fluorescence X-ray Instrument

Management of Production Lines

In order to prevent the entry of environmentally unfriendly chemicals into our products, RoHS-compliant products and non-RoHS-compliant products are manufactured in separate lines on our production floor by using separate equipment, jigs and tools.

Equipment, jigs and tools for soldering process are identified by signs and labels as shown in the following pictures.



Indication of Lead-free Solder



Indication of Eutectic Solder



Indication of Solder tank

Environmental Conservation Activities

1 . Energy Saving

87% of the energy Cosel consumes is electric power. Since the inception of the Company, all our fluorescent lamps at our shop floors and offices have had pull switches to reduce the amount of power consumed. We are making sure that lights are turned off during breaks and when not in use.

Furthermore, all the personal computers used at Cosel are set in the energy-saver mode and our monitors are automatically turned off when not in use. We are always taking small but important measures.

Cutting Down Power Consumption of Computers

Entire company has adopted a power-saving configuration in which a monitor goes off and a computer goes to a stand-by mode when it is not in use for a certain period of time.

Power switches are provided for each computer or for each area so that when somebody goes home, he or she can turn off the power to reduce power consumption of computers not in use.

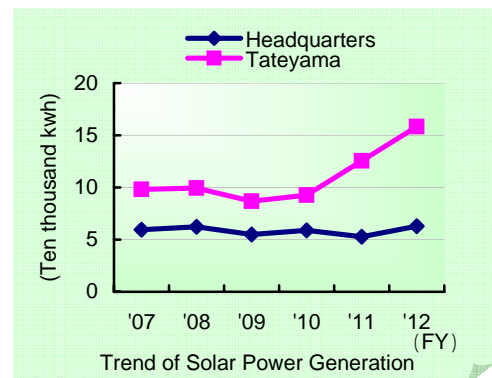


2 . Use of Renewable Energies

- FY2002 60kw solar power generator was installed at the rooftop of the new headquarters building
 - In FY2004, 50kw solar power generator was installed at the rooftop of the Tateyama Plant
 - In FY2006, 50kw solar power generator was added at the rooftop of the Tateyama Plant
 - In FY2010, 50kw solar power generator was added at the rooftop of the Tateyama Plant
- The impact of these generators is about 200,000kwh annually (CO₂ emission of about 84t-CO₂ reduction)



Solar Panels at New Headquarters Solar Panels at Tateyama Plant



3 . Reduce

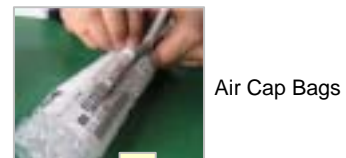
Reduction of Use of Air Cap Bags for Packing

Air cap bags were used when we shipped transformers and sheet metals, etc. to contract manufacturers. Once packages were opened at contract manufacturers' site, the air cap bags were disposed of as industrial waste.

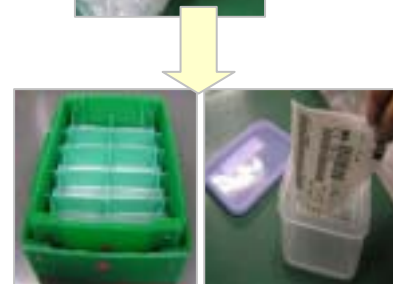
We reduced the use of air cap bags by changing our packing methods using reusable Tupperware and containers.

Unpacking at contract manufacturers' site also became more efficient.

(This is one example of our QC circuit activities)



Air Cap Bags



Reusable Tupperware and Container

Environmental Conservation Activities

Elimination of Styrofoam

We had been using styrofoam as a buffer material for the shipment of our products because it was cheap and excellent to protect our products. After being used, it had been discarded as the industrial waste.

We have replaced plate-shaped styrofoam with cardboards and small styrofoam balls with biodegradable resin in order to reduce industrial wastes.

4. Reuse



Reuse of Tape Reels and Semiconductor Sticks

We use chips to assemble power supplies. These chips are shipped from manufacturers reeled up onto plastic reels.

When chips are used up, the reels are left, which used to be discarded as industrial waste of stabilized type. Some semiconductors come in plastic sticks when shipped from manufacturers. These sticks had been discarded once semiconductors were used up just like the reels.

Because they do not get deformed or worn after use, we have changed our procedures to reuse them by having manufacturers collect them after use.



Reuse of Used IPA

We use isopropyl alcohol (IPA) as a diluent for fluxes which are used in soldering our products. We also use IPA for cleaning of jigs and tools.

In 2010, we introduced IPA recovery equipment to recover used IPA and reuse it. As a result, we were able to reduce the amount of chemical substances.



IPA Regenerator



Regenerated IPA

5. Recycle



Recycling of Waste Products and



Defective products, unusable bottom plates and dummy circuit boards that were cut off in production processes had been discarded as industrial waste.

Now we are dividing these wastes into metals and plastics, etc. before disposing them so that they can be used as ingot and furnace combustion improver.

Environmental Burden Data

Every year, we at Cosel are investigating environmental burden in our business activities for management purpose.

() YoY Jan, 2012 to Dec, 2012

INPUT

Energy

Electrical Power About 429millionkwh (102%)	LPG About 44,000m ³ (100%)
Kerosene About14kℓ (125%)	Gasoline About7kℓ (87%)

Materials

Solders with lead(*1) About0.06 t (46%)	Lead-free Solders About7 t (81%)
Flux/IPA About21 t (84%)	

Office Paper

Copy Paper About8 t (136%)

Packing Materials

Packing Boxes (Cardboard Boxes) About158 t (78%)	Buffer Materials (Cardboard Boxes,Plastics) About97 t (85%)
---	--

Water Resources

Water About5,400m ³ (88%)	Underground Water About94,000m ³ (112%)
---	---



OUTPUT

Products

Wastes

Domestic Waste About3 t (98%)	Industrial Waste of Stabilized About0.6 t (42%)
Industrial Waste of Controlled Type About4 t (112%)	Industrial Waste subject to Special Control About0kg (-)

Recycling

Cardboard Boxes About83 t (112%) →Cardboard Boxes	Used Papers About20 t (93%) →Toilet paper, Newspaper	Plastics About11 t (67%) →Accelerants	Waste About2.4 t (44%) →Accelerants
Waste Liquid About1.2 t (171%) →Accelerants	Styrene Foams About0.7 t (44%) →Polystyrene materials	Fluorescent About87kg (118%) →Glass materials	Conductive About61kg (53%) →Trail tarp

Valuable Resources

Lead-free Solders Balls About4.1t (89%)	Waste Metal(*2) About27 t (90%)
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CO₂ Emission

CO₂ About2,130 t -CO ₂ (102%)
--

Discharged Water

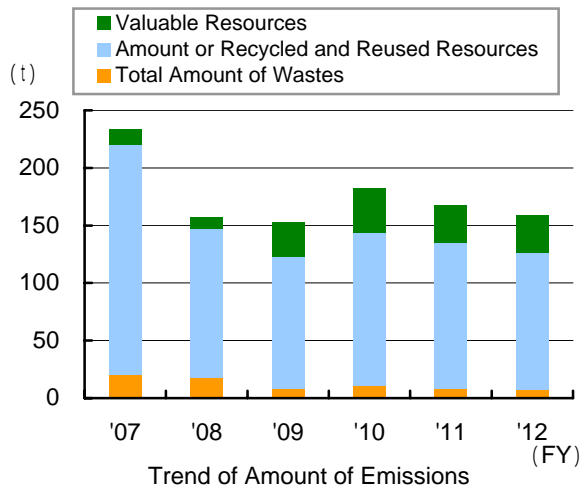
Sewage About5,400m ³ (88%)
--

(*1)Became completely lead-free

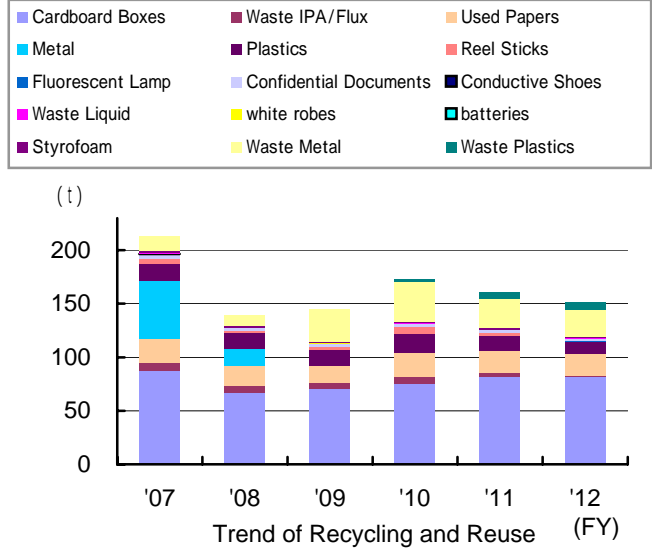
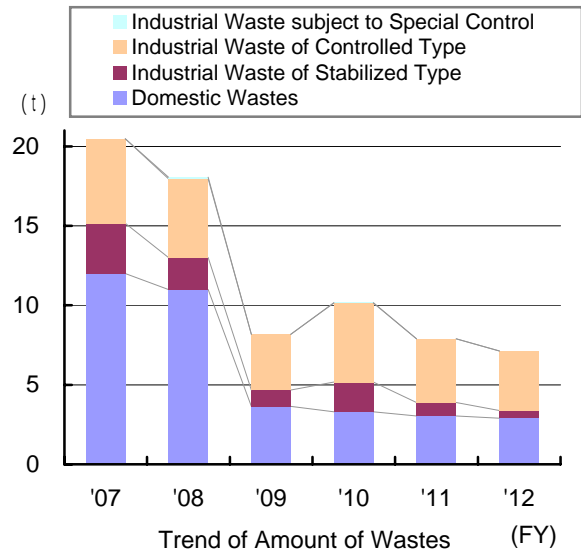
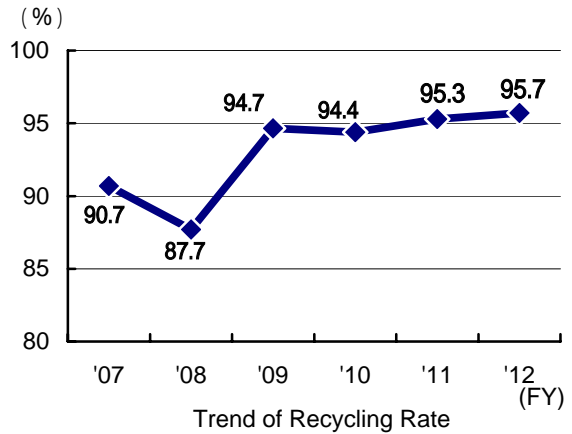
(*2)It is changed from recycling to valuable resources

Environmental Burden Data

1. Amount of Emissions



*Recycling Rate (%) = Total Amount of Wastes collected for Recycling and Reuse and Valuable Items for FY (kg)/Total Emission Amount for FY (kg) *100



Many types of wastes are generated in our business activities. Many of them are recyclable, if we segregate them properly.

We at Cosel, Environmental Committee and Beautification and Recycling Committee are working together in such activities as making sure wastes are properly separated and emissions are reduced.



Chairman of Environment Committee
Yutaka Tamou

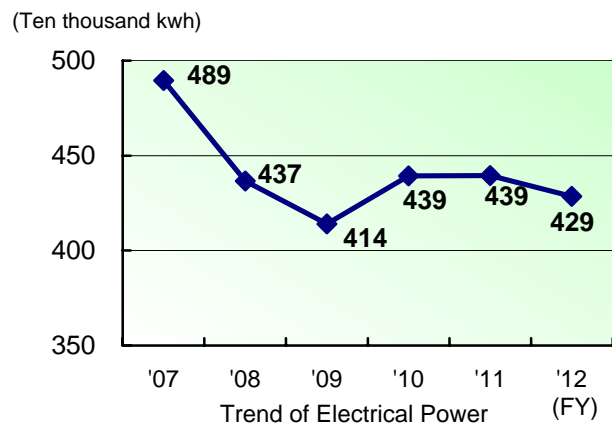
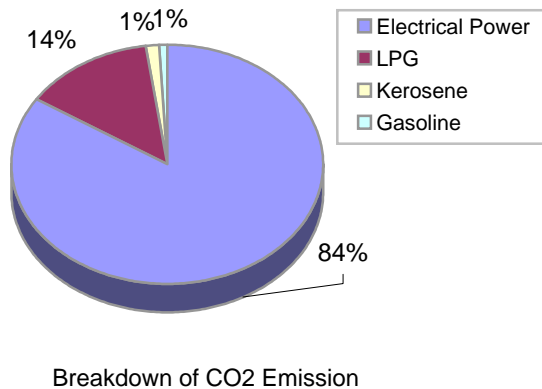
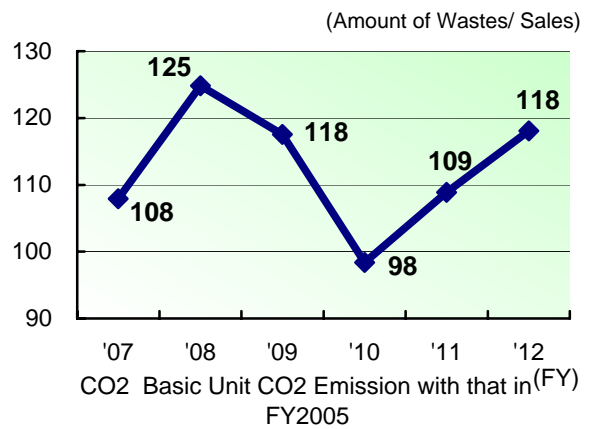
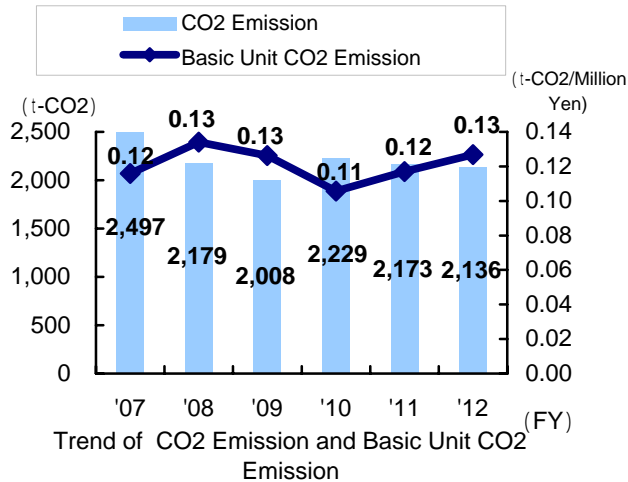
"Environmental Committee is working on the following 3 major activities.

- (1) Reduction of CO₂
- (2) Improvement of Recycling Rates
- (3) Compliance with Laws and Regulations

In this fiscal year, the project team has considered to save energy and employees are proceed some actions for "Reduction of CO₂ emission". We also have taken action to sort of materials for increasing the percentage of garbage recycle rate. We enforced to recycle all materials seriously.

Environmental Burden Data

2. Total Energy Amount



As we mentioned before, 84% of our CO₂ emission comes from electrical power consumption. In order to reduce this, our Environmental Committee is playing a central role in implementing many activities.

As for our total energy use (crude oil equivalent) as a business operator under the Law Concerning the Rational Use of Energy was 1,268kl, which was not subject to notification requirement.

However, it is expected that our energy use will exceed the 1,500kl criteria within several years. Therefore 2 employees took the Energy Management Training in FY2010.

We have also confirmed that we are not specified consigner as defined by Law Concerning the Rational Use of Energy.

3. Amount of Environmentally Unfriendly Chemicals

Among chemical substances handled by Cosel, Class I Designated Chemical Substances whose handling amounts are subject to notification requirement with PRTR are "lead and its compounds." However, lead solder which falls under "lead and its compounds" is not subject to the notification requirement because we have already changed all of our solder to lead-free solder.

Environmental Accounting

Covered Area: Head Office and Plant, Tateyama Plant
Unit: Thousands of Yen

Environmental Conservation Cost

Category	Description	Investment	Cost
(1) Cost within Business Area Cost incurred to curb environmental burden through production and service activities implemented within business areas.			
Pollution Prevention Cost		0	0
Global Environment Conservation Cost		1,884	15,015
Resource Circulation Cost		0	2,362
(2) Cost at Upstream and Downstream Cost incurred to curb environmental burden generated at upstream and downstream of production and service activities.			
	(Cost) Green procurement Controlling Environmentally Unfriendly Chemicals	0	82,054
(3) Management Cost Environmental Conservation Management Cost			
	(Investment)Power Monitoring System (Cost) Management of Environmental activities. Monitoring and measuring data from facilities with Environmental burdens. Handling of Responses to Survey on Chemicals.	704	11,432
(4) R&D Cost Environmental Conservation R&D Cost			
	(Cost)Research and development of the environmental conservation products	0	422
(5) Social Activities Cost Environmental Conservation Cost for Social			
	(Cost) Sponsoring Environment-related radio program	0	800
(6) Environmental Damage Control Cost Cost to Control Environmental Damages			
	-	0	0
Total		2,588	112,085

Environment Conservation Cost includes depreciation of capital investment of the past year and labor cost.

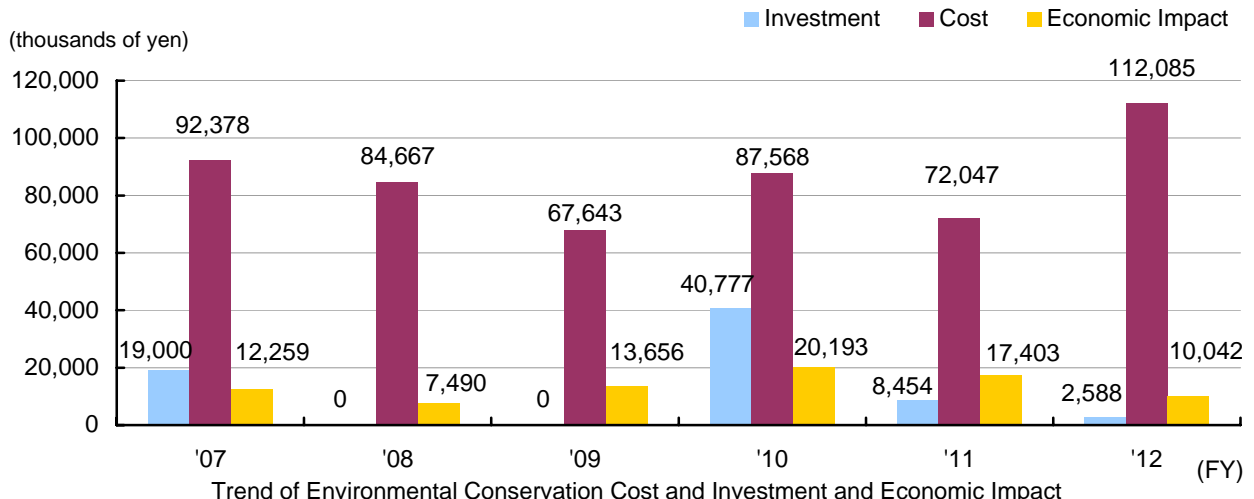
Environmental Conservation Effect (Substance Volume)

Item	Effect
CO2 Reduction (Reduction of Power Consumption with photovoltaic power generation and energy saving measures)	92(t-CO ₂)
Effective Use of Wastes (Amount of Recycle-Reuse and Valuable Resources)	151(t)
Use reduction quantity of IPA	2.7(t)

Environmental Conservation Effect (Economic Impact)

Item	Amount
Savings from Power Usage Reduction	3,028
Reduction of waste disposal cost thanks to the Recovery of Valuable Resources	101
Proceeds of Sales of Recyclable Items(Valuable Items)	6,913
Total	10,042

Economic effect based on assumption such as risk avoidance (expected effect) is not posted as effect.



Environmental Education

For the purpose of Environmental Management, we have clearly identified types of the training in need. We are offering;

- (1) General trainings to raise awareness among employees about Environmental issues.
 - (2) Professional trainings to improve technical skills in specialized areas as shown below.
 - (3) Training on environmentally unfriendly chemicals (please see page 13)
- (1)General trainings cover all the employees, including part-timers, temporary employees, if engaged for a certain period. As for the new employees, they are trained at first. If they do not understand enough, they will be trained till satisfaction.













List of professional training

No.	Operation	Description of Training	The concerned
1	Soldering	<ul style="list-style-type: none"> • How to dispose of solder wastes • Check soldering machine • Emergency measures 	Persons who handle them
2	Treatment of Waste Organic Solvent	<ul style="list-style-type: none"> • How to dispose fluid containing flux and/or IPA • Emergency measures 	People in charge of relevant tasks
3	Paper work concerning industrial waste	How to process industrial waste control slips (manifest)	
4	Confirmation of Revision of and Evaluation of Compliance with Environmental Laws and Regulations	How to confirm the revision of, and evaluate compliance with environmental laws and regulations	
5	Observe nitrogen gas filling	<ul style="list-style-type: none"> • Check when observing liquid nitrogen filling • Daily check 	
6	Controlling chemicals and hazardous substance	Control methods based on internal regulations	
7	Confirmation of Kerosene Tank Check Results and Emergency Response	How to train, provide hands-on exercises and check understanding based on "Kerosene Tank Control Procedures (PEC018)."	

Numbers of Employees with Certification in the Environmental Field

We are encouraging employees to acquire certification in the environmental field and trying to increase the number of certified employees.

As of today, the following numbers of employees have certification in the environmental field.

No.	Name of Credentials	Number of Credential Holders
1	hazardous materials security sup	1 
2	Class B hazardous materials eng	19 
3	Class C hazardous materials eng	10 
4	chief of lead	4 
5	chief of organic solvent	13 
6	special controlled industrial wast	5 
7	chief of specified chemical subst	10 
8	1 health officer	10 
9	Safety Officer	4 
10	fire prevention manager	6 
11	Eco test	55 
12	Internal Auditor of the Environme	25 

Improve environmental awareness

Visiting Recycling Company with Plant Tour

In December, four members of the Beautification Recycling Committee from our headquarters plant and Tateyama plant visited a recycling company to which we subcontract confidential documents recycling.

Plant tour was given to deepen our understanding about waste separation and to confirm how confidential documents are recycled.



Production Dept. Section2
Uichi Kanamori

"This was my first time visiting the recycling plant, which made me realize how important recycling is.

The facility is recycling important documents with finger print security system. We understood the recycling system and aware of the importance of sorting materials. We publicize the importance internally as the best we can.

Segregate plastic bottles

Beverage bending machines are installed in our premises. Used plastic bottles are separated into exterior films, caps and bottles (main bodies) before being discarded.

We are trying to improve environmental awareness through an easy-to-do environmentally friendly activity.



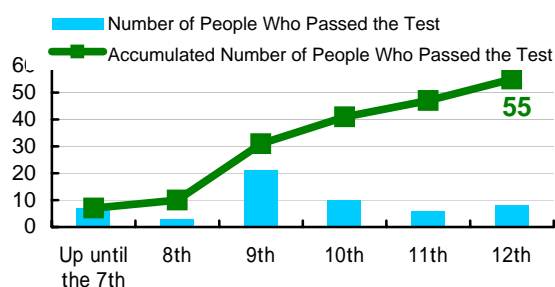
Encouraging taking Eco Test: Developing People who Work on Environmental Issues

Eco Test (officially known as Certification Test for Environmental Specialists) is a certification test run by the Tokyo Chamber of Commerce in order to develop people with a wide range of knowledge who can play a leading role in tackling environmental issues and facilitate the realization of a sustainable society where we can protect environment and achieve economic growth at the same time.

Cosel's employees started to take the test from the 6th test and 55 of them have passed the test so far.

We are encouraging our employees to take the test by subsidizing a test fee and making those who passed the test eligible for certification reward money.

We will continue this effort in FY2013.



Noise Filter Design Dept.
Junko Yasuda

(Past the 13th Test)

"Many sorts of standards and kinds are existing on environment label. We look at them without attention so far.

Also, we knew common environment glossaries, histories, international conferences and the rules. We have proud that our actions are helping of earth environment at the end."

Social Contribution

JEITA Toyama District Manufacturing Class



On June 1, 2013 (Saturday), "6th JEITA Toyama District Manufacturing Class" was held at SMK(in YATUO). 30 male and female students in grades 5 and 6 from nearby elementary schools participated in the class and engaged in an electrical engineering project under the theme of "Let's turn on a light by wireless signal."

Cosel has been a part of this class since the 1st class. In the 5th class too, our employees served as instructors and gave students guidance.

Children seemed to have struggled with unfamiliar tasks of assembling and soldering, but we received such feedbacks as "It is great feeling that various lights make turn on/ off by wireless on signal", "In next year, when I will be in middle high school, I utilize my experience of radio craft. ", "It was very fun to do. I would like to do this again."



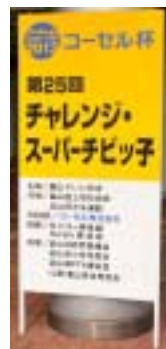
What is JEITA?
 Japan Electronics and Information Technology Industries Association.
 An organization composed of manufacturers and sellers of such products as electrical and electronic equipment, electronic devices, electronic components, electronic materials and software.

Cosel Cup Challenge Super Kids

This is our 25th anniversary since we became a special sponsor for a sport event for boys and girls of grades 4 through 6 hosted by a local TV station.

About 323 children in Toyama prefecture participated in 5 events ranging from 100-meter sprints, ball throwing, broad jump, zigzag dribbling and swimming.

It became a sparkling day as children competed, family and friends cheered for them.



Fund-raising Activities

Proceeds from the sales of our internal bazaar and donation from our employees are donated to Toyama Prefecture Cooperative Donation Society. Donation amount is approximately 100,000 yen per year, which is enough to buy a wheelchair for the disabled or elderly.

The donation can be also applied to home-based service, volunteer training, accident prevention programs for children and fostering and nurturing of young people.

In FY2008, we sent about 100 spoiled postcards to National Federation of UNESCO Associations in Japan. The spoiled postcards are replaced with new stamps and then sold. The proceeds of the sales of these new stamps is donated.

The donation is used for the World Terakoya Movement, a program for people who had not been fortunate to have educational opportunities.



Two erasers
Cambodia



One pencil
Nepal



Two notes
Afghanistan

An article is equivalent in a sheet of spoiled postcard

Benefits with Employees

Human Development

【Our Philosophy on Training】

We believe that people are our most important assets and developing human assets is the driver for our growth.

【Basic Educational Policies】

Based on the above philosophy, the following basic educational policies are set forth.

1. Invigorate workplace
2. Improve leadership
3. Acquire necessary knowledge and techniques to become more capable
4. Develop skills for the operation and maintenance of an appropriate quality system
5. Be aware of the need of an environmental management system and develop skills for its operation and maintenance

【Educational Activities】

Educational Committee is playing a central role in planning and implementing various training and educational events in collaboration with other related departments.



Member feedback of DP workshop
(Re-form staff consciousness)

Company Newsletters

【Purpose of Company Newsletters】

Newsletter Committee is playing a central role in issuing Company Newsletters twice a year, hoping that they will provide topics of conversation and serve as lubricant, making Cosel a company that everybody feel fortunate to be a part of.

【Topics Covered】

Our newsletters cover a wide range of topics including topics related to our workplaces, club activities and hobbies which employees are proud of.

Every issue of our newsletter provides enjoyable topics, sometimes revealing our colleague' hidden talents and sometimes showing us hidden less pretentious side of our usually naggish bosses.



Cover of Company Newsletter issued in FY2012

Benefits with Employees

Activities for Labor Safety and Hygiene

Safety and Hygiene Committees organized separately for the headquarters and Tateyama Plant are taking a lead and conducting a safety and hygiene patrolling for the purposes of maintaining and improving the safety of work environment (bimonthly).

When a problem is found as a result of the parole, a recommendation for improvement is issued, upon which a relevant department takes actions and reports back to the committee.

The number of labor accidents in the past 5 years is as follows.



Maintaining and Promoting Health

We are trying to maintain and improve mental and physical health of our employees through the following trainings.

- Sexual harassment prevention
- Power harassment prevention
- Mental illness prevention

Club Activities

There are 11 active clubs within Cosel (a club can be formed with a minimum of 5 members and subsidized by the company).

There are culture-related clubs and sport-related clubs. They aim at maintaining and promoting health and developing friendship among members.

In FY2011, a defunct tennis club made a comeback and in FY2012, a running club was newly formed.



Running club Member sin Training

Work and Life Balance

It is very challenging to raise children in single or dual-income families. This is one of the factors which invited declining birth rates and decreasing population of children. In this environment, one of the social responsibilities of businesses is to "support life and work balance" for their employees.

[Promoting the use of shorter work hours for child care system]

Employees who are raising children in the 6th grade or younger (as of the end of March of a fiscal year) can work shorter hours within the prescribed hours under our flexible work hour system.

【Encouraging Employees to Use Planned Paid Days Off】

Our internal rule stipulates that we have to use at least of 2 days of paid day off every half-year term.

By working efficiently, having good communication with our bosses and colleagues and using paid days off in a planned manner, we would like to achieve a good life-work balance and personal development and freshen up ourselves.



Purchasing Dept. *Nami Koide*

" I have shorter work hours. I come in 1 hour later and leave office 1 hour earlier. I am so grateful that I am having shorter hours because this gives me more time to spend with my children.

2 of my children are enjoying at preschool, so I can work free for anxiety. "

Postface

Thank you very much for reading our "Environmental Report 2013."

Since we started to issue "Environmental Report" in 2000, we have expanded the coverage of our articles by adding articles about our social activities in addition to environmental activities in order to bring a better disclosure.

As a part of corporate social responsibilities, we will make our company-wide efforts to achieve our goals and disclose our activities.

July, 2013
Cosel, Co., Ltd.
Quality Management Dept.
Quality Management Div.1
<http://www.cosel.co.jp/en/>

