"Father Sun" Activities Annual Report 2016

K O A Corporation Site Report

KOA Corporation Company Profile (ISO14001 Registered Sites)

Earthwing (Minowa-machi Kamiina-gun)	: Headquarters and research and development of electronic components
South Wing , West Wing (Minamiminowa-mura Kamiina-gun)	: Quality assurance function, research and development of electronic components, logistics services to customers in Japan (To be registered in December 2016)
Eastwing (Minowa-machi Kamiina-gun)	: Design, development, and manufacture of resistors, circuit protection devices, and inductors
MINOWA Wing (Minowa-machi Kamiina-gun)	: Design, development, and manufacture of resistors and hybrid IC
Nishiyama Factory (Ina City)	: Design, development, and manufacture of resistors, inductors, resistor network, and circuit protection devices
Minowa Factory (Minowa-machi Kamiina-gun)	: Design, development, and manufacture of resistors, inductors, and circuit protection devices
Chuo Factory (Minamiminowa-mura Kamiina-gun)	: Design, development, and manufacture of multi-layer ceramics
Takumi no sato (Iida-shi)	: Manufacture of resistors
Nanakuri no mori (Achi-mura Shimoina-gun)	: Design, development, and manufacture of resistors and circuit protection devices

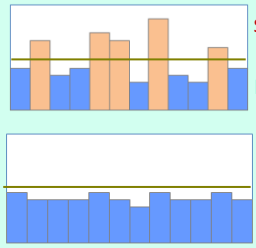
Material flow for FY2015 and undertakings for social environmental activities

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption **9,014 kL** (Vs. last year : Down 4%)	**Design, development, manufacture, and sale of resistors and other electronic parts** (Products Vs. production volume of last year : Down 2%)	**Emitted substances** ・ **Reused : 53 tons** ・ **Recycled : 468 tons** ・ **Disposed : 2 tons** (Vs. last year : No change)
Clean water **86,080 m³** (Vs. last year : Down 13%)	**Product containing the amount of movement of the substances subject to PRTR** **5.9 tons** (Vs. last year : Down 10%)	**CO_2 emissions from fuel combustion** **13,019 t-CO_2** (Vs. last year : Down 4%)
Quantity of substances subject to PRTR contained in purchased materials **24.5 tons** (Vs. last year : Down 5%)		**Quantity transferred Substances subject to PRTR** ・**to the environment : 8.5 tons** (Vs. last year : Down 2%) ・**to emitted substances : 9.3 tons** (Vs. last year : Down 6%)

Electric power consumption reduction measures "Modification of firing furnace to conserve energy"

Nanakuri no mori has embarked on modifying its firing furnaces, which represented approximately 30% of factory's total electric power consumption, for energy conservation purposes. Since each firing furnace has to run continuously for long hours to stabilize the temperature inside the furnace, it consumes huge amounts of electricity. To increase the thermal efficiency of the furnace, we have covered each of the places heat is dissipated with thermal insulating material to ensure heat retention, and at the same time, we have changed the conveyer belt, which transfers the work pieces inside the furnace, to a less-heat-absorbing type made of a thinner material to address the heat loss both from heat radiation and absorption perspectives. Further, we have introduced a control system to disperse the timing of turning on and off the electric heater, which successfully suppressed the peak power consumption from 79kw to 27kw, to equalize power consumption.

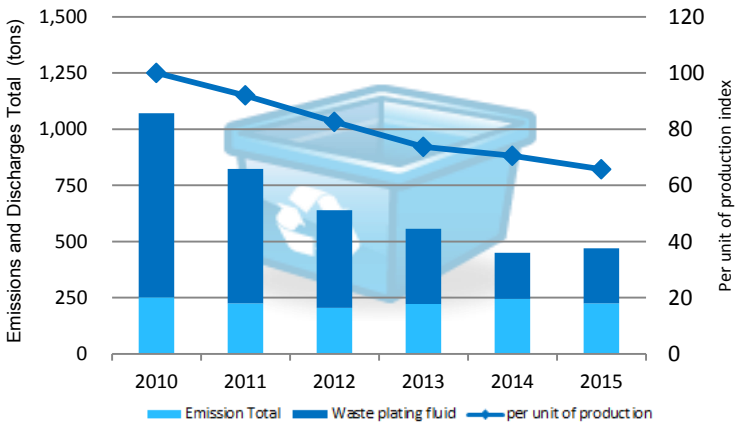
energy-saving measures have cut monthly electric power consumption by approximately 30%, which is equivalent to 6.7 tons in carbon dioxide emissions. Currently, we are rolling out these energy-saving measures to firing furnaces used by other factories to reap the benefit of energy conservation on a group-wide basis.



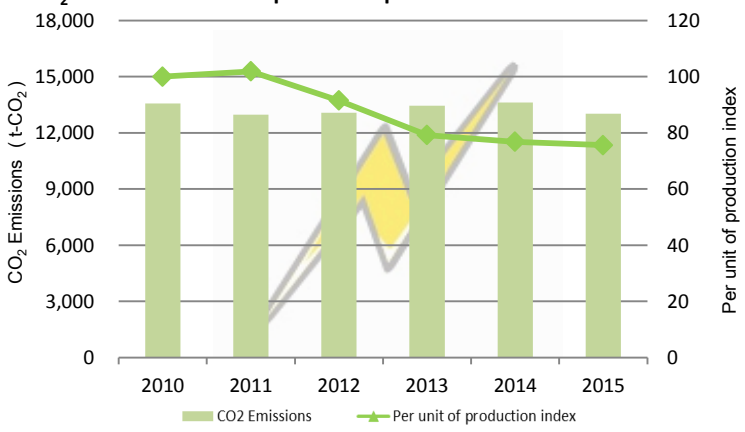
The Topics for "Father Sun" Strategy

AC	FY2015 Targets	Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)	
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎	We have achieved zero environmental accident. We have observed statutory requirements and established law-abiding systems in association with the construction of the South Wing and West Wing. And by performing a law-abiding audit, compliance to all relevant laws and regulations has been confirmed.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	◎	Improving the cycle time to reduce the operating time of production equipment, proposing design ideas that can help to reduce customers' environmental burden, expanding the green areas inside the factory's premises, and improving the designs of existing products to reduce the amount of raw materials consumed and materials discarded are among some of a variety of activities we engaged in for environmental preservation.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎	Design changes to reduce discarded raw materials, computerization to eliminate the use of paper documents, lengthening the life of plating fluid, and recycling of electroplating effluents are some of our 3R activities that enabled us to cut the total amount discharged per unit of production by 34.3% from 2010 to achieve our goal.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	◎	Rolling out to all KOA factories our activities to eliminate the leakage of compressed air and to systematically replace the existing utility systems to more efficient systems, abolishing oil-fired boilers by incorporating heat sources employing heat pumps, reducing electric power consumption by improving the control method of electric furnace helped us to achieve carbon dioxide emissions reduction per unit of production by 24.4% from 2010 to achieve our goal.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion



"Father Sun" Activities Annual Report 2016
KOA ELECTRONICS CO., LTD. Site Report

KOA ELECTRONICS CO., LTD. Company Profile

Location of Head Quarters : Anan-chou, Shimoina-gun, Nagano, Japan
JapanEstablishment : September 27, 1969
Representative : President, Nakatou Yasuhisa
Employees : 302 (As of March 31, 2016)
Business Description : Design, development, and production of resistors
Factory : Tagami,Niino,Yasuoka,Minamishinano,Chiyo,Waseda

- Environmental Management Representative
  General Manager of General Affairs Group Noritaka Koike
- ISO14001 Certification Number : 20001591UM (Registered in March 2000)
- Contact : Support Center, QC Group
  【 T E L : 81-260-22-2261 】
  【 U R L : http://www.koa-electronics.co.jp 】

Environmental Policy and Philosophy of KOA ELECTRONICS

KOA Electronics is a company, which manufactures electronic components (fixed resistors) in the land surrounded by rich natural environment of Nagano Prefecture. To learn the importance of nature by being close to nature and to maintain beautiful environment that people of future generations would also want, each employee is aware of the importance of nature and the responsibly of practicing the "Father Sun ("Environmental Management System") to build the bond of trust with the Mother Earth to ultimately create a model for perpetually circulating society.

Material flow for FY2015 and undertakings for social environmental activities

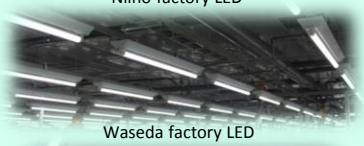
INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption **2,494 kL** (Vs. last year : Down 1%)	**Design, development, manufacture, and sale of resistors and other electronic parts** (Products Vs. production volume of last year : Down 11.3%)	**Emitted substances** **・Reused : 0.4 tons** **・Recycled : 209 tons** **・Disposed : 0.6 tons** (Vs. last year : Down 7%)
Clean water **3,705 m³** (Vs. last year : Down 10%)		**CO_2 emissions from fuel combustion** **3,720 t-CO_2** (Vs. last year : No change)
Quantity of substances subject to PRTR contained in purchased materials **30.4 tons** (Vs. last year : Down 6)	**Product containing the amount of movement of the substances subject to PRTR** **14.8 tons** (Vs. last year : Down 4%)	**Quantity transferred Substances subject to PRTR** **・to the environment : 11.7 tons** (Vs. last year : Down 12%) **・to emitted substances : 14.2 tons** (Vs. last year : Down 6%)

Improved energy-saving performance "Conversion to LED lighting and efficient utilization of manufacturing facilities"

Each factory of KOA Electronics engaged in energy-saving activities, such as upgrading to LED lighting and compartmentalizing a large lighting area into a number of smaller lighting areas, identifying and eliminating air leakage by conducting an investigation, and seeking efficient utilization of compressors, to help cut carbon dioxide emissions by 19.6 tons in 2015.

Going forward, we will be rolling out air leakage investigation and fixing of leakage spots that Minami-Shinano factory carried out to other factories to further curb carbon dioxide emissions in pursuit of lessening environmental burden.

Niino factory LED



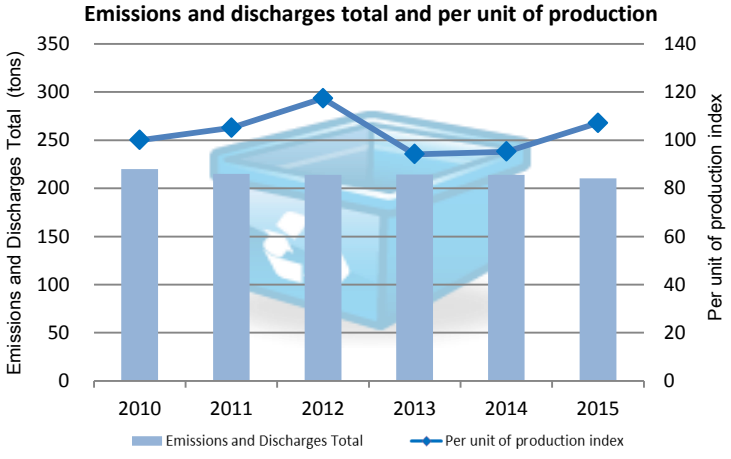
Waseda factory LED

Waseda factory compressor

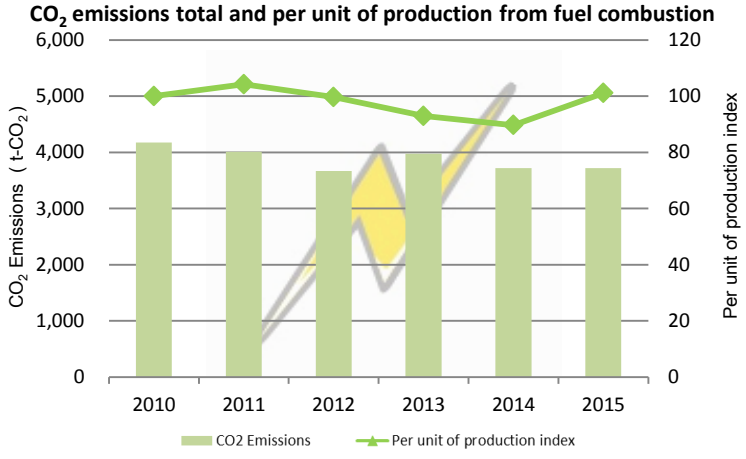
The Topics for "Father Sun" Strategy

AC	FY2015 Targets		Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎	We have maintained the status of zero environmental accidents. In 2015, in the process of fixing the pavement around kerosene tank and newly constructing an indoor storage place, we have transferred specially-controlled industrial waste storage to a more secure place to alleviate environmental risks.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	◎	All non-manufacturing departments, such as engineering, quality assurance and operational support, were also active in reducing environmental effects, and in 2015, while the factories are reinforced (as a part of business continuity planning) to make them earthquake resistant (with particular focus on their roofs), they took part in infrastructure improvement and energy-conservation-geared production facility improvements, Web-EDI promotion, and waste products reduction through reducing defects.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	○	In 2015, we pursued the reduction of discharged materials stemming from manufacturing, such as generated defects. But we failed to reach our target as the total amount discharged per unit of production exceeded the 2010 number by 8%. We will continue to focus on discharged materials reduction activities to help us accomplish the 2020 social environmental targets, the activities for which are slated to commence in 2016.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	○	We were active in many energy-saving initiatives, but our carbon dioxide reduction measures were unable to keep up with reduced manufacturing output. As a consequence in 2015, carbon dioxide emissions per unit of production increased by 2% from 2010 to fall short of our target. Going forward, we will proactively promote energy-saving activities.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion



"Father Sun" Activities Annual Report 2016
KASHIMA KOA DENKO CO., LTD. Site Report

KASHIMA KOADENKO CO., LTD. Company Profile

Location of Head Quarters : Nakanoto-machi, Kashima-gun, Ishikawa, Japan
Establishment : October 15, 1984
Representative : President, Nomuki Kazunori
Employees : 132 (As of March 31, 2016)
Business Description : Design, development, and production of resistors and resistor/network

- Environmental Management Representative : President, Nakatou Yasuhisa
- ISO14001 Certification Number : JQA-EM0155 (Registered in October 2000)
- Contact : General Affairs Center

【TEL：81-767-76-1111】
【URL：http://www.kashimakoa.co.jp】

Environmental Policy and Philosophy of KASHIMA KOA DENKO

We have put up "Circulation", "Harmony", "Finite", and "Enrichment" as our corporate philosophy and building the bond of trust with our 5 stakeholders - "Shareholders", "Customers", "Employees and Their Families", "Local Community", and "Mother Earth" - as our corporate mission. We are blessed with rich natural environment at the foot of Mount Ishidou and with people known for having a rich sense of humanity. And by taking advantage of these factors, we are engaging in the manufacturing of electronic components knowing that we have much to learn by dealing with soil, water, and the sun on a daily basis to build the bond of trust with the Mother Earth as a responsible member of its ecosystem.

With each employee respecting the circulation of life in the water system of our community, we will responsibly practice the "Father Sun" environmental management system to promote the preservation of biodiversity of our community to create a model for perpetually circulating society.

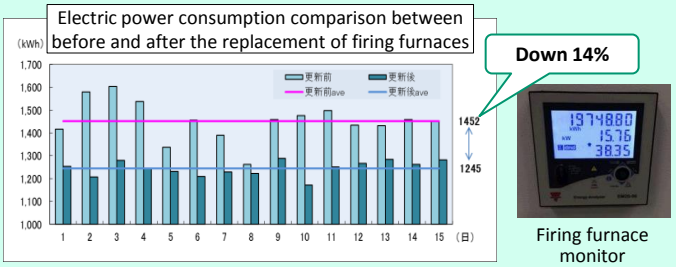
Material flow for FY2015 and undertakings for social environmental activities

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption **939 kL** (Vs. last year : Down 8%)	**Design, development, manufacture, and sale of resistors and other electronic parts** (Products Vs. production volume of last year : Down 15%)	**Emitted substances** **・Reused : 23 tons** **・Recycled : 59 tons** **・Disposed : 0.02 tons** (Vs. last year : Down 5%)
Clean water **2,202 m³** (Vs. last year : Up 8%)	**Product containing the amount of movement of the substances subject to PRTR** **0.7 tons** (Vs. last year : Down 10%)	**CO_2 emissions from fuel combustion** **1,383 t-CO_2** (Vs. last year : Down 8%)
Quantity of substances subject to PRTR contained in purchased materials **3.6 tons** (Vs. last year : Down 7%)		**Quantity transferred Substances subject to PRTR** **・to the environment : 1.8 tons** (Vs. last year : Down 6%) **・to emitted substances : 1.1 tons** (Vs. last year : Down 6%)

Undertakings to reduce electric power consumption "Upgrading to high-efficiency systems"

With the evolution of manufacturing, low electric power consumption is one of important criteria in choosing production equipment. In 2015, we purchased high-efficiency firing furnaces and laser oscillators.

Firing furnaces feature airtight highly-heat-insulated structure with electric power distribution function, which allowed us to cut electric power consumption by 73,500kWh/year (or 14% per equipment). And we have chosen an air-cooled LD excitation type for laser oscillators, which allowed us to reduce electric power consumption by 39,000kWh/year (or 97% per equipment).

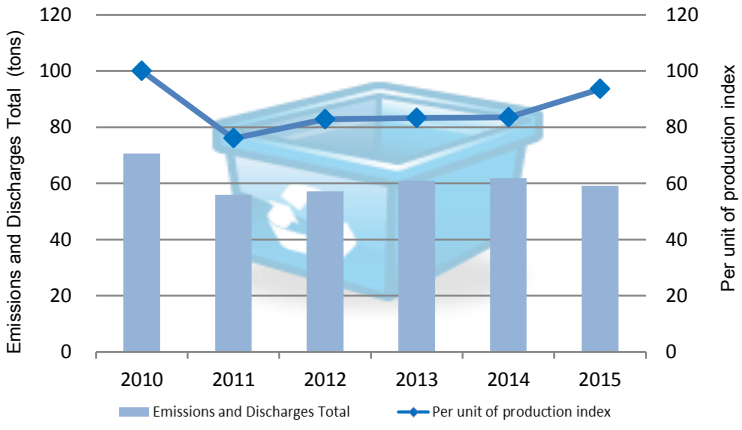


Firing furnace monitor

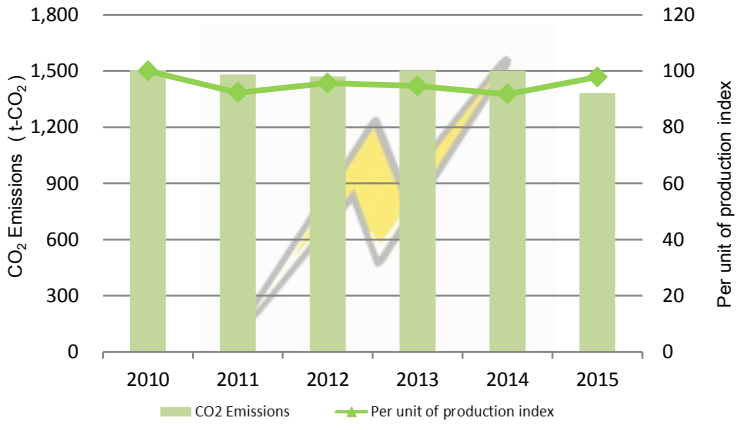
The Topics for "Father Sun" Strategy

AC	FY2015 Targets		Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎	We maintained the status of zero environmental accidents.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	○	In 2015, we have cut electric power consumption (by projected 73,500kWh/year) by upgrading to energy-saving-type firing furnaces and reducing the quantities of resistors that do not meet quality standards.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎	Our measures to cut the amount of scrapped metal plate debris by redesigning pressing manufacturing process to stamp out 2 pieces of metal places (instead of just 1 piece) and to cut taping defects by reducing the attachment of metal power enabled us to achieve total discharges per unit of production by 6.7% from 2010 to reach the target.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	○	Implementation of laser oscillators, upgrading of firing furnaces, introduction of stricter control in running air-conditioners in our factory contributed to reducing electric power consumption by approximately 8.2% from 2010; however, due to reduced manufacturing output, carbon dioxide emissions per unit of production was less by only 2.1% from 2010 to fall short of our target.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion



"Father Sun" Activities Annual Report 2016

SANADA KOA Corporation Site Report

SANADA KOA Corporation Company Profile

Location of Head Quarters :
Fuchu Office / Fuchu City, Tokyo, Japan
Sanada no sato / Ueda City, Nagano, Japan
Sanada Factory / Ueda City, Nagano, Japan
Establishment : January 31, 1935
Representative : President, Sorimachi Akihiro
Employees : 223 (As of March 31, 2016)
Business Description : Design, development, and production of resistors, sensors, and varistors

- Environmental Management Representative : Director, Kitahara Yoshitatsu
- ISO14001 Certification Number : JQA-EM0155 (Registered in February 2000)
- Contact : Support Center Business Support Group
  【TEL : 81-42-364-8321 】
  【URL : http://www.sanadakoa.co.jp 】

Environmental Policy and Philosophy of SANADA KOA Corporation

Thanks to being blessed with rich nature of "pristine rivers and mountains of Nagano" and "water and greenery of Musashino" , the company was able to grow. We are engaging in corporate activities by not forgetting the blessings of the Mother Earth and the local community.

As we engage in the production of electronic components, we are learning through dealing with soil, water, and the sun on a daily basis and are committed to establishing the bond of trust with the Mother Earth by being conscious that we are just one member of all beings and creatures,

Material flow for FY2016 and undertakings for social environmental activities

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption **1,872 kL** (Vs. last year : Down 11%)	**Design, development, manufacture, and sale of resistors and other electronic parts** (Products Vs. production volume of last year : Down 12.1%)	**Emitted substances** ・ **Reused : 0 .1tons** ・ **Recycled : 32.7tons** ・ **Disposed : 0 tons** (Vs. last year : Down 1.2%)
Clean water **7,680 m³** (Vs. last year : Down 17%)	**Product containing the amount of movement of the substances subject to PRTR** **1.0 tons** (Vs. last year : Up 28%)	**CO_2 emissions from fuel combustion** **2,758 t-CO_2** (Vs. last year : Down 11%)
Quantity of substances subject to PRTR contained in purchased materials **3.2 tons** (Vs. last year : Down 14%)		**Quantity transferred Substances subject to PRTR** ・**to the environment : 1.4 tons** (Vs. last year : Down 28%) ・**to emitted substances : 0.8 tons** (Vs. last year : Down 14%)

Undertakings for biodiversity "Biotope in high spirits"

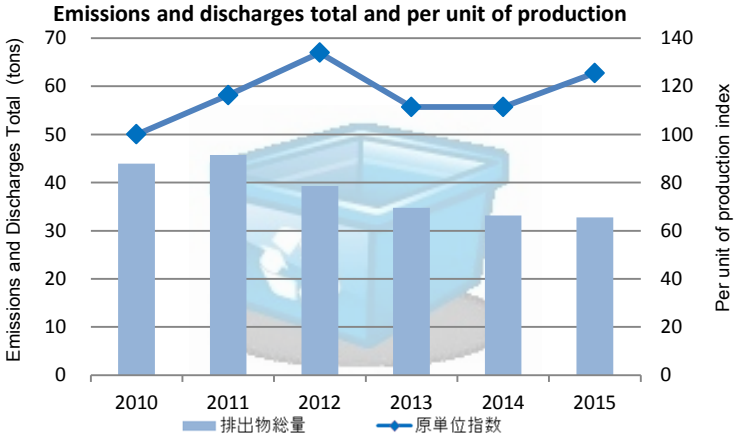
"Sanada no sato", which stands at the foot of historic Sanada castle and is designed to blend right in with surrounding scenery, is focusing on corporate activities deeply rooted in its local community with coexistence with rich nature in mind.

We overcame the threat of water depletion blamed on the lack of spring water, and from this year, killifish is among its inhabitants along with frogs, butterflies, water striders and dragon flies, which joined the biotope last year. The biotope is starting to form an ecosystem just like the fields and mountains of Sanada. With our employees, we are committed to help developing these ecosystems to provide a home for a wide variety of living creatures.

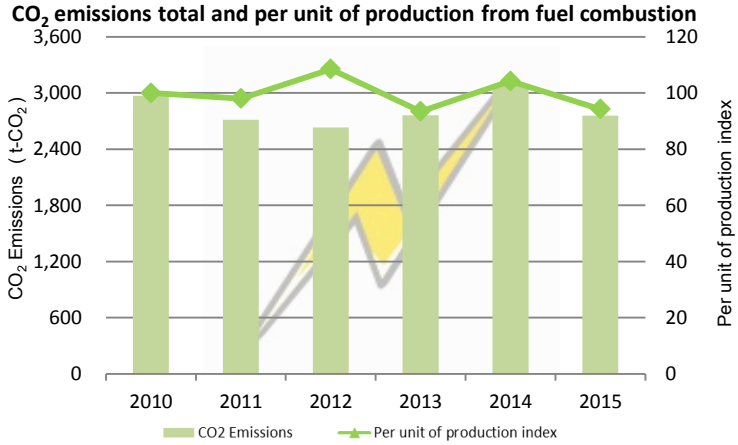
The Topics for "Father Sun" Strategy

AC	FY2015 Targets	Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)	
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎	We maintained zero environmental accident status. In 2015, we addressed the risks associated with the leakage of discharged water from manufacturing processes. And we completed all compliance-related work related to the demolishing and sale of old Sanada factory.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	○	In 2013, we commenced the Father Sun activities, and the environmental improvement activities of manufacturing and non-manufacturing departments are starting to bear fruit. We will be spreading the thoughts and activities to reduce environmental burden and achieve the 2020 social environment target.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎	Even though we maintained the zero emissions status of discharged materials, emissions reduction could not keep pace with declining sales, and as a result, discharged materials per unit of production exceeded the target by 25% to fail to achieve our goal. We are evolving our environmental-burden reduction activities from recycling to reuse and from thermal recycling to material recycling.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	◎	Over the past 5 years, we diligently engaged in energy-saving activities, such as eliminating the leakage of compressed air, reducing the number of air-conditioners (made possible by factory floor space utilization rationalization), reducing the operating time of electric furnaces, shielding outdoor units from the sun, and spraying water on the roof (for cooling purposes), all of which contributed to us achieving per-unit-of-production targets.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion



"Father Sun" Activities Annual Report 2016
KOA KASEI CO., LTD. Site Report

KOA KASEI CO., LTD. Company Profile

Location of Head Quarters : Ina City, Nagano, Japan
Establishment : July 12, 1968
Representative : President, Yamagishi Hiromichi
Employees : 54 (As of April 1, 2016)
Business Description : Design, development, sales, and production of woodwork and Styrofoam and cardboard packaging

- Environmental Management Representative
  : General Manager of General Affairs Nakamura Shohji
- ISO14001 Certification Number : JQA-EM0155 (Registered in October 2000)
- Contact : General Affairs 【TEL : 81-265-72-7264 】

Environmental Policy and Philosophy of KOA KASEI

KOA KASEI is a company engaging in the production of Styrofoam packaging and cardboard boxes and woodwork products in the land blessed with rich natural environment of Nagano Prefecture. We are committed to learning the importance of nature through interacting with nature to preserve the environment, in which the people can live without anxiety, for the people of future generations. With each one of us being interested in the importance of nature to practice the "Father Sun (Environmental Management System)" responsibly, we are striving to preserve the biodiversity of our community and create a model for perpetually circulating society.

Material flow for FY2015 and undertakings for social environmental activities

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption 1,013 kL (Vs. last year : Up 3%)	**Design, development, sales, and production of woodwork and Styrofoam and cardboard packaging** (Products Vs. production volume of last year : No change)	**Emitted substances** ・ **Reused : 0 .04 tons** ・ **Recycled : 70 tons** ・ **Disposed : 0.4 tons** (Vs. last year : No change)
		CO_2 emissions from fuel combustion 2,441 t-CO_2 (Vs. last year : Up 3%)
Quantity of substances subject to PRTR contained in purchased materials 9.0 tons (Vs. last year : Up 2%)	**Product containing the amount of movement of the substances subject to PRTR 0 tons** (Vs. last year : No change)	**Quantity transferred Substances subject to PRTR** ・**to the environment : 0.04 tons** (Vs. last year : No change) ・**to emitted substances : 0 tons** (Vs. last year : No change)

Curbing carbon dioxide emissions "Repairing of steam pipe heat insulating material"

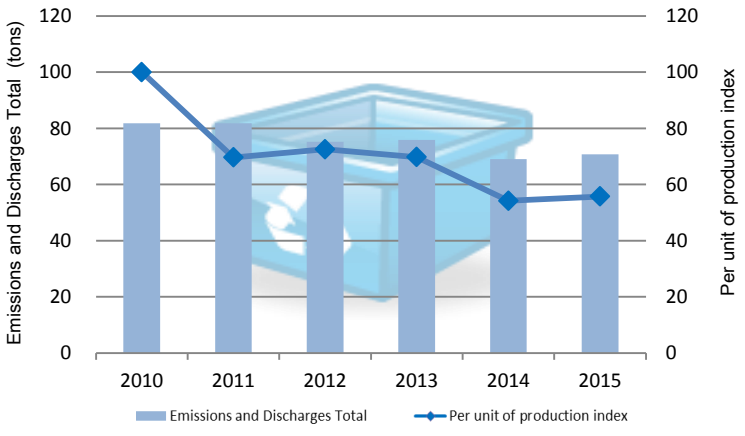
Steam, which is essential in making Styrofoam products of KOA KASEI, is generated by 2 boilers consuming heavy oil as heat sources. The steam is sent to a forming machine through steam pipes. Even though heat insulating material is wrapped around the pipe, some sections of the insulating material are missing due to deterioration, which prompted us to repair damaged sections. Also, as the places where operators touch (such as valves) had significant deterioration, we covered these places with a protective net and reinforced by sewing with wires by intertwining with jointing sections.

This reinforcement enabled suppressing the surface temperature of a pipe, which had heat insulating material missing, from 120℃ to 40℃ to contribute to not only energy saving but also improved safety.

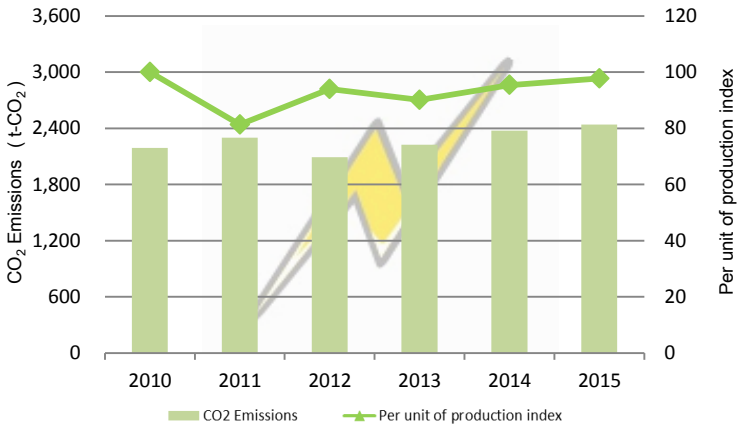
The Topics for "Father Sun" Strategy

AC	FY2015 Targets		Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	×	In August 2015, torrential rainfall and a sudden gust of wind have dispersed our Styrofoam products outside of the company's premises. Even though this was a natural disaster, we will be performing detailed examination of risks again and introduce remedial measures to ensure zero environmental accident status.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	◎	Design modification to reduce the amount of raw materials we use to make Styrofoam products and securing of timber procurement channel have allowed the company to realize products and manufacturing processes with less environmental burden in addition to improving the environmental consciousness of our employees and customers.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎	Over the past 5 years, the reuse of packaging materials and the promotion to improve recycling rate all contributed to the company maintaining the zero emissions status. Also the total amount discharged per unit of production was cut by 45% from 2010 to greatly exceed our goal.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	○	Despite introducing stricter production control and repairing damaged heat insulating material, which helped energy conservation, we could not overcome the adverse changes in production volume, and as a result, carbon dioxide emissions per unit of production in 2015 were less than 2010 by only 2.3%, thus failed to reach our goal of a 5% reduction.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion



"Father Sun" Activities Annual Report 2016
JAPAN ELECTRONIC APPLICATIONS CO., LTD. Site Report

JAPAN ELECTRONIC APPLICATIONS CO., LTD. Company Profile

Location of Head Quarters : Tonami City, Toyama, Japan
Establishment : May 26, 1984
Representative : President, Ooba Takeyoshi
Employees : 52 (As of April 1, 2016)
Business Description : Manufacturing of Thick Film Wiring Substrate and Hybrid IC

- Environmental Management Representative : Director, Yukihisa Kitagawa
- ISO14001 Certification Number : JQA-EM0155 (Registered in October 2010)
- Contact : General Group 【TEL : 81-763-33-5700 】
【URL : http://www.jeacnet.com 】

Environmental Policy and Philosophy of JAPAN ELECTRONIC APPLICATIONS

In this land where rich-in-nature Tonami Plain spreads, we are dedicated to preserve the environment for the people of future generations where they can live without anxiety. And we would like to preserve the biodiversity of our community and realize perpetually circulating society through promoting the Father Sun activities.

Material flow for FY2015 and undertakings for social environmental activities

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption 273kL (Vs. last year : Down 14%)	**Design, development, manufacture, and sale of resistors and other electronic parts** (Products Vs. production volume of last year : Down 17%)	**Emitted substances** ・ **Reused : 0 tons** ・ **Recycled : 16tons** ・ **Disposed : 0 tons** (Vs. last year : No change)
Clean water 31,435 m³ (Vs. last year : Down 24%)		**CO_2 emissions from fuel combustion 403 t-CO_2** (Vs. last year : Down 14%)
Quantity of substances subject to PRTR contained in purchased materials 6.9 tons (Vs. last year : Down 4%)	**Product containing the amount of movement of the substances subject to PRTR 0.1 tons** (Vs. last year : No change)	**Quantity transferred Substances subject to PRTR** ・**to the environment : 2.3tons** (Vs. last year : Down 6%) ・**to emitted substances : 4.6 tons** (Vs. last year : Down 2%)

Undertakings to reduce electric power consumption "Use of a small compressor on holidays to eliminate waste"

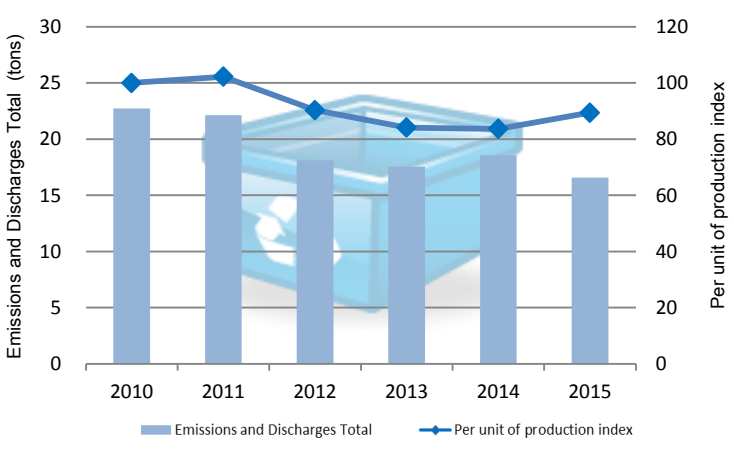
We had been running a 15kW heavy-duty compressor even on holidays for the purpose of providing compressed air to some manufacturing processes. However the amount of compressed air being supplied was only a fraction of the capacity of the compressor, which meant that we were wasting a lot of energy.

To address this problem, we have set up a small compressor, which switches on automatically during holidays in place of a larger system, to cut electric power consumption by 850kWh/month.

The Topics for "Father Sun" Strategy

AC	FY2015 Targets		Outcomes and achievement (Level of achievement ◎:100% ○:More than 70% △:More than 50% ×:Less than 50%)
Ⅰ	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎	We maintained the status of zero environmental accident. In 2015, to prevent contaminating the areas surrounding our factory accidentally with leaked fuel when refueling a mower, we have set a rule for refueling to promote awareness.
Ⅱ	Promote Kaizen (improvements) to realize operations in harmony with the environment and products/production processes with reduced environmental burden.	◎	We have fixed sunken asphalt near waste material storage area to allow waste material collecting trucks enter and exit smoothly even in snowy weather.
Ⅲ	Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎	We started reusing waste plastic as heat insulating material to cut the amount of waste plastic we throw away. Compared to 2010, total discharge per unit of production was less by 11% to greatly exceed our target.
Ⅳ	Reduce CO2 emissions from fuel consumptions by 5% from 2010 results.	◎	In addition to ceasing the use of a heavy-duty compressor during holidays, replacement of air receiver tank, which we carried out in 2014, had a big effect in reducing electric power consumption of air compressors to help the company to achieve electric power consumption reduction of 14.5% from 2010.

Emissions and discharges total and per unit of production



CO_2 emissions total and per unit of production from fuel combustion