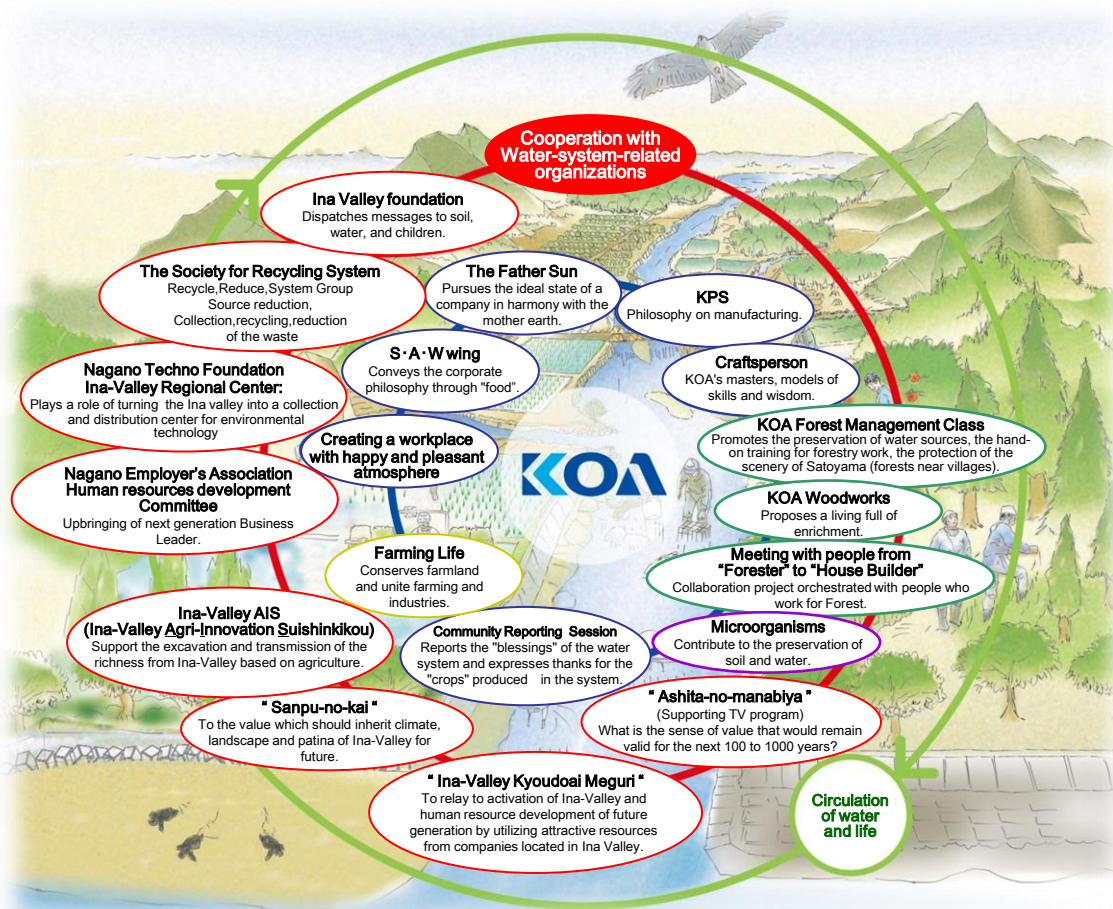


KOA Group Annual Report of the "Father Sun" Activities 2013



This figure shows the framework of KOA's environmental conservation activities in the water system of the Tenryu River system extending from Lake Suwa to the Sea of Enshu.

The KOA Group embraces "circulation", "harmony", "finite", and "enrichment" as the fundamental value of corporate management, and is conducting various experiments to build models for perpetually circulating local society.

KOA's mission and the "Father Sun" Activities

The KOA Group regards establishing the bond of trust with 5 Stakeholders – "Shareholders", "Customers and Business Partners", "Community", "Employees and Their Families", and "Mother Earth" – its corporate mission. The "Father Sun Activities" is a name bestowed upon KOA's environmental management system which aims to assort with Earth, creates the model of circulating local society and it's instilled our dedication to do the activities which we can be extremely confident with "Father Sun".

The "Mother Earth" is one of the key elements of "KOA's Vision" instituted in 2011. This vision, which applies to all people working for KOA Group companies in all countries and regions, shows our basic thinking to promote business practices in harmony with the environment and activities not burdening the environment, via exposing the effect of our environmental preservation activities in all aspects of our business. As we permeate this vision in the minds of all employees, we will engage in business practices in conscious of the environment.

■ KOA's Vision "Earth"

KOA and all its employees, together with their family members and the people of local community, are maintaining the biodiversity of the Tenryu River System (where KOA has its origin) and local communities (where KOA has a presence), and are engaging in activities to realize the perpetually circulating society.

Company Profile

Location of Head Quarters : Minowa-machi, Kamiina-gun, Nagano, Japan

Establishment : March 10, 1940

Capital : JPY6.033 billion

(Listed on the first section of the Tokyo and Nagoya Stock Exchanges)

Representative : President, HanagataTadao

Employees : 1,321 (As of March 31, 2013)

Business Description

: Design, development, manufacture, and sale of various electronic components

●KOA Group Profile

Company structure : (Consolidated) 6 companies in Japan and 10 companies in overseas

: (Non-consolidated) 1 company in Japan and 1 company in overseas

Employees : 4,245 (As of March 31, 2013) (Japan) 2,052 (Overseas) 2,193

●Environmental Management Representative

: Managing Director, Kayoko Fukano

●ISO14001 Certification Number

: JQA-EM0155 (Registered in April 1998)

●Contact : Management Administration Initiative
Social Environment Center

【TEL: 81-265-70-7171 (main number) 】

【URL: <http://www.koanet.co.jp> 】

KOA Environmental Policy

At KOA Group, under this policy, all employees are engaging in the "Father Sun" activities.

Origin

How can we live in harmony with mother earth?

Philosophy

KOA was established and grew up in Ina Valley to provide the environment where farmers can live as farmers. Meanwhile, as we engage in electronic component production, we - as one of living creatures of earth - continuously learn about our association with soil, water and sun to build "trust" with the earth.

With each employee being interested in the circulation of life in the water system that is essential to one's community in responsibly practicing the "Father Sun" (Environmental Management System), we will preserve the biodiversity of the land of our roots to create a model for perpetually circulating society.

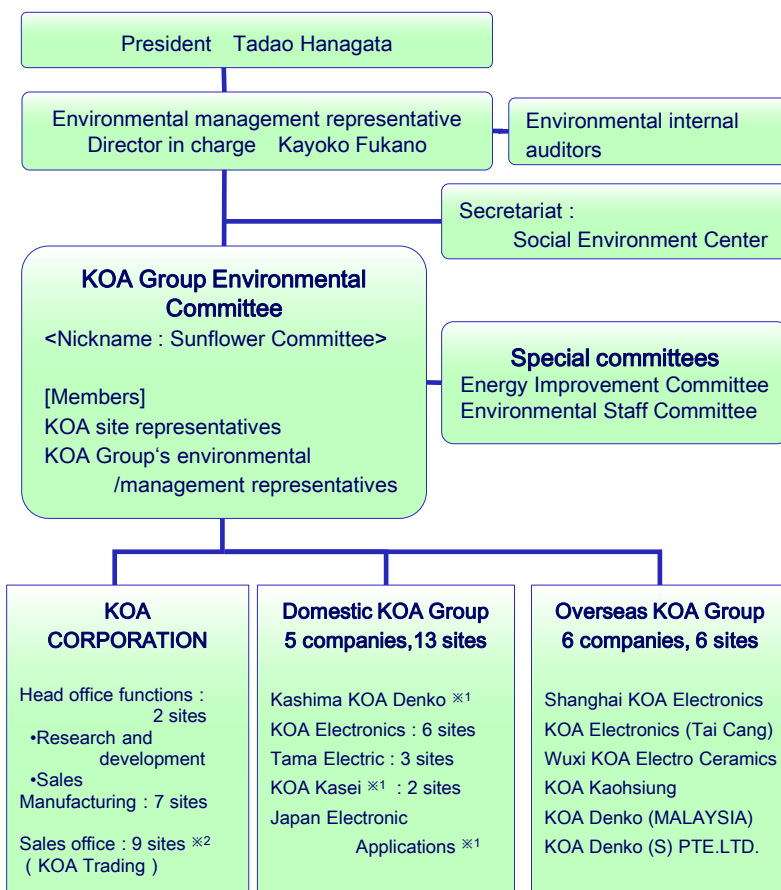
Policy

- (1) We shall accurately grasp how KOA's development, production, sales activities, product and services affect the environment to establish "Father Sun" (Environmental Management System) and try to continuously improve "Father Sun" as we strive to prevent the environmental pollution.
- (2) KOA's environmental activities shall be developed into two: one is the "Father Sun" activity for improving responsiveness to the social environment and the other is the quality assurance activity for improving responsiveness to the product environment.
- (3) All employees shall adhere to laws and regulations relevant to KOA's environmental aspects, other requirements (including customer requirements) KOA has agreed to abide by, and voluntary standards, to engage in activities conscious of natural environment based on the Environmental Manual and the Quality Manual.
- (4) To take actions consistent with the philosophy of this policy, we shall review each year our environmental improvement activities in pursuit of realizing business affairs in harmony with the environment, in pursuit of realizing the effective use of finite natural resources, in pursuit of realizing products and production processes friendly to the environment, and in pursuit of stopping global warming (energy conservation), in the framework of management objectives and targets.
- (5) We shall conduct internal environmental audits and strive to continuously improve "Father Sun" through self-imposed control.
- (6) This environmental policy shall be disseminated to all members involved in environmental activities at KOA and all KOA group entities to improve our corporate environmental awareness.

April 01, 2013

Tadao Hanagata, President of KOA Corporation

The "Father Sun" Promotion System



Revisions to KOA Environmental Policy

With Mr. Tadao Hanagata taking office as the President and Representative Director, KOA Environmental Policy was amended in April 2013.

By inheriting KOA's dedication to seek harmony with environment and to engage in model building for perpetually circulating local society, while being aware of customer requirements and the need to be harmonized with "KOA's Vision", we have clearly stated the "preservation of biodiversity", which has always been reflected in our undertakings, in the "Philosophy" section. Also in the "Policy" section, we have added "energy conservation" as one of the specific activities to prevent global warming.

Fortification of the promotion of "Father Sun" activities

To have all people working for KOA given the chance to engage in the "Father Sun" activities, from 2011, we have expanded the scope of our activities to comply with the requirements of ISO14001 to include Japan sales sites. In the environmental patrol conducted in 2012, we were encouraged to confirm many environmentally friendly activities being practiced and the "Father Sun" activities being permeated.

For example, to promote the 3R activities, we have reestablished the route through which our disposed waste materials are recycled or processed, mandated each workplace to have sorted waste material disposal station, and conducted regular waste separation checks. Also to reduce CO2 emissions through power saving, we have set up our lighting system featuring many switches to allow lighting of only necessary areas.

In 2013, we worked hard to have Tama Electric Co., Ltd. being awarded with an ISO14001 multi-site certification. With group companies being united, the promotion of the "Father Sun" activities will strengthen even more.

Undertakings on "Product Environment"

With growing call to grasp environmental load via Life Cycle Assessment (LCA) and to disclose information pertaining to environmental load, KOA has been participating in the activities lead by JEITA, an association of electronics industry, to take part in issuing the "Guide for Life Cycle Assessment of Electronic Components" and in preparing and releasing databases for standard Life Cycle Inventory (LCI) (for resistors and fuses) and Carbon Footprint (CFP).

※1 Multi-site Certification Sites: The reference to KOA Corporation and the sites integrated into ISO14001 system.

※2 The sites excluded from ISO14001 registration: The sites "Father Sun" activities are carried out based on KOA's environmental management system

The Achievements of “Father Sun” Strategy 2012

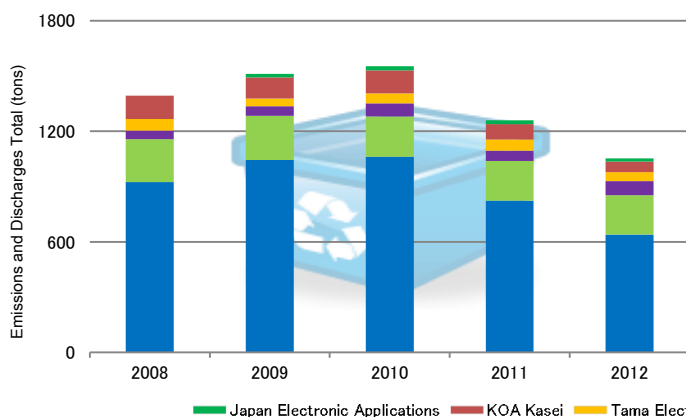
At KOA Group, as common long-term targets for the year 2011 to 2015, we have set 3 goals: “Prevention of Environmental Effects”, “Effective use of Finite Natural Resources”, and “Prevention of Global Warming (Promotion of Energy Conservation Activities)”. Each Business Unit is conceiving and enforcing environmental activities (the “Father Sun” operations) to achieve these goals. For the year 2012, we were able to achieve all targets.

AC	Long-term goals	2012 Targets	Outcomes and achievement	2013 Targets
I	Prevention of environmental impact (Prevention of pollution・Compliance)	No environmental accidents. : Execute prevention / improvement measures on environmental effects each fiscal year.	◎ We maintained the status of “Zero Environmental Accidents” both in Japan and overseas. To mitigate social environmental risks, we have identified the need to ‘Establish the “Father Sun” activities at the Nanakurinomori’ to design and implement a necessary system to enable 14001 registration.	No environmental accidents
III	Effective use of finite natural resources. (Reduce final disposal rate to less than 1% and cut total emissions and discharges per unit of production below 2010 results)	Continually reduce emissions and discharges.	◎ In overseas, each site had set targets, such as for reducing discharges per unit of production and for reducing discharges of designated substances, and we were able to confirm accomplishments.	Continuous reduction of emissions and discharges (Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.)
		Maintain the status of zero emissions and cut emissions and discharges per unit of production below 2010 results.	◎ In Japan, we maintained the “Zero Emissions” (final disposal rate of less than 1%) status to reduce discharges by 210 tons or 16% from last year.	
IV	Prevention of global warming. (Promotion of energy conservation activities) (Reduce CO ₂ emissions from fuel combustion by 5% in 2015 from 2010 results)	Execute continuous energy conservation activities.	◎ In overseas, each site had set a target reduction goal for energy usage per production volume by, for example, converting to highly-efficient device with more efficient system, and we were able to achieve.	Continuous energy conservation activities (Reduce CO ₂ emissions from fuel combustion by 3% from 2010 results.)
		Reduce CO ₂ emissions from fuel consumptions by 2% from 2010 results.	◎ Even though energy emission CO ₂ in Japan domestic increased, 280 tons compared with previous fiscal year, regarding CO ₂ emission per production volume, we were able to achieve 2% reduction.	

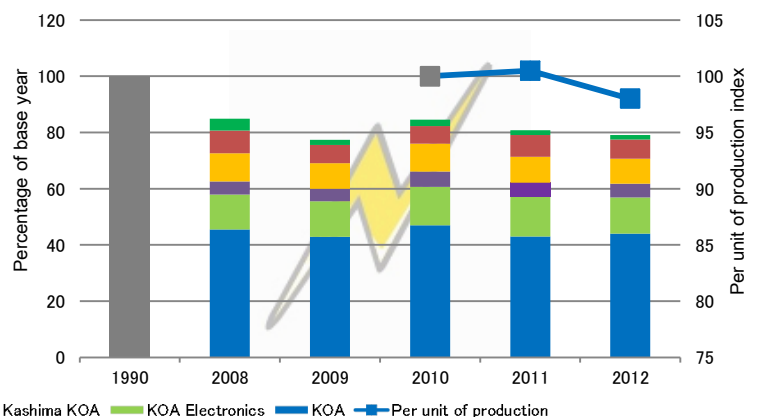
Continuation based on Long-term Targets

Level of achievement ◎ : 100% ○ : More than 70% △ : More than 50% × : Less than 50%

ACIII Domestic KOA Group Emissions and Discharges Total



ACIV Domestic KOA Group CO₂ Emissions from Fuel Combustions Kyoto Protocol (Emission Index) and Target (Per Unit of Production Index)



Domestic KOA Group Material Flow Chart

INPUT	Business Activity	OUTPUT
Crude oil equivalent energy consumption 15,230 kL (Vs. last year : Down 2%)	Design, development, manufacture, and sale of resistors and other electronic parts (Products Vs. production volume of last year : Down 14%)	Emitted substances • Reused : 65 tons • Recycled : 1,048 tons • disposed : 5 tons (Vs. last year : Down 17%)
Clean water 115,805 m ³ (Vs. last year : Up 8%)	Product containing the amount of movement of the substances subject to PRTR 15t	CO ₂ emissions from fuel combustion 23,520t-CO ₂ (Vs. last year : Down 3%)
Quantity of substances subject to PRTR contained in purchased materials 50 tons		Quantity transferred Substances subject to PRTR • to the environment : 13 tons • to emitted substances : 22 tons

Target III: The results on the “Effective use of Finite Natural Resources”

For the year 2012, we had to contend with unfavorable effects from reduced production volume. But with our business units diligently enforcing various 3R measures, such as promoting the use of returnable boxes for raw materials and semi-finished and finished goods, lengthening the shelf-lives of chemicals needed for manufacturing, and being creative on packaging to reduce disposed materials, we were able to cut the total weight of discharged waste by 220 tons or 17% from last year.

Also by KOA continuing to expand in-house treatment of “Waste Fluid from Special (Production) Processes”, which constitutes about 40% of discharged waste, we were able to reduce the discharged waste by 160 tons or 27% from last year.

Target IV: The results on the “Prevention of Global Warming (Promotion of Energy Conservation Activities)”

In 2012, we engaged in the “power conservation with strict management”. As a part of our activities, we have rolled out our leakage prevention measure on compressed air, which is something each factory/office is using, to KOA Group companies/entities.

We have identified the sections compressed air is leaking in our pneumatic piping system with a leak detector and by working closely together with equipment operators, who use/maintain the system on a daily basis, to assess the situation, and after implementing remedial measures based on our investigation, we have fixed air leakage to reduce the amount of time air compressor has to be run. With this improvement, we have cut the CO₂ emitted in air by 120 tons on an annual basis.

At KOA Group, we have set our CO₂ emission goal, which is based on the Kyoto Protocol, at “92” with respect to “100” being the number for 1990 emissions. Our performance for the year 2012 was “79”, which far exceeded our target number.

Compliance: Verifying the status of compliance with laws and ordinances

In building the new factory, "Nanakurinomori", we have made sure compliance with relevant laws and ordinances, and we have signed agreements with administrative authorities and local community. To honor our responsibilities, we are continuing to measure the quality of ground water, which we had measured before and during construction, even after the construction of the factory. We assessed the impact of construction work on the environment by making construction companies identify environmental aspects and design remedial measures on them, and during the construction, we patrolled the facility to ensure contractors possessing environmental permits, properly managing industrial waste control manifest, and enforcing corrective actions.

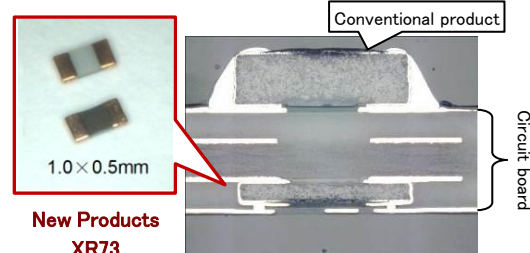
After the completion of construction, we have conducted an environmental-compliance audit to test conformance to environmental laws and ordinances, as well as adherence to legal requirements and agreements we signed with local community, and confirmed we infringed no regulations. With us working responsibly, KOA Group is maintaining compliance status.



Manufacturing realizing products and processes with little environmental burden

With the sophistication of small mobile devices, such as smart phones and tablet computers, the number of electronic components used in each unit of these devices is increasing. To secure the area on the circuit board to place these parts, we are observing the advancement of these parts being downsized. KOA's core products, chip resistors, also offer ultra-small sizes down to 0.4mm 0.2mm. Recently, high-density-mounting technology, "Integrated Module Board", of embedding electronic components inside a substrate is garnering attention. As an innovative new product applying this technology, KOA has developed a thick-film chip resistor, "XR73", which is designed for "Integrated Module Board".

XR73 has achieved ultra-thin thickness of 0.17mm maximum, which is about half of conventional chip resistors to contribute to further downsizing and thinning of the substrate. Also, our XR73 is approximately 60% lighter, thus reduces the usage of raw materials, to make it much more environmentally friendly



Model building for perpetually circulating local society

Our view and approach toward the business asset.

Assets	Enterpris	Human Resource Development	KOA Group Award commendation system and Craftsman
		"Father Sun" Activities	Reduction of environmental loads caused by corporate activities
	Community	Association with People	Nurturing of juveniles in the community Ashita-no-manabiya
		Association with Forests	KOA Forest Management Class
		Association with Water	KOA Woodworks
		Association with Soil	The Society for Recycling System
		Pleasure and responsibility as a member of the Ecosystem	Ina Valley Foundation Integration of Farming and Manufacturing The undertakings on biodiversity

Effective use of timber from forest thinning : "KOA Woodworks"

The demand for lumber made in Japan is declining, because of cheap imported lumber. And because of low demand, there are many forests that are no longer maintained, the consequence of which is dense growth of trees, branches, and leaves, to make the forest dark and unhealthy. To bring back rich forest, dense growth needs to be trimmed to allow the sunlight to penetrate the forest. Thus forest thinning is absolutely necessary.

The logs generated in forest thinning are mostly out of shape – too thin and bent – that they were thrown away. KOA Kasei's "KOA Woodworks" came up with an idea for effectively utilizing these wasted wooden materials to process them into chairs and accessories. By introducing these products in daily lives of people, they become fond of using wooden products to increase demand, which we hope will lead to more people maintaining forests to bring back rich forests.

"KOA Forest Management Class", which train people who develop forests, and "KOA Woodworks", which makes wooden products, are engaging in activities cherishing the association with forests.



The new factory, "Nanakurinomori" to seek harmony with natural environmen

"Nanakurinomori" is located in Achi village, a community in the southern part of Nagano Prefecture, which is surrounded by beautiful unspoiled woodland. With the concept of "Blending to the culture and the life in village forest", "Nanakurinomori" opened in October 2012 as a factory conscious of harmonizing with surrounding landscape and preserving natural environment.

In the construction of factory wing "Koubou Nokogiriyane" and cafeteria/lecture facility "Harunire-no-syuku", we proactively used local Nagano-prefecture-made lumber, on which we were credited with 134t-CO2 under the "Carbon Fixation Certification System". And for this, we received an Excellence Award in the Local Lumber Use Section of the "Award for Creating Vibrant Forest in the Southern Nagano Prefecture". Also, to be conscious of energy conservation, we have installed the "Cool Pit" system to pre-cool/pre-heat the air by forcing it through an underground duct prior to being cooled/heated by air-conditioner and the "OM Solar" system to store the solar heat in concrete underneath to subsidize this energy to warm the factory during winter. In the Plating Wing, the "Mekki Koubou", we have a "Closed System" of zero waste fluid being discharged outside the facility to absolutely ensure protecting the quality of water of local community.



In addition, as an activity to promote biodiversity, we have set up a biotope around the factory. And to reforest the area, we are planting trees like, maple, oak, etc., which are naturally grown trees of this area, collected from forests owned by our employees. Under the instruction of KOA Forest Management Class, nest planting is the method we used to reestablish wooded areas. In each circle 3 meters in diameter, we have planted 8 trees of the same kind to entice competition and create the condition for trees to complement each other, which recreates the environment as close to nature as possible – this allows healthy growth.

Over 100 people representing many departments, including the members of the board of directors, have participated in their spare time to plant a total of 400 trees. And with employees also taking part in forest thinning and management, we are hoping to nurture the "Mori" or "Forest", with which a lot of people can feel the change of seasons.

Passing on the nature and culture of Ina Valley : "Ashita-no-manabiya"

Since 2007, KOA is sponsoring a TV show, the "Ashita-no-manabiya". This program began with a wish to hear the messages from nature and living creatures, without which we cannot sustain our lives, of Ina Valley.

The series "Hello Ina Valley" conveys the richness and beautiful video footage of Ina Valley to the people of newer generations, which we feel is the responsibility of present generation. In 2012, we introduced historical cherry trees and traditional festivals.

