Calsonic Kansei

Driven by Inspiration and Innovation

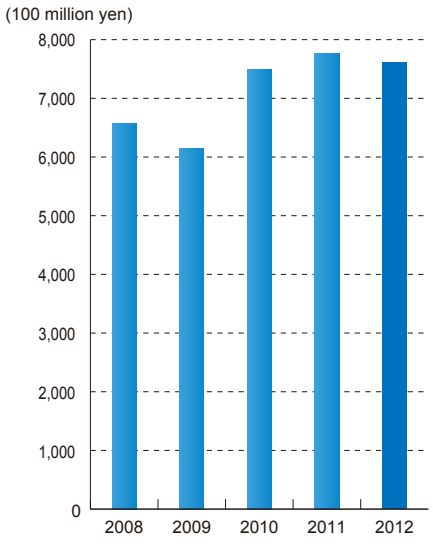
Environmental Report 2013

CONTENTS

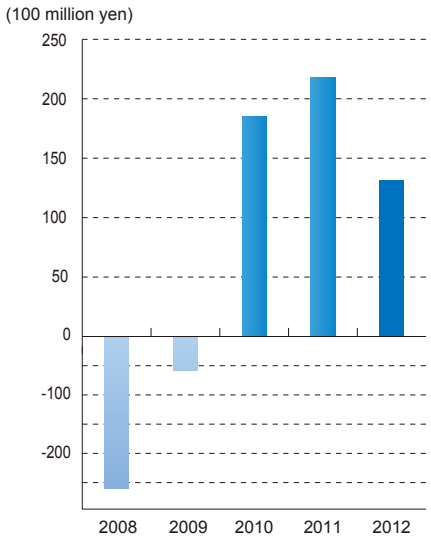
1 Company/Business Overview

[Company Name]	Calsonic Kansei Corporation
[Headquarters]	2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama
[Established]	August 1938
[Capital]	¥41.5 billion
[Consolidated Subsidiaries]	34
[Affiliates Accounted for under Equity Method]	15
[Stock Exchange Listings]	Tokyo Stock Exchange (1st Section)
[Businesses]	Manufacture and sale of parts for automobiles and industrial vehicles

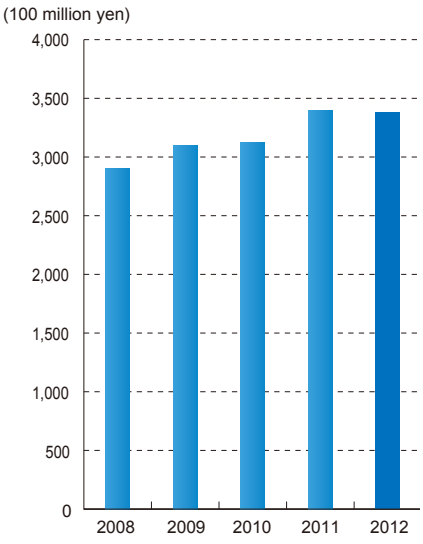
Sales



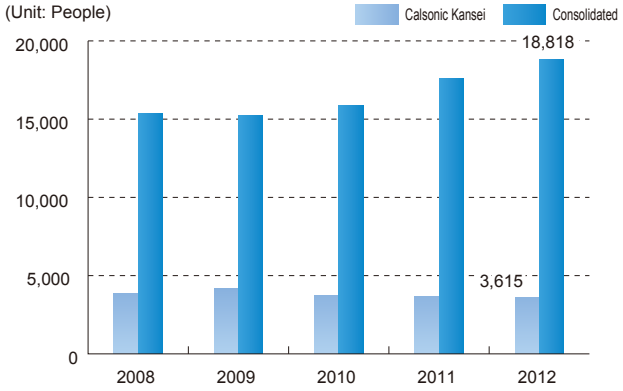
Ordinary profit



Total assets



Number of employees



Scope of this Report

■Organization

Calsonic Kansei Corporation, and its domestic and overseas affiliated companies

■Period

Data in this report refer to fiscal 2012 (from April 2012 to March 2013), although some activities from fiscal 2013 are also covered.

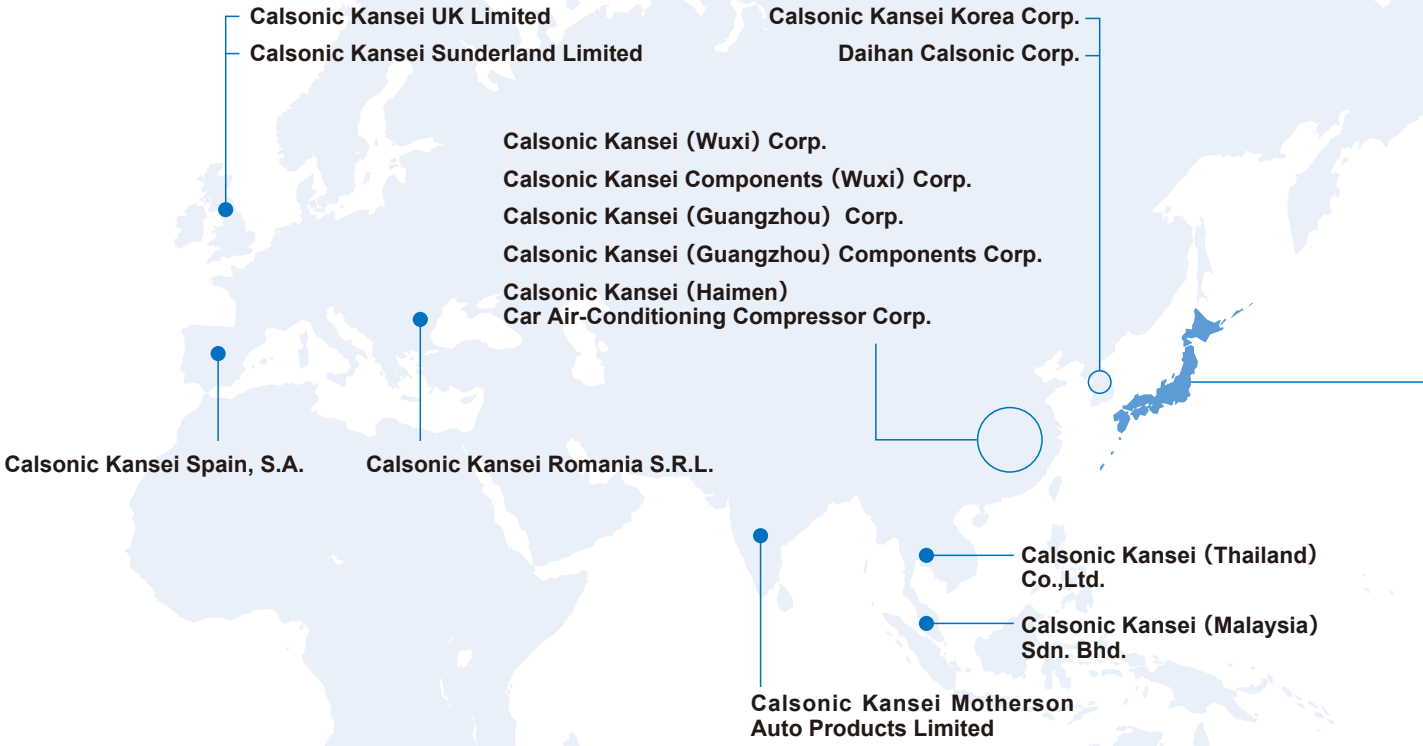
■Data

Data are based on the companies (wholly-owned and consolidated subsidiaries) included in the Calsonic Kansei Group's Environmental Management System.

[Guidelines Referred to]

Environmental Reporting Guidelines (The Ministry of the Environment)
Environmental Accounting Guidelines (The Ministry of the Environment)

Calsonic Kansei Group Companies Subject to Consolidated Environmental Management



Major Products

Module Products

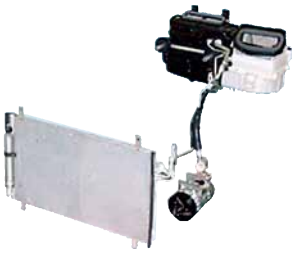
Designing a set of components or systems as a single unit or module can help reduce the number of parts and overall vehicle weight, and improve fuel efficiency. A good example of the benefits of this approach is increased cabin space created by modularizing the cockpit. Calsonic Kansei is a supplier that can provide modules on a global scale. We are striving to be recognized by automakers as their best partner by developing and manufacturing high-quality modules in cooperation with them.

Cockpit Module (CPM)

Front End Module (FEM)

System Products

Under the slogan of creating comfortable space that is friendly to both the earth and people, Calsonic Kansei designs and manufactures heaters, coolers, intake blowers and other components needed for air conditioning systems, as well as intake and exhaust systems. Our intake and exhaust systems meet contradictory requirements such as muffling performance, exhaust gas purification performance and engine power performance in a high-level and well-balanced manner.



Air Conditioning System

Exhaust System

<Japan>
Calsonic Kansei Corporation
CKK Corporation
CKF Corporation
CKP Corporation
Calsonic Kansei Utsunomiya Corporation
Calsonic Kansei Iwate Corporation
Tokyo Radiator Mfg. Co., Ltd.
Calsonic Kansei Yamagata Corporation

Calsonic Kansei North America, Inc.

Calsonic Kansei Mexicana, S.A.de C.V.

Units and Component Products

Components are the basis of all Calsonic Kansei products. We have always taken on new challenges in technological development toward producing cutting-edge components. We have established a system that enables us to share technologies worldwide and to supply products of uniform quality around the world. We always try to anticipate changing market needs and provide innovative products that meet all the expectations and requirements of our customers.

CPM and Interior Products


Injection Scarfskin


Console Box

Air Conditioner Products


Air Conditioning Unit

Heat Exchange Products


Radiator


Motor Fan


Condenser

Compressor Products


Fixed Capacity Type


Variable Capacity Type

Exhaust Products


Exhaust Manifold Converter


Flexible Tube


Muffler

Electronics/Electric Products


Body Control Module


Meter


Control (integrated switch)

2 TOP COMMITMENT

"As a global automotive company, we are inspired to be world-leading in innovation and Monozukuri while contributing to a sustainable society."

Hiroshi Moriya
President and CEO

Akira Fujisaki
Executive Vice President and Environmental Officer

With our mid-term business plan "CK GX4 T10", we will strive to develop world-leading environmental technologies/products.

In July 2011, Calsonic Kansei announced its medium-term business plan for fiscal years 2011 to 2016, called "CK GX4 T10" (CK G-by-four T-ten). Under the Plan, we aim to achieve our goals "T10" by implementing the four key initiatives of our growth strategy, namely, 4Gs-Green, Growth, Global and Great Company. In fiscal year 2013, the third year of the Plan, we will make every effort to achieve steady progress, following our roadmap.

■Green
We will develop innovative environmental technologies and products that lead the world. We aim to lead the industry in the development of next-generation environmentally-friendly products, by creating technological synergy with our total energy management technology at the core.

■Growth
We aim to capture demand for compact cars and low-priced cars and expand our business in emerging countries by adopting innovative and aggressive marketing strategies, growth-oriented product and technology development strategies, and regional strategies tailored to each region.

■Global
To achieve true globalization, we strive to develop individuals who can serve as global business leaders and create an organization and corporate culture rich in diversity, through global organizational management, standardization of work processes, and enhancement of manufacturing capabilities.

■Great Company
To establish a solid foundation that enables us to become a Great Company, we will implement Green, Growth and Global initiatives in a comprehensive manner, thereby achieving the goals set in our medium-term business plan.

Achieve the goals of T10

1) Develop 10 new innovative eco-friendly products that lead the world.
2) Achieve global top 10 status in terms of sales.
3) Achieve global top 10 status in terms of operating profit.

Our corporate vision is "as a global automotive company, we will be inspired to be world-leading in innovation and Monozukuri, while contributing to a sustainable society". To become a truly global company that is trusted by all people around the world, we will strive to achieve our mid-term business plan and pursue concerted efforts as a comprehensive automotive parts manufacturer, to promote environmental protection in all aspects of our business activities, from development and design to manufacturing and logistics.

Vision Mission Value

A *global* automotive company,
inspired to be *world-leading in innovation* and Monozukuri,
while contributing to a *sustainable society*

Global, Inspired, World Leading Innovation, Sustainable Society

Global · Inspired · World Leading Innovation · Sustainable Society

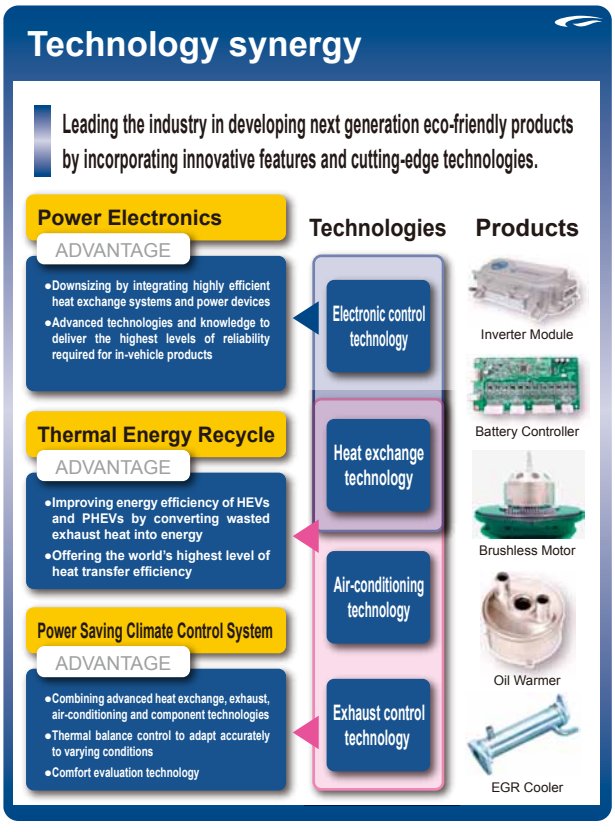
Calsonic Kansei
Driven by Inspiration and Innovation

Environmental Protection Efforts

The Calsonic Kansei Group has been undertaking concerted efforts toward achieving the high level targets set out in its medium-term environmental action plan, “Calsonic Kansei Group Green Program 2016 (CKGP2016)”, established in fiscal 2011.
2012 was the last year of the first commitment period of the Kyoto PROTOCOL (2008-2012). The Japanese government’s target was to reduce the GHG emissions by 6% relative to the 1990 level. Our company greatly surpassed the goal by reducing the GHG emissions by 44.5% in 2012 and by 38.4% on average in the last five years.
This is the result of vigorous implementation of our aggressive energy saving strategies including promotion of energy saving activities by all staff, investment in energy saving such as smart meters and LED lighting, energy saving diagnosis at the global level, and restructuring of domestic factories that have decreasing volume of production.
We are promoting environmental protection by striking a balance between environmental protection and financial performance, while at the same time encouraging every employee to become more environmentally conscious in their daily work.

• Environmental Management

As part of efforts to reinforce our environmental management promotion structure, we established the Global Environment Management Meeting in fiscal 2011. In addition to the existing four committees (Product Environmental Committee, Production Engineering Environmental Committee, Environmental Energy Committee, and Environmental Communication Committee), four regional committees for North America, Europe, China and Japan were also established, to ensure that environmental policies and plans are shared and implemented among all Group companies around the world. Furthermore, to promote effective environmental management across the Group, we hold liaison meetings where environmental officers from all Group companies exchange information. In June 2012, the R&D Center of the Headquarters launched activities to obtain ISO 14001 certification, although it was not originally planned to be incorporated into the company’s environmental management system. the Center has been working to develop an effective environmental management system that involves all employees since authentication and registration were completed in January this year.



• Environmentally friendly product development

We will strive to develop innovative environmental technologies and products that lead the world by implementing Green initiatives identified in our new medium-term business plan. Our accomplishments so far include technology development and commercialization of injection scarfskin and EGR cooler.

• Global Warming Prevention and CO_2 Emissions Reduction

We achieved a 38.4% reduction on average in the last 5 years in gross CO_2 emissions from our domestic plants, against the target of “7% reduction on average in the period from 2008 to 2012, compared to fiscal 1990 levels,” set by the Japan Auto Parts Industries Association.
This successful result was obtained thanks to Monotukuri Challenge Runner (MTCR) activities, as well as Group-wide energy-saving activities such as energy-saving diagnosis and horizontal implementation of good practices, undertaken under the leadership of energy saving teams, which were formed by staff members in charge of energy saving from all plants to promote energy saving.

• Zero Emissions

As a manufacturer that uses limited resources from the earth as raw materials to produce products, we are committed to the effective use of resources. As part of such efforts, we are implementing “zero emissions activities”, activities to reduce final disposal of wastes as close to zero as possible, as part of our routine duties. We aim to achieve zero emissions at all group companies and plants throughout the world. Furthermore, in order to achieve zero emissions, this year, we set a new target completion date of Zero Landfill for our overseas locations to be 2015 and promote activities and strengthen our system to achieve “zero emission”.

Social Contribution and Harmonious Coexistence with Local Communities

Calsonic Kansei is committed to contributing to building a better society. In line with this commitment, we strive not only to actively disclose environmental information, but also to closely communicate and engage with our stakeholders, thereby deepening mutual understanding and fostering relationships of trust.
We aim not just to contribute to local communities, but also to achieve harmonious coexistence with local communities through a wide range of activities including local environmental protection. Every Calsonic Kansei Group member is determined to be actively involved with efforts to address environmental problems facing the community, in cooperation with local residents.

To Everyone Reading this Report

We regard this Environmental Report as a major communication tool with our stakeholders and the public. However, with the aim of conserving resources, we have discontinued publishing the Environmental Report in printed form, and post information only on our website. We ask for your understanding.
To achieve sustainable corporate development while maintaining harmonious coexistence with society, we place great importance on listening to our customers’ needs and comments and addressing issues requiring attention one by one with sincerity.
We hope that readers of this report will gain a better understanding of our environmental policy and activities. To better fulfill our responsibilities to protect the global environment as well as to deepen our communication with all stakeholders, we invite your candid comments and opinions about our activities, for which we thank you most sincerely in advance.

September 2013

3 Green Concept

As a corporate group specializing in the production of automotive components, the Calsonic Kansei Group vigorously promotes group-wide environmental protection activities.

Environmental Policy (established in April 1993)

The Calsonic Kansei Group Environmental Policy establishes a set of basic principles, in accordance with which all Group companies will promote environmental protection, a common challenge for all humankind.
To be trusted by all our stakeholders including customers and society at large, and to contribute to building a sustainable society, we strive to ensure that all Group companies throughout the world share the Policy and act in an environmentally responsible manner in accordance with it.

Environmental philosophy

With the aim of creating a pleasant natural environment and contributing to enriching society, Calsonic Kansei strives to protect the global environment by promoting intellectual innovation through technology integration, while at the same time encouraging its employees to always be aware of the basic principle of harmonious coexistence with nature.

Basic Environmental Policy

To contribute to building a more prosperous society, we strive to protect the environment at every stage of our business activities.

Environmental Policies

①Establish an organization that promotes environmental protection activities.
②Continuously improve and upgrade the environmental management system.
③Comply with all applicable environmental laws and regulations.
④Conduct environmental audits.
⑤Promote resource-and energy-savings, waste reduction and recycling.
⑥Reduce and eliminate the use of regulated hazardous substances.
⑦Develop environmentally friendly products.
⑧Streamline logistics activities.
⑨Implement environmental activities at our operations in Japan and overseas using the same standards in place at our domestic plants.
⑩Actively disclose environmental information.

Vision, Mission, Value

Vision, Mission, Value show the direction for us to become a Great Company through GX4 T10.

Corporate Vision (Significance of our existence)

As a global automotive company, we are inspired to be world-leading in innovation and Monotukuri, while contributing to a sustainable society.

Mission Statement (Our specific roles)

Global
We create the strongest world-wide automotive supplier brand by cohesively blending our diverse cultures into one dynamically agile team.

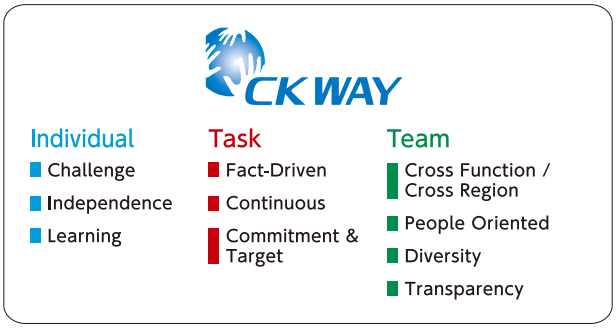
Inspired
We are persistent to invest in the CK core values generating pride, passion, and loyalty in all of our team members.

World Leading Innovation
We harness creativity and a Monotukuri spirit from our team members to be first-to-market with high quality products and processes for our customers.

Sustainable Society
We are committed to be a socially responsible corporate citizen that brings value to our shareholders, communities, and team members.

CK WAY (Action guidelines followed by every employee)

CK WAY is our Code of Conduct applies to all our employees to achieve our corporate vision, and is essential for us, CK Group, as a source of power for sustainable growth. All our employees are expected to follow it.



4 Environmental Management

With the aim of improving the global environment, Calsonic Kansei vigorously promotes environmental management throughout the Group worldwide, and encourages all Group employees to be more environmentally aware in the their daily operations.

1 Calsonic Kansei Group Environmental Management Promotion System

To further promote global environmental management, since fiscal 2011, we have been holding the Global Environment Management Meeting, replacing the former Environment Management Meeting.
Under the Global Environment Management Meeting, there are four committees. Each of the four committees develops an activity plan in its respective field, which is then presented to the Global Environment Management Meeting. The Meeting discusses and finalizes the Group's Action Plan based on the plans submitted by the committees. The Meeting also follows up the activities in the priority themes and ensures the effective implementation of the Action Plan. We have a system in place to ensure that all environmental management activities, from target setting to implementation, are executed, monitored and evaluated properly.

Organizational Structure and Roles of Each Committee

Global Environment Management Meeting

Chairperson:
Global Production Division General Manager
Vice Chairperson:
Global Technology Division General Manager
Secretariat:
Environmental Energy Control Group

	Japan	North America	Europe	Asia
Product Environmental Committee	Promotes environmental conservation in product development, including development of environmentally friendly products and review of environmental performance indicators for products.			
Environmental Energy Committee	Promotes reduction of environmental burdens caused by manufacturing operations; promotes compliance with environmental laws and regulations; promotes prevention of global warming and effective use of resources; promotes the reduction and elimination of the use of regulated hazardous substances; ISO 14001 progress management; conducts corporate environmental audits, etc.			
Production Engineering Environmental Committee	Promotes the reduction of environmental burdens of production technologies; promotes compliance with environmental laws and regulations; promotes energy and resource conservation measures; develops methods to reduce the use of regulated hazardous substances; and shares environmentally friendly technologies.			
Environmental Communication Committee	Promotes internal and external communication activities, including planning and implementation of social contribution activities. ⇒ Public relations activities for external audiences, through website and environmental newsletters. ⇒ Awareness-raising and information-dissemination activities for employees through the intranet and in-house magazines.			

2 Calsonic Kansei Green Program 2016

As our medium-term plan for environmental conservation for fiscal years 2011 to 2016, we will vigorously implement the plan to achieve the following targets.

Calsonic Kansei Green Program (CKGP) 2016

Item	Target						
	Classification	Region	Term	FY2012 Target	FY2012 Results	FY2013 Target	FY2016 Target
CO_2 Emissions Reduction (Reduction of energy use) •Reduction of CO_2 emissions per unit for production/logistics (emission per sales) •Reduction of CO_2 emissions per unit from offices (emission per office floor space)	CO_2 from production	Japan	Upper row Single year Lower row Mid-term	2% reduction vs FY2011 29.3% reduction vs FY2005	5% increase vs FY2011 28.5% reduction vs FY2005	2% reduction vs FY2012 30.7% reduction vs FY2005	34.7% reduction vs FY2005
		N. America, Europe, Asia	Upper row Single year Lower row Mid-term	2% reduction vs FY2011 4.7% reduction vs FY2005	2.9% reduction vs FY2011 10.4% reduction vs FY2005	2% reduction vs FY2012 6.0% reduction vs FY2005	9.7% reduction vs FY2005
	CO_2 from logistics	Japan	Upper row Single year Lower row Mid-term	1% reduction vs FY2011 18% reduction vs FY2010	15.1% reduction vs FY2011 23.2% reduction vs FY2010	1% reduction vs FY2012 19% reduction vs FY2010	22% reduction vs FY2010
	CO_2 from offices	Japan	Upper row Single year Lower row Mid-term	1% reduction vs FY2011 2% reduction vs FY2010	0.4% reduction vs FY2011 1.09% reduction vs FY2010	1% reduction vs FY2012 3% reduction vs FY2010	6% reduction vs FY2010
Resource Recycling •Reduction of CO_2 emissions per unit (emission per sales)	Waste (Waste + valuable resources)	Japan	Upper row Single year Lower row Mid-term	2% reduction vs FY2011 20% reduction vs FY2005	0.3% increase vs FY2011 26.3% reduction vs FY2005	2% reduction vs FY2012 22% reduction vs FY2005	28% reduction vs FY2005
		N. America, Europe, Asia	Upper row Single year Lower row Mid-term	1% reduction vs FY2011 2% reduction vs FY2010	6.2% increase vs FY2011 2.1% increase vs FY2010	1% reduction vs FY2012 3% reduction vs FY2010	6% reduction vs FY2010
Conservation of Water, Air, Soil & Biodiversity • Reduction of water use (water use per sales)	Water use	Japan	Upper row Single year Lower row Mid-term	1% reduction vs FY2011 17.1% reduction vs FY2009	15.1% increase vs FY2011 17.5% reduction vs FY2009	1% reduction vs FY2012 18.2% reduction vs FY2009	21.4% reduction vs FY2009
	PRTR	Japan	Upper row Single year Lower row Mid-term	1% reduction vs FY2011 2% reduction vs FY2010	5.1% reduction vs FY2011 19.7% reduction vs FY2010	1% reduction vs FY2012 3% reduction vs FY2010	6% reduction vs FY2010
Zero Landfill •Reduction of landfill rate (landfill per waste amount)	Landfill waste	N. America, Europe, Asia	Mid-term	–	84.2%	50%	0% (Achieving 0 in FY2015)

3 Environmental Action Plan (Fiscal 2012 Targets and Results)

To strengthen group-wide environmental efforts, the Calsonic Kansei Group holds the Global Environment Management Meeting and Environmental Energy Committee Meeting twice a year to exchange information on the implementation status of the Action Plan and achievements.

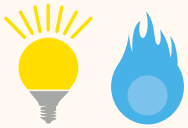
Priority issue	Mid-term Action Plan	
Environmental Management Promotion	**Promote acquisition and maintenance of ISO 14001 certification for all Group plants and companies in Japan and overseas.**	
	Strengthen group-wide global environmental management promotion system.	
	Enhancement of environmental risk management	Purification and prevention of contamination of soil and groundwater
		Strict control of wastewater quality
	Community partnership activities	Disseminate information on environmental activities undertaken by a production department to earn local communities' trust. Maintain fulfillment rate at 100%.
	Green partnership activities	Promote three Environmental Clean Chain Activities (CO_2 emissions reduction, effective use of resources, and reduction of substances causing environmental burdens) and prevent occurrence of environmental accidents at a production department. Enhance green partnership activities in collaboration with cooperating companies. Maintain fulfillment rate at 100%.
Reduction of environmental burdens of manufacturing activities	**CO_2 emissions reduction (Reduction of energy use)**	**・Reduction of carbon dioxide (CO_2) emissions (Japan Auto Parts Industries Association [JAPIA] Voluntary Environmental Action Plan)** Japan: Reduce CO_2 emissions by 7% and CO_2 emissions per unit by avg. of 20% from 2008 to 2012 (vs FY1990)
		・Reduction of carbon dioxide (CO_2) emissions (CKGP2016) Reduce CO_2 emissions per unit (total emissions/sales) by the percentages listed below, by FY2016, vs FY2005 Japan: 34.7% reduction North America, Europe & Asia: 9.7% reduction
	Resource recycling	**・Reduction of waste emissions (waste and valuable resources) (CKGP2016)** Reduce waste emissions per unit (total amount of waste emitted/sales) by the percentages listed below, by FY2016 Japan: 28% reduction vs FY2005 North America, Europe & Asia: 6% reduction vs FY2010
	Conservation of water, air, soil & biodiversity	**・Reduction of use of environmentally hazardous substances (CKGP2016)** Japan: Reduce environmentally hazardous substance use per unit (total amount of PRTR substances used/sales) by 6% by FY2016 vs FY2010
		・Reduction of water use (CKGP2016) Japan: Reduce waster use per unit (total amount of water used/sales) by 21.4% by FY2016 vs FY2009
Development of Environment-Conscious Products	**Enhancement of efforts to develop products that address environmental issues**	Compliance with laws and regulations, as well as customer requirements, and reduction and elimination of use of regulated chemical substances (European ELV Directive: lead-based soldering in electrical applications, abolished at the end of December 2010) (Compliance with European REACH regulations)
		Reduction of waste (development of easily recyclable products)
		Prevention of global warming (fuel efficiency/energy efficiency)
		Prevention of air pollution (purification of exhaust gas)
		Noise prevention (reduction of noise emissions)
	Evaluation of environmentally friendly products	
Green Procurement	**Expansion of green procurement**	
Environmental Communication	**Active disclosure of information on environmental activities**	

2012 Plan	2012 Results	Page
Improve quality of ISO 14001 activities.	ISO Authentication and Registration at R&D Center/Headquarters in January 2013 and Calsonic Kansei Yamagata Corporation in November 2012. Conducted CK environmental performance audits for all certified domestic sites.	12
Enhance CK Group Environmental Management Promotion System.	Strengthened Calsonic Kansei Environment Management Meeting. Improved emergency contact network in case of environmental accidents within Calsonic Kansei Group (Horizontal deployment rate: 100%)	8
Continue and expand soil and groundwater conservation efforts.	Took remedial measures for soil or groundwater contamination that had occurred, as well as preventive measures to prevent future occurrence of soil/groundwater contamination.	23
Manage wastewater quality and exhaust gas emitted from our plants, by setting voluntary targets at 80% of regulation values.	Achieved our voluntary target values.	22
Fulfillment rate of community partnership activities (actual assessment points/standard assessment points): 100%	Achieved community partnership fulfillment rate of 100%. Conducted environmental risk communication by community members, company and government. Conducted cleaning of areas around business sites. Accepted visitors for plant tours and internship of students from local elementary, junior and senior high schools.	30-32
Fulfillment rate of green partnership activities (actual assessment points/standard assessment points): 100%	Achieved green partnership fulfillment rate of 100%. Conducted emergency response training for cooperating companies. Implemented training sessions on prevention of environmental accidents.	
Japan: Reduce CO_2 emissions by 7% from FY 1990 level on average in 2012. (Calsonic Kansei + CKK + CKF)	CO_2 emissions: 44.5% reduction CO_2 emissions per unit: 56.9% reduction The target of the first commitment period of the Kyoto Protocol (2008-2012) is CO_2 emission reduction by 6% from 1990. As compared with this target, we achieved 44.5% reduction in FY 2012 and 38.4% on average of the last 5 years.	24-28
Reduction of CO_2 emissions per unit Japan: 2% reduction vs FY2011 (29.3% reduction vs FY2005) North America, Europe & Asia: 2% reduction vs FY2011 (4.7% reduction vs FY2005)	Japan: 5% increase vs FY2011 (28.5% reduction vs FY2005) North America, Europe & Asia: 2.9% reduction vs FY2011 (10.4% reduction vs FY2005)	
Reduction of waste emissions per unit Japan: 2% reduction vs FY2011 (20% reduction vs FY2005) North America, Europe & Asia: 1% reduction vs FY2011	Japan: 0.3% increase vs FY2011 (26.3% reduction vs FY2005) North America, Europe & Asia: 6.2% increase vs FY2010	
Japan: 1% reduction of environmentally hazardous substance use per unit vs FY2011	Japan: 5.1% reduction vs FY2011 (19.7% reduction vs FY2010)	22
Japan: 1% reduction of water use per unit vs FY2011 (17.1% reduction vs FY2009)	Japan: 15.1% increase vs FY2011 (17.5% reduction vs FY2009)	28
Reduce VOCs in vehicle cabin interiors. Promote the use of lead-free solder. Ensure compliance with European REACH Regulations.	Continued efforts to reduce VOCs in vehicle cabin interiors. Used lead-free solder for some models. Implemented activities to comply with European REACH Regulations.	20-21
Disclose materials data to customers promptly.	Responded effectively to customer instructions (via IMDS).	
Promote the development of easily recyclable products.	Cockpit front-end modules, Seamless hard instrument panels, Paintless instrument	15-19
Promote light-weight, fuel efficient/energy efficient products.	Injection scarfskin, EGR cooler. Cockpit front-end modules, Small, high performance air-conditioning systems, Variable capacity compressors for air-conditioners, Steering members, Printed circuit board harnesses, Built-in oil coolers, EV inverters, EV battery controllers, Lightweight radiators, Charge air coolers, Brash-less motors.	
Promote development of products that ensure effective purification of exhaust gas.	New-structure metal supports Urea aqueous tank, DPF	
Promote development of products with low noise emissions	Low noise exhaust system	
Promote the development of environmentally friendly products. Promote the creation of a database for relevant indicators.	Disseminated information on indicators for environmentally friendly products to employees, and started using the indicators. Promoted the development of a system for calculating CO_2 emissions in the production stage.	
Enhance Green Procurement Guidelines.	Promoted activities to encourage business partners to agree to and follow our Green Purchase Guidelines.	23
Enhance Environmental Report.	Disseminated information on Calsonic Kansei's environmental activities and achievements widely to the public, through Environmental Report.	30-32
Enhance information dissemination activities for external audiences.	Improved the "Environmental Information" section on our website. Communicated our environmental activities to our shareholders through Medium-Term Reports.	

4 Business Activities and Environmental Burden ⇒ Mass Balance

No mark: Calsonic Kansei + domestic and overseas affiliated companies •: Calsonic Kansei + domestic affiliated companies

Input

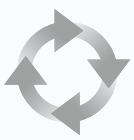



Raw Materials	Energy	Water	Chemical Substances
Total raw materials 188,114 t • 61,792 t	**Total energy** 4,144,383,555 GJ • 1,525,736,657 GJ	**Total water** 1,189 m³ • 647 m³	**Total chemical substances** • 222 t
Steel Materials 45,727 t • 14,207 t	**Electricity** 415,623 Mwh • 153,005 Mwh	**Water supply** 550 m³ • 213 m³	
Nonferrous Metal Materials 83,600 t • 37,271 t	**Special Heavy Oil A** 1,006 KL • 1,006 KL	**Industrial Water** 118 m³ • 12 m³	
Resin Materials 56,720 t • 9,901 t	**Light Oil** 71 KL • 52 KL **Kerosene** 228 KL • 225 KL	**Groundwater** 521 m³ • 422 m³	
Other 2,067 t • 413 t	**Utility Gas** 8,476 m³ • 1,897 m³		
	LPG 3,731 t • 2,817 t **Gasoline** 90 KL • 13 KL		

Calsonic Kansei Affiliated Group

Press | Welding | Resin Molding | Painting | Machining | Assembly

Output





Recycled	Greenhouse Gasses	Air Pollution Sources	Water Contamination Sources	Chemical Substances
Reusable Materials 29,362 t • 10,145 t	**CO_2** 190,327 t CO_2 • 74,131 t CO_2	**SOx** • 0.42 t	**Waste Water** • 366 m³	**Total chemical Substances** • 110 t
Waste 1,873 t • 56 t	**Other than CO_2** 0 t • 0 t	**NOx** • 3.60 t	**BOD** • 1.60 t	**Toluene / Xylene** • 86 t
		Soot • 0.13 t		**Other** • 24 t

5 Establishing an ISO 14001 Environmental Management System

Promoting the Acquisition of ISO 14001 Certification

- Since 1998 the Calsonic Kansei Group has been promoting the acquisition of ISO 14001, an international standard for environmental management systems. All Calsonic Kansei plants, the Testing Research Center, and domestic and overseas affiliated production companies (except those newly established) have been certified. The Group is promoting high standards of environmental management on a global scale.
- The Research and Development Center of the headquarters launched activities to obtain ISO 14001 certification in June 2012. The acquisition of certification and registration were completed in January 2013. We are currently establishing the environmental management systems for all of our group companies and all our employees.

Acquisition Status of Calsonic Kansei Facilities

	Plant	Month/Year first certified
Japan	Gunma Plant	October 1998
	Kodama Plant	January 1999
	Oppama Plant	February 1999
	Yoshimi Plant	December 2001
	Testing Research Center	January 2003
	R&D Center, Headquarters	January 2013

Acquisition Status of Major Domestic Affiliated Companies

	Company	Month/Year first certified
Japan	Calsonic Kansei Iwate Corporation	June 1998
	CKK Corporation	March 1999
	Calsonic Kansei Utsunomiya Corporation	May 1999
	CKF Corporation	December 1999
	Tokyo Radiator Mtg. Co., Ltd.	March 2003
	CKP Corporation	March 2004
	Calsonic Kansei Yamagata Corporation	November 2012

Acquisition Status of Major Overseas Affiliated Companies

	Company	Month/Year first certified
North America	Calsonic Kansei North America, Inc., Shelbyville Plant	September 2001
	Calsonic Kansei North America, Inc., Lewisburg Plant	September 2002
	Calsonic Kansei Mexicana S.A. de C.V., Aguascalientes Plant	March 2005
	Calsonic Kansei Mexicana S.A. de C.V., San Francisco Plant	March 2005
Europe	Calsonic Kansei Sunderland Limited	September 1999
	Calsonic Kansei UK Limited, Washington Plant	October 1999
	Calsonic Kansei UK Limited, Llanelli Plant	January 2002
	Calsonic Kansei Spain, S.A.	February 2000
	Calsonic Kansei Romania S.R.L.	November 2008
Asia	Daihan Calsonic Corp.	April 2004
	Calsonic Kansei Korea Corp.	October 2004
	Calsonic Kansei Malaysia Sdn. Bhd.	August 2007
	Calsonic Kansei (Wuxi) Corp.	August 2007
	Calsonic Kansei (Wuxi) Components Corp.	November 2008
	Calsonic Kansei (Guangzhou) Components Corp.	January 2009
	Calsonic Kansei (Haimen) Corp.	Under consideration
	Calsonic Kansei (Thailand) Co., Ltd.	August 2011
	Calsonic Kansei Motherson Auto Products Limited.	Under consideration

R&D Center, Headquarters,
External review

Calsonic Kansei Yamagata Corporation,
External review

Continuous Improvement of Environmental Management System (EMS)

As part of our efforts to continuously improve our environmental management system, we are working to increase the number of internal auditors at each business site. We also conduct internal and external environmental audits on a regular basis; internal audits are carried out under the leadership of the Environmental Energy Control Group of the Headquarters, and external audits are conducted by external agencies.

5 Environmental Accounting

The Calsonic Kansei Group has introduced environmental accounting as a tool for quantitative evaluation of environmental activities and official announcements.
Environmental accounting is a means of publicizing and quantitatively summing up the economic advantages accompanying environmental conservation measures, as well as the benefits and costs of environmental conservation and related activities, and what we publicize in the environmental report fulfills our commitment to explain our business activities to our various stakeholders.

Establishing a quantitative evaluation summary is helpful for enhancing our sustainable business management practices.

Those benefits are summed up quantitatively, and announced to society in the form of environmental accounting through environmental reports. Evaluation of quantitatively calculated results can also assist our environmental management practices.

1 Goals of Environmental Accounting for the Calsonic Kansei Group

1

By actively disclosing quantitative measurement results to local citizens, stockholders, and society in general, we aim to boost the transparency of the environmental activities of our company and help all parties gain an understanding of our corporate stance on the environment.

2

We use the quantification of both costs and amounts that arise from corporate involvement in environmental activities as a means of making further decisions pertaining to the effective promotion of future environmental activities.

3

In order to improve the consciousness of our employees, we established a system that raises environmental awareness, focuses on this awareness, and develops it further through everyday workplace interaction.

2 Status of FY 2012

Environment Conservation Costs

Environmental conservation costs are the investment and expenditures related to our environmental activities measured in monetary units.

(Unit: Million yen)

Environmental Conservation Costs

Classification			Investments			Expenditures		
			FY 2011	FY 2012	Rise and fall	FY 2011	FY 2012	Rise and fall
1.Costs within each business area for reduction of the environmental burden			167	129	△38	628	820	192
	Pollution prevention costs	Prevention of air, water, soil and noise pollution.	86	23	△63	241	208	△33
	Environmental conservation costs	Energy savings, resource savings, costs of phasing out materials with high environmental burdens	81	76	△5	57	77	20
	Resource recycling costs	Costs for reduction of industrial waste, recycling, and disposal	0	30	30	330	246	△84
2.Upstream/downstream costs		Costs for controlling environmental burdens occurring upstream/downstream of our business areas.	0	0	0	127	129	2
3.Management activity costs		Human resource costs incurred for environmental policy organizations, and the establishment, operation and certification of environmental management structures.	0	4	4	159	133	△26
4.Environmental research and development cost		Costs for development of environmentally friendly products, and research and development related to reducing environmental burdens.	310	364	54	3,758	3,828	70
5.Social activities costs		Costs for supporting environmental conservation activities conducted by local citizens and groups.	0	0	0	2	6	4
6.Environmental damage treatment cost		Costs for restoration of the natural environment and compensation for environmental damage.	0	0	0	34	15	△19
Total			**477**	**497**	**20**	**4,708**	**4,931**	**223**

Environmental Conservation Effects

Environmental conservation effects are assessed both from the economic aspect, which is evaluated based on the amount of money, and the quantitative aspect, which is evaluated based on the reduction in substances causing environmental burdens.

Evaluation of Quantitative Effects of Environmental Conservation Policies

Classification		FY2011	FY2012	Effect
1.Environmental conservation effects related to resources used in business operations (quantity)				
	Total energy use after conversion to CO_2 (t)	202,511	199,402	3,109
	Water consumption (km^3)	1,250	1,272	△22
2.Environmental conservation effects related to waste discharged in business operations (quantity)				
	Total amount of waste (t)	34,373	31,236	3,137
	Amount recycled (t)	31,820	29,362	2,458
	Amount disposed (landfilled) (t)	2,553	1,873	680
	PRTR substances (quantity, discharged) (t)	118	110	8

Economic effects of Environmental Conservation Policies

The economic effects are reported as the sum of the cutbacks in expenditures related to environmental activities (substantial results from energy saving activities etc.) and the income related to environmentally friendly activities (income from selling valuable resources etc.)

(Unit: Million yen)

Classification		FY2011	FY2012	Effect
3.Economic effects of environmental conservation policies		13,359	11,817	△1,542
	Reduced costs through energy saving	140	139	△1
	Reduced costs related to water use	3	3	0
	Income from selling valuable resources	1,016	966	△50
	Proceeds from selling environmentally friendly products	12,200	10,709	△1,491

Basic Items

1.Target Period:FY 2011 (April 2011 to March 2012)
FY 2012 (April 2012 to March 2013)

2.Scope of Statistics:

Calsonic Kansei Corporation
Gunma Plant
Oppama plant
Yoshimi Plant
Kodama plant
Testing Research Center
R&D Center/Headquarters

Domestic affiliated companies
CKK Corporation
CKF Corporation
CKP Corporation
Calsonic Kansei Utsunomiya Corporation
Calsonic Kansei Iwate Corporation
Calsonic Kansei Yamagata Corporation
Tokyo Radiator Mfg Co., Ltd.

Overseas affiliates

North America	Calsonic Kansei North America Inc.
	Calsonic Kansei Mexicana, S.A. de C.V.
Europe	Calsonic Kansei UK Limited
	Calsonic Kansei Sunderland Limited
	Calsonic Kansei Spain, S.A.
	Calsonic Kansei Romania S.R.L.
Asia	Daihan Calsonic Corp.
	Calsonic Kansei Korea Corp.
	Calsonic Kansei affiliates in China
	Calsonic Kansei Thailand Co., Ltd.
	Calsonic Kansei Malaysia Sdn. Bhd.
	Calsonic Kansei Motherson Auto Products Limited

3.Statistical methods:
Basically, we calculate costs in compliance with the guidelines issued by the Ministry of the Environment as a reference.

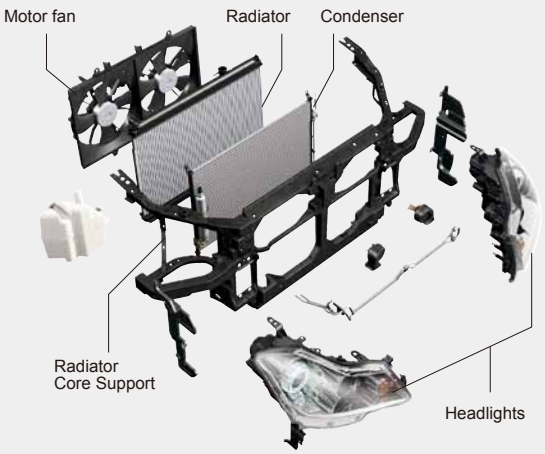
6 Environmentally Friendly Product Development

Calsonic Kansei set a “Green” target in its medium-term business plan announced in July 2011. This means that we aim to lead the industry by creating environmental technologies/ products of the next generation that can lead the world.
Calsonic Kansei is developing products that can reduce environmental impact throughout their entire life cycles with the concept: “We develop environmentally friendly products”.
When developing environmentally friendly products, we adhere to the requirements of fuel/motive energy efficiency, compact/lightweight design, simplification of recycling processes, elimination/minimization of hazardous substances, etc. To adapt products to these requirements, it is necessary to consider these issues from the first stage of development.
We are promoting the development of products for electric cars, which are the most environmentally friendly motor vehicles on the market.
Calsonic Kansei is promoting the development of environmentally friendly products by assessing the environmental aspect, in addition to assessing quality, cost, delivery and patent issues.

1 Calsonic Kansei’s Efforts and Products to Achieve its Environmental Targets

Environmental targets	Calsonic Kansei’s Efforts to Achieve its Environmental Targets		Calsonic Kansei products etc.
Development Stage	Reduction of waste and controlled hazardous materials	Reduction and elimination of controlled hazardous materials used in products	Products that do not use controlled hazardous substances (developing alternative materials)
		Development of easily recyclable products: Disassembly-oriented	Cockpit modules, Front-end modules, Seamless hard instrument panels
		Development of easily recyclable products: Recycling	Integrated radiators and condensers, All-aluminum radiators, Uncoated instrument panels
		Development of easily recyclable products: Longer life	Stainless exhaust mufflers
		Development of easily recyclable products: Lightweight and compact design	Compact and high-performance air conditioning systems, Compact and lightweight aluminum internal oil coolers and exhaust manifolds, Lightweight steering members, Lightweight thin evaporators, Lightweight thin condensers, Lightweight radiators, PCB harnesses, Built-in oil coolers, Brushless motor, Main muffler
Usage stage	Prevention of global warming	Fuel cost savings and motive power savings: Improvement in the efficiency of motive power engines	Inverter, Battery controller, EGR cooler
		Fuel cost savings and motive power savings: Reduction of the load on motive power engines through motive power savings in parts	High-efficiency car air conditioning systems (external control compressors, dual pipe systems)
		Fuel cost savings and motive power savings: Improvement in the efficiency of power transmissions / Improvement of automatic transmissions	Oil warm-up system
		Fuel cost savings and motive power savings: Easing traffic congestion	Electronic toll collection on-board device
	Protection of the ozone layer	Reduction of HCFCs: Development of an air conditioning system using a new coolant	Air conditioning systems compatible with a new coolant
		Reduction of HCFCs: Reduction of greenhouse gas emissions	Reduction in the amount of coolant used due to device improvements
			Reduction in the amount of coolant leaked due to hose and joint improvements
	Air pollution prevention	Exhaust gas purification	Aqueous urea tank systems, ultra-thin metal substrates, EGR coolers, DPFs, Dual inside wall tube exhaust manifolds
	Noise prevention	Reduction of exhaust noise	Low-noise exhaust systems, Sound radiation-reducing devices
	Coping with resource depletion	Development of new power resources: Fuel cell vehicles	Development of components (heat exchangers, etc.)
		Development of resource saving products	Development of metal catalyst carriers with new mechanisms
Disposal	Reduction of waste	Recycling of used cars: Rebuilding/reusing	Rebuilding and reusing air conditioning compressors
		Recycling of used cars: Material recycling	Recycling instrument panels and recovering precious metals from catalysts
		Recycling of used cars: R&D for ASR reduction	
		Collection and destruction of CFCs	Coolant (CFC) recovery machine

2 Total Reduction of Environmental Burden by Modularization



Frontend Module

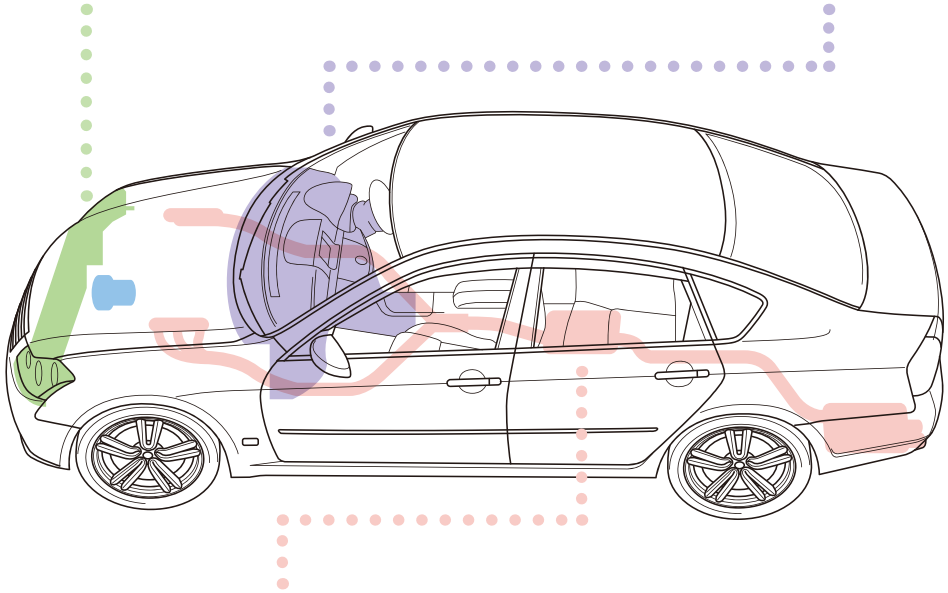
The parts in the frontend, such as the radiator, condenser, and various other heat exchangers, are integrated with the core support radiator to act as a support column. We are promoting space-saving and improving the assemblability and disassemblability of vehicles.

Reduction in the number of parts	35% to 50%
Reduction in weight	5% to 20%

Cockpit Module

The instrument panel, meters, air conditioning unit, airbag, electronic control unit, etc. are combined together with the steering member to form the frame. The keywords for our development work are “lightweight” and “recyclability.”

Reduction in the number of part connection points	35%
Reduction in the number of parts	18%
Reduction in weight	5%



Engine Exhaust Module

We are developing systems for the exhaust manifold, catalytic converter, center muffler, rear muffler, finisher, etc. which are highly suitable for exhaust gas purification.

3 Launching of Gx4 (Green) Environmental Products

In FY 2011 and 2012, we launched two types of environmental products.

■Injection Scarfskin

Injection scarfskin instrument panel

- Great heat efficiency during manufacturing and low CO_2 emission (reduction by 58% compared with powder molding)
- Good material yield and low waste material (2.7 times more compared with vacuum molding)

■EGR Cooler

(EGR: Exhaust Gas Recirculation)

- Heat exchanger that cools exhaust gas when it is returned to combustion chamber
- Reduce pump loss at the time of intake air and improve fuel efficiency

4 Prevention of Global Warming

We contribute to the improvement of the energy efficiency of vehicles by developing compact and lightweight fuel cost-saving/motive power-saving products. Our weight-saving efforts in particular can be seen in many of our products.

Promoting Compact and Lightweight Vehicle Parts

Brushless Motor

Reduction in size

20%

Main Muffler

Reduction in weight
(compared with our conventional products)

10%

Development of Fuel Cost-/Motive Power-/Electric Power-Saving Products

■64 mm-thick Charge Air Cooler

The resistance of charge air was reduced by 30% (compared with our conventional products). The heat resistance was improved for fuel cost saving and to respond to regulations for exhaust gases from diesel cars.

■Compressors for Car Air Conditioning

Calsonic Kansei contributes to the environment through fuel cost/motive power saving and reduction of CO_2 by offering variable capacity swash plate-type compressors which enable power saving due to continuous variability, as well as fixed capacity vane rotary compressors which realize compact and lightweight design due to their simple shape. In addition, we are promoting the development of compressors for EVs (electric vehicles).

Fixed Capacity Compressor CR06

Variable Capacity Compressor CSV617

■Inverter and Battery Controller for EVs

The inverter features highly efficient control and quick response performance. The battery controller is a device that monitors and controls the state of lithium-ion batteries.

Inverter for EVs

Lithium Ion Battery Controller for EVs

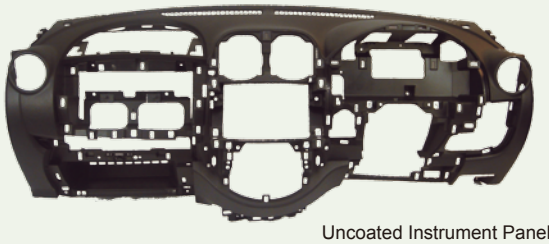
Development of Alternative Technology

■Development of Alternative Refrigerant Air Conditioning Systems

Refrigerants currently used for car air conditioners have caused some concerns with regard to their impact on global warming. We are now developing air conditioning systems that use alternative refrigerants with a very low global warming coefficient.

5 Effective Use of the Earth's Resources

Calsonic Kansei strives to develop products with better disassemblability/recyclability by reducing the number of kinds of materials used, and those which need fewer new resources.

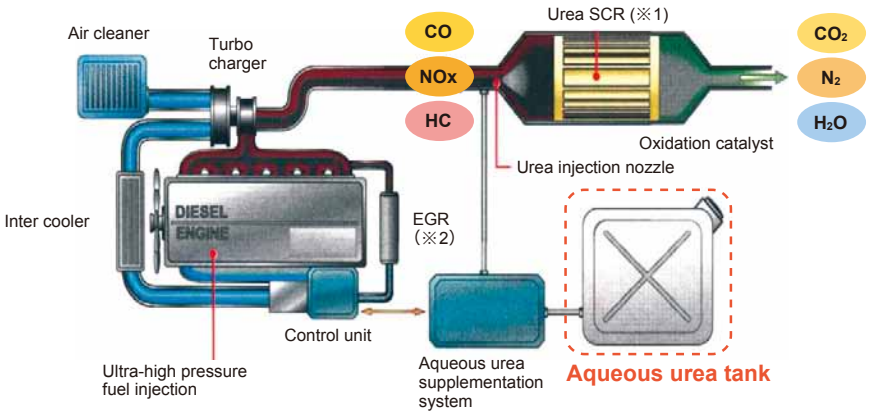


Uncoated Instrument Panel

6 Prevention of Air Pollution/Purification of Vehicle Exhaust Gases

Aqueous Urea Tank - Urea SCR System

The nitrogen oxide (NOx) present in exhaust gases is likely to be produced during complete combustion at high temperatures. By combining this NOx with aqueous urea it can be broken down into harmless water and nitrogen. The urea SCR system utilizes this mechanism to inject aqueous urea during catalysis, greatly reducing the amount of NOx produced.
The aqueous urea tank is an important component that supports the urea SCR system.
As the tank is made from stainless steel, it has excellent rustproof properties and, along with the EGR cooler, intercooler and the aluminum fuel tank, this environmentally friendly product has been developed to meet the various needs of our customers.
This is the first time anywhere in the world that an aqueous urea tank has been mass-produced for vehicle installation and is highly durable and corrosion resistant.



※1 SCR : Selective Catalytic Reduction
※2 EGR : Exhaust Gas Recirculaton

7 Noise Prevention - Reducing Exhaust Noise in Exhaust Parts

By analyzing the silencing elements using elemental technology, and then combining the various elements, we are developing exhaust parts with high levels of silencing performance.

8 LCA Efforts (Product Environmental Impact Evaluation)

By quantitatively evaluating and understanding the environmental impact of products, Calsonic Kansei assesses the appropriateness of product plans, determines whether developmental plans are required or not, and sets priorities for environment-conscious matters during the product design, development and manufacturing processes, etc. and implement suitable environmental measures.
We have already calculated the internal environmental burden per unit for each of the products we make at our manufacturing plants, and we have entered this information into databases as LCA data for self-manufactured products.
LCA data are also calculated for selected target vehicle types. In 2006, we started seriously examining how to assess methods for evaluating the environmental aspect of products during the product development process and utilize the results. In 2007, we built a CO_2 emissions-computing system to calculate the CO_2 emission amounts generated during the manufacturing process for each of our products.

7 Efforts to Manage Chemical Substances

Substances that could impact the environment are used in some products, and for the manufacture of items designed to improve the quality of these products. Therefore, there are concerns that these substances could have a significant impact on the environment during the manufacture and use of these products and also when they are discarded.
Global awareness of the environment is now increasing and more requests to reduce/stop using these substances are coming in every year, both from home and abroad.
In response, we are promoting the responsible management of chemical substances (environmentally hazardous substances) by adhering to the laws and regulations of each country, responding promptly to our customers' requests, and setting our own goals voluntarily.

1 Basic Concepts

To achieve responsible risk management for "products", "manufacturing process", "purchased materials" and "processed materials", we adhere to the following fundamental principles: "Use as few harmful chemicals as possible", "eliminate as many harmful substances as possible and change to alternatives" and "properly manage harmful chemicals if they have to be used."

Environmentally Hazardous Substances in Products	●Reducing the amounts of environmentally hazardous substances used in products ●Immediate disclosure of the amounts of environmentally hazardous substances used in products
Environmentally Hazardous Substances Used in Manufacturing at Plants	●Reducing emissions of environmentally hazardous substances used in the manufacturing process ●Properly managing used chemical substances
Environmentally Hazardous Substances in Purchased Items	Operations for Green procurement ●Confirming the presence of chemical substances used in purchased items ●Confirming the environmental management of our business partners

2 Environmentally Hazardous Substances in Products

Reducing the Amounts of Environmentally Hazardous Substances Used in Products

Calsonic Kansei doesn't just comply with the legal restrictions of each country. They also set their own goals, manage and use follow-up systems, promote the development of alternative technologies, and work towards reducing the amounts of environmentally hazardous substances used in their products.

■Efforts by Calsonic Kansei to Comply with Regulations

Legislation			Calsonic Kansei's Efforts							
Regulations	Substances	Regulatory Schedule	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
European ELV Directive	Four substances (lead, cadmium, mercury, hexavalent chromium)	Prohibited from July 2003	Compliance completed (Except for some exemptions)							
	Hexavalent chromium, corrosion coating	Prohibited from July 2007	Compliance completed							
Self-regulations	Reducing/abolishing the 13 VOC substances found in vehicle interiors		The adoption process started in the second half of 2006.							
	Applying a Pb-free solder		Currently working towards adoption.							
European REACH Regulations	SVHC*				★Effective June 1. Currently underway.					

*SVHC stands for "Substance of Very High Concern" and is scheduled to include about 1,500 specific items, such as carcinogenic substances.

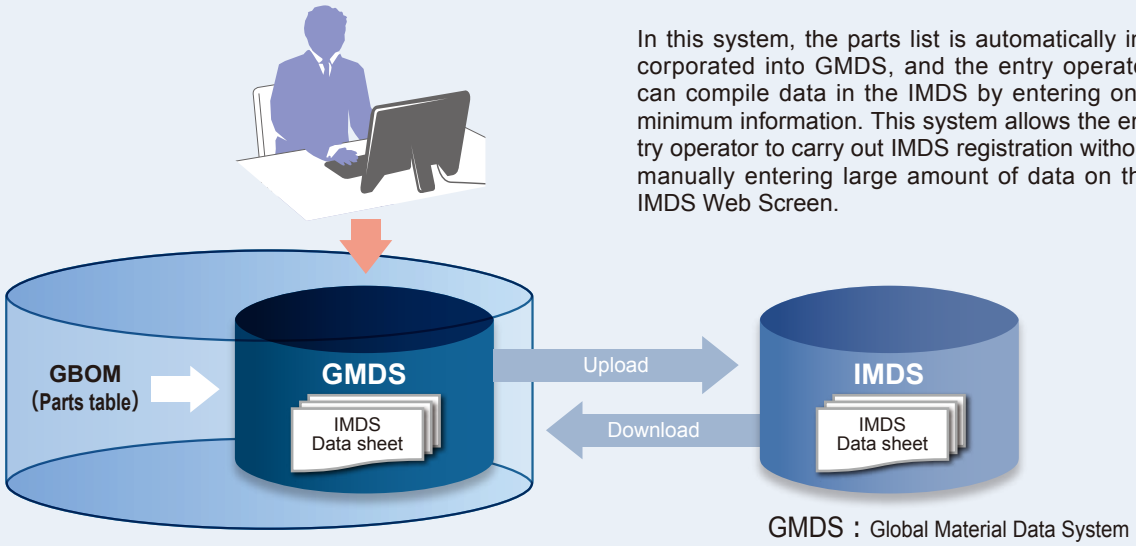
Efforts Directed Towards Reducing VOC Levels in Vehicle Interiors

Calsonic Kansei has set goals aimed at reducing and abolishing 13 volatile organic compounds (VOC) such as formaldehyde, toluene and xylene, which are included in the adhesives and coating materials used in car interior products and can cause irritation to the nose and throat. We have set a target for their elimination and a reduction in usage of related materials and coatings. We are now expanding the list of target materials used for these sorts of application.

Materials	Coatings
① Using materials that do not contain formaldehyde ② Using adhesives that contain less toluene and xylene	① Developing/using coatings that contain less toluene and xylene (TX-free coatings) ② Developing water-based coatings containing only a small amount of solvent

Immediate Disclosure of the Amount of Environmentally Hazardous Substances Used in Products

Almost all automobile makers now require suppliers, including Calsonic Kansei, to refrain from using prohibited substances and to report the materials and substances used in products through IMDS.
To comply with this request, we have developed and formulated an IMDS entry support system called “GMDS” to promote the prompt disclosure of information to customers.



In this system, the parts list is automatically incorporated into GMDS, and the entry operator can compile data in the IMDS by entering only minimum information. This system allows the entry operator to carry out IMDS registration without manually entering large amount of data on the IMDS Web Screen.

GMDS : Global Material Data System

3 Environmental Efforts at Plants

Reducing Emissions of Volatile Organic Compounds (VOC) from Plants into the Air.

Domestic	We are conducting environmental compliance evaluations at each of our bases. In addition, in order to comply with the VOC emission regulations, we have installed thinner collection devices at plants that are subject to control. As a result, our plants continue to operate without violating any regulations.
Overseas	At each of our overseas bases, we are changing over to the use of low-toluene and low-xylene paints.

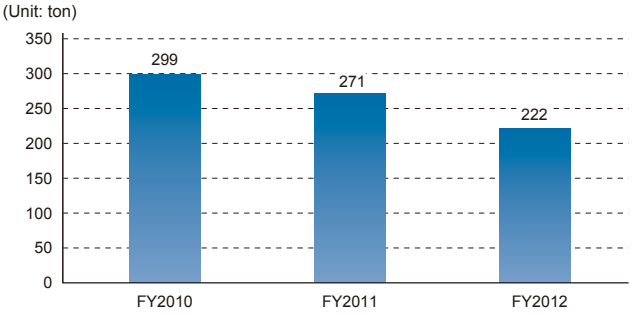
Support for PRTR Legislation (Calsonic Kansei + Domestic affiliated companies)

In order to confirm the amounts of PRTR-regulated substances discharged, moved and used, and to reduce the environmental burden, we are reducing the amounts of PRTR-regulated substances used by changing coating materials and setting the goal of a 6% reduction in emissions per unit by FY 2016, compared with FY 2010.

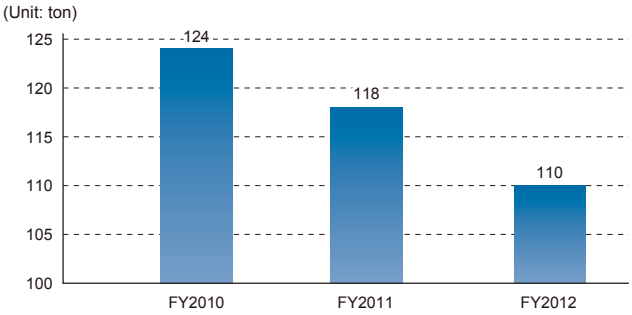
※ PRTR (Pollutant Release & Transfer Register),
(Act on the Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment, published in 1999)

Target for FY2012	FY2012 Results
Compared with FY 2011 Amount of Emissions per Unit 1% Reduction	Amount of Emissions per Unit 5.1% Reduction

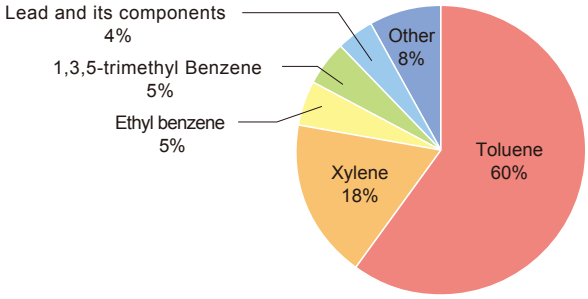
Amount Used (Calsonic Kansei + Domestic affiliated companies)



Amount Discharged/Moved (Calsonic Kansei + Domestic affiliated companies)



Amount Discharged/Moved in FY 2012 (Total: 110t)



Management of PCB

Appropriate management regulations have been implemented for electrical devices that include PCBs as waste products for special management in accordance with the law. PCBs are also scheduled for prompt disposal, which has already started at some bases.

Thorough Water Quality Management

We have set our voluntary management targets (80% of the regulatory value) and are conducting stricter management than the law requires.

Thorough Air Quality Management

We can reduce sulfur oxide (SOx) and CO_2 consumption by switching from Heavy Oil A fuel to Special Heavy Oil A fuel (containing only 10% of the sulfur content of Heavy Oil A) as well as converting natural gas and LPG for combustion and reducing the amount used by adopting energy-saving activities.

Environmental Contamination Accidents or Grievances

Rules for collecting data on overseas environmental accidents were established in FY 2011 in order to manage them as quickly as possible.
Although one environmental accident with the potential to affect the environment at large occurred in FY 2012, our quick responses were able to minimize the damage.
After each accident, the situation was rapidly assessed and the causes were investigated in order to cope with the situation. (A report has already been submitted to the government.)

Base	Content
Calsonic Kansei (Thailand) Co., Ltd.	Exceeding the oil reference value in the waste water

Efforts to Clean up Soil Ground Water and Prevent Contamination

We are addressing the current situation by focusing efforts on plants which have already been contaminated, and we are implementing preventive measures and conducting thorough investigations.

1 Efforts for Advanced Prevention

- Switching from subterranean fuel management to above ground management⇒ Completed.
- Converting from Special Heavy Oil A to Natural Gas and LPG (including CO_2 reductions)

2 Thorough Surveying

We have already conducted investigations on the soil in each area, including affiliated companies.
We are also conducting an investigation of affiliated company groups.

4 Efforts to Reduce the Amounts of Environmentally Hazardous Substances in Purchased Items

Promotion of Green Procurement

Calsonic Kansei procures various items such as raw materials, indirect materials and component parts and believes that managing all procured items is an important part of the responsible management of environmentally hazardous substances. We ask for our suppliers' cooperation in following the "Calsonic Kansei Green Procurement Guidelines" that were created in order to comply with the relevant laws and regulations and to accommodate customers' requests. This enables us to continue promoting Green Procurement with our suppliers in order to fulfill our social responsibilities.

Operation for Green Procurement

The "Calsonic Kansei Green Procurement Guidelines" set out legislation stipulating the substances that are to be managed, how to conduct survey reports on chemical substances included in items we have purchased, and evaluations of the environmental management system status of our suppliers.

1 Environmental Efforts for Purchased Items (Materials, Parts, Products, Indirect Materials and Packaging Materials)

- We conduct surveys of the substances included in purchased items (materials, parts, products and packaging materials).
- We confirm that any chemical substances included in purchased items (materials, parts, products and packaging materials) comply with the requirements by using IMDS, MSDS, etc.

2 Investigation for the Establishment of Environmental Management Systems

①Accreditation for an environmental management system such as ISO 14001 has been acquired.
②Accreditation for an environmental management system such as ISO 14001 is being promoted, and a clear plan with a concrete schedule for acquisition has been established.
③Equivalent activities to either of the above are ongoing.

8 Efforts Towards an Environmentally Balanced Factory

The Calsonic Kansei Group is quantitatively evaluating the environmental burden output resulting from its industrial operations, and striving to reduce this burden by gaining a comprehensive understanding of the impact of all operations.
2012 was the last year of the first commitment period of the Kyoto PROTOCOL (2008-2012). The Japanese government's target was to reduce the GHG emissions by 6% relative to the 1990 level. Our company greatly surpassed the goal by reducing the GHG emissions by 44.5% in 2012 and 38.4% on average in the last five years.
We promote reduced carbon emissions and reduced emissions per unit from the viewpoint of global warming and also promote 100% reuse of resources in order to create zero waste from the viewpoint of the effective use of resources, so that our factories can operate in balance with the environment.
Furthermore in 2012, same as 2011, our concerted efforts called "Energy Saving Special Activities" greatly surpassed the original targets and promoted our energy management.

1 Prevention of Global Warming

In FY 2012, we established the "Calsonic Kansei Green Program 2016" midterm environmental plan and we are now promoting various activities to reach the FY 2016 goal.

Transition of CO_2 Emissions from FY 1990 to FY 2012 (Calsonic Kansei + CKK + CKF)

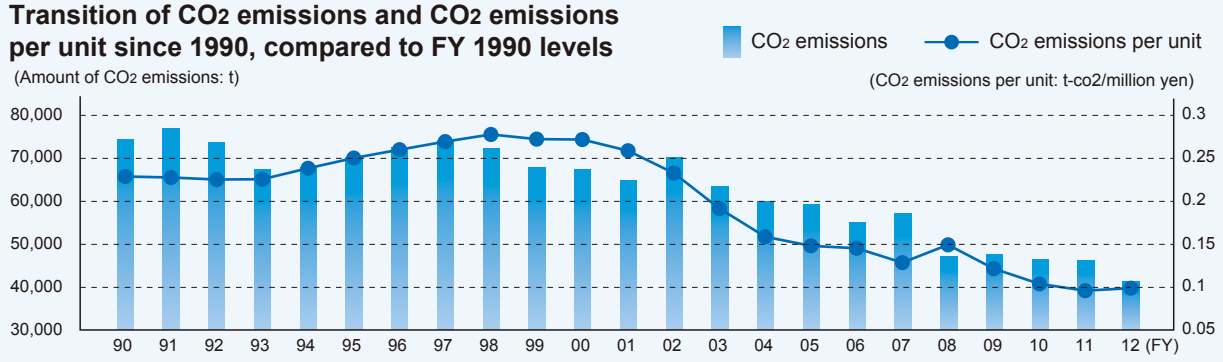
1 CO_2 Reduction Plan

We are targeting an average reduction of 7% in CO_2 emissions and 20% in CO_2 emissions per unit from 2008 to 2012 (Environmental Self-Action Plan of the Japan Auto Parts Industries Association), in comparison with FY 1990 levels.

2 CO_2 Reduction Achievements

CO_2 emissions were reduced by 44.5% and CO_2 emissions per unit were reduced by 56.9% in FY 2012, compared to FY 1990 levels.

Transition of CO_2 emissions and CO_2 emissions per unit since 1990, compared to FY 1990 levels



Management Item	FY 1990 (base year) Results	FY2012 Results	Achievement status
CO_2 Emissions (t-CO_2)	74,391	41,250	44.5% Reduction
CO_2 Emissions per Unit (t-CO_2/million yen)	0.229	0.0988	56.9% Reduction

(0.33 was used as the CO_2 conversion factor for electricity in comparison with FY 1990)

	1990	2008	2009	2010	2011	2012	08-12 average	Comparison with 1990 FY 08-12 average	Comparison with 1990 FY 12 alone
CO_2 Emissions; Fixed factor (t-CO_2)	74,390	47,165	47,726	46,507	46,235	41,250	45,777	38.4%reduction	44.5%reduction
CO_2 Emissions; Variation factor (t- CO_2)	74,390	55,470	52,261	49,672	60,461	59,680	55,509	25.4%reduction	19.8%reduction
CO_2 Emissions per Unit; Fixed factor (t- CO_2/ million yen)	0.2286	0.1492	0.1215	0.1038	0.0959	0.0988	0.1138	50.2%reduction	56.9%reduction
CO_2 Emissions per Unit; Variation factor (t- CO_2/ million yen)	0.2286	0.1755	0.133	0.1109	0.1251	0.1428	0.1375	39.8%reduction	37.5%reduction
CO_2 conversion factor for electricity (t·CO_2/ Mwh) (basic unit of JAPIA)	0.330	0.400	0.370	0.372	0.460	0.517	–	–	–

Overview of Activities until FY 2012 (Calsonic Kansei + Domestic Affiliated Companies)

We are aiming to reduce the amount of CO_2 emissions per unit by 34.7% by FY 2016, compared to FY 2005.

In order to achieve the goal described above, we targeted a 2% reduction in FY 2012, compared to FY 2011. As a result, a 5.0% increase in CO_2 emissions per unit and a 9.4% reduction in CO_2 emissions were achieved.

Management Item	FY 2005 (base year) Results	FY2011 Results	FY2012 Results	Achievement status	
				Compared with FY 2005	Compared with the Previous Year
CO_2 Emissions (t-CO_2)	**103,183**	**81,801**	**74,131**	**28.2%Reduction**	**9.4%Reduction**
CO_2 Emissions per Unit (t-CO_2/million yen)	**0.2173**	**0.1480**	**0.1554**	**28.5%Reduction**	**5.0%Increase**

(0.38 was used as the CO_2 conversion factor for electricity in comparison with FY 2005)

Overview and Discussion of Activities

①We carried out “Energy-Saving Special Activities” in which all of our bases participated. We also implemented energy-saving diagnosis and energy engineering study groups to extract and improve energy-saving projects. However, as a result of production volume reduction, the CO_2 emissions per unit increased.
②As a result of our “Energy-Saving Special Activities”, our headquarters area received the highest award, representing Saitama prefecture, from the Kanto-District Rational Use of Power Committee (February 26, 2013).


表彰状
最優秀賞
カルソニックカンセイ株式会社
研究開発センター本社殿
貴事業所は電気使用合理化
活動において顕著の成績を
得られました
このご努力に敬意を表し
ここに表彰いたします
平成二十五年二月二十六日
関東地区電気使用合理化委員会
委員長 野村 宏

Overview of Activities until FY 2012 (Overseas Affiliated Companies)

We are aiming to reduce CO_2 emissions per unit by 9.7% by FY 2016, compared to FY 2005.

In order to achieve the goal described above, we targeted a 2% reduction in FY 2012, compared to FY 2011.
By promoting reduction activities, a 2.9% reduction in CO_2 emissions per unit was achieved.

Management Item	FY 2005 (base year) Results	FY2011 Results	FY2012 Results	Achievement status	
				Compared with FY 2005	Compared with the Previous Year
CO_2 Emissions (t-CO_2)	**79,507**	**110,930**	**116,195**	**—**	**—**
CO_2 Emissions per Unit (t-CO_2/million yen)	**0.2919**	**0.2693**	**0.2615**	**10.4%Reduction**	**2.9%Reduction**

(0.38 was used as the CO_2 conversion factor for electricity in comparison with FY 2005)

Activities and Discussion

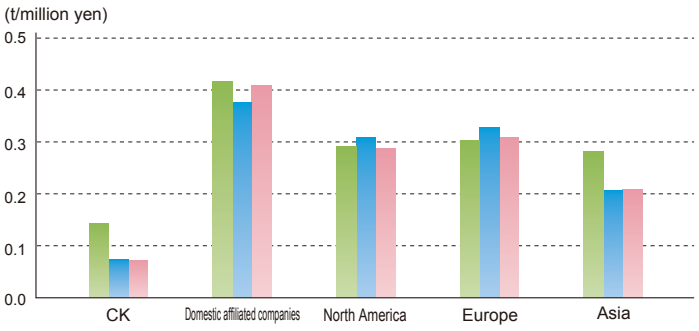
Implementation of energy-saving diagnosis in overseas bases

In FY 2012, the Department of Environmental Energy Management in Japan and the personnel in charge of energy management at bases in Asia increased employees’ understanding of energy saving and implemented diagnosis to evaluate and compare their respective situations.

Regional CO_2 Emission Status in FY 2012

We assessed the CO_2 emission status of our domestic and overseas affiliated companies.

Transition of Regional CO_2 Emissions per Unit

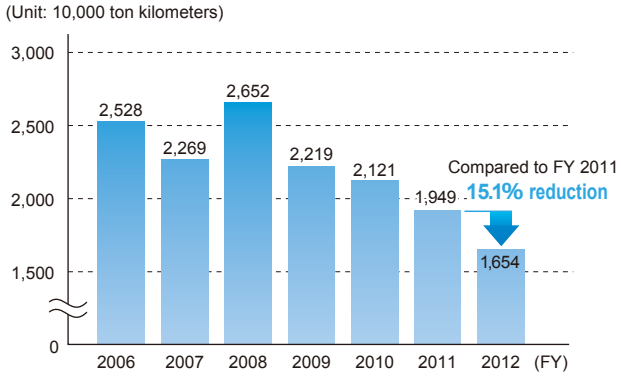


Results (ton-kilometer) at the logistics stage

The right-hand graph shows a result of less than 30 million ton-kilometer, which does not require notification, etc. However, we have drawn up a reduction plan for logistics and we are making efforts to achieve the set goal.

Activities and Discussion

①Minimization of transportation between domestic bases by promoting overseas procurement
②Promotion of transportation by train
③Promotion of sea transportation



2 Natural Resource Conservation Activities

To utilize the planet's limited resources efficiently, we are seeking to achieve zero emissions at all the global business bases of our group, to promote conservation activities, and to reduce the amounts of materials used and waste generated (waste and valuables).

Flowchart Illustrating Reuse Operations for Waste Discharged from Plants

Categories Type	Methods for Handling/Disposal	Disposal Location	Methods for Effective Usage	Recycled Products
Oil waste (including benzene and waste LLC), Other oily water	Oily water separation	Cement manufacturers Calsonic Kansei (fuel)	Sales of resources (recycled heavy oil)	Fuels, cement, roadbed materials
High quality paper, newspaper, magazines	Sorting/dissolving	Paper manufacturers	Sales of resources	Toilet paper, etc.
Cardboard, confidential documents, paper cores	Sorting/dissolving	Paper manufacturers	Sales of resources	Recycled paper, cardboard medium, etc
Iron scraps and empty cans	Sorting/dissolving	Metal refining manufacturers	Steel-making materials	Steel, non ferrous metals (copper, aluminum, stainless steel) materials
Oil waste (cooking oil waste)	Separation/recycling	Oleochemical manufacturers	Fuel for oleochemical manufacturers' company cars, feed	Biodiesel fuels, assorted feed
Fluorescent waste	Separation/recycling Crushing/separation	Material manufacturers	Recycled materials for each element	Recycled materials (mercury, glass, metals)
Glass bottles	Sorting/crushing	Glass manufacturers	Glass materials	Glass bottles
Waste plastic (soft)	Crushing, volume reduction and solidification	Resin-recycling manufacturers	Boiler fuels	Solid fuels
Oil waste (oil-bearing waste cloth)	Incineration	Waste heat boiler installation manufacturers	Utilization of waste heat (collecting steam)	Boiler fuels
Waste plastic	Crushing/separation	General recycling manufacturers	Sorting, steel-making materials, fuels	Ferrous materials, solid fuels, fuels
Metal scraps (including aluminum chips) Fluorescent waste (crushed pieces) Infectious waste Glass ceramic scraps Sludge Oil waste (filter)	Incineration and fusion	Shaft furnace manufacturers	Shaft furnace-reducing agents	Steel-making materials, roadbed materials (incineration residues)
Sludge (flux, grinding residue)	Incineration	Shaft furnace manufacturers	Utilization of waste heat (furnace heat reserves) Shaft furnace-reducing agents	Roadbed materials (incineration residues)
Dehydrated sludge (filter press)	Classification	Shaft furnace manufacturers	Processing granular materials	Raw materials for cement
Wood scraps	Crushing	Waste wood-recycling manufacturers	Compressed graft cutting	Laminated wood (particle boards)
Wood clippings and grass	Crushing/fermentation	Compost manufacturers	Compost materials	Compost

Overview of Activities until FY 2012 (Calsonic Kansei + Domestic Affiliated Companies)

We are aiming to reduce the amount of waste discharge per unit by 28% by FY 2016, compared to FY 2005.

In order to achieve the goal described above, we targeted a 2% reduction in FY 2012, compared to FY 2011. Although we promoted reduction activities, waste discharge per unit increased by 0.3%.

Management Item	FY 2005 (base year) Results	FY2011 Results	FY2012 Results	Achievement status	
				Compared with FY 2005	Compared with the Previous Year
Waste discharge (t)	**17,433**	**14,892**	**12,911**	—	—
Waste Discharge per Unit (t/million yen)	**0.0367**	**0.0270**	**0.0271**	**26.3%Reduction**	**0.3%Increase**

Waste discharge per unit=Total amount of waste discharge/Sale

Activities and Discussion

As a result of the following activities, we managed to reduce the waste discharge. However, as a result of production volume reduction, the waste discharge per unit increased.
①Horizontal development of resource-saving activities
②Improvement of poorly performing processes is targeted by promoting MTCR activities in each plant.

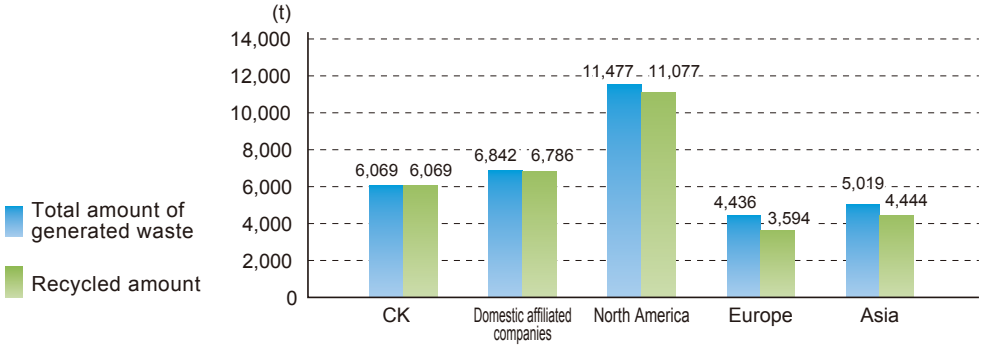
Overview of Activities until FY 2012 (Overseas Affiliated Companies)

We are aiming to reduce the amount of waste discharge per unit by 6% by FY 2016, compared to FY 2010.

In order to achieve the goal described above, we targeted a 1% reduction in FY 2012, compared to FY 2011. Although we tried to reach this goal, the amount of waste discharge per unit increased by 6.2%.

Management Item	FY 2010 (base year) Results	FY2011 Results	FY2012 Results	Achievement status	
				Compared with FY 2010	Compared with the Previous Year
Waste discharge (t)	**18,997**	**19,481**	**20,923**	—	—
Waste Discharge per Unit (t/million yen)	**0.04923**	**0.04734**	**0.05029**	**2.1%Increase**	**6.2%Increase**

Regional Total for Generated Waste Amount in FY2012



Activities and Discussion

- Although we extracted projects to reduce the amount of waste discharge and implemented the activities to improve the situation, the amount of waste increased because it was the projects' start-up period.
- In the overseas locations where "Zero Emission" activities lagged behind, we set FY2015 as the deadline to achieve Zero Landfill and promoted activities.
- Calsonic Kansei North America, Lewisburg Plant, achieved the zero landfill, and they received an award from the State of Tennessee.

(Left) CKNA Lewisburg Plant achieved zero waste discharge
(Right) Award from the State of Tennessee

3 Water Resources Used and Reduction Measures

Overview of Activities until FY 2012 (Calsonic Kansei + Domestic Affiliated Companies)

We are aiming to reduce the volume of water consumption per unit by 21.4% by FY 2016, compared to FY 2009.

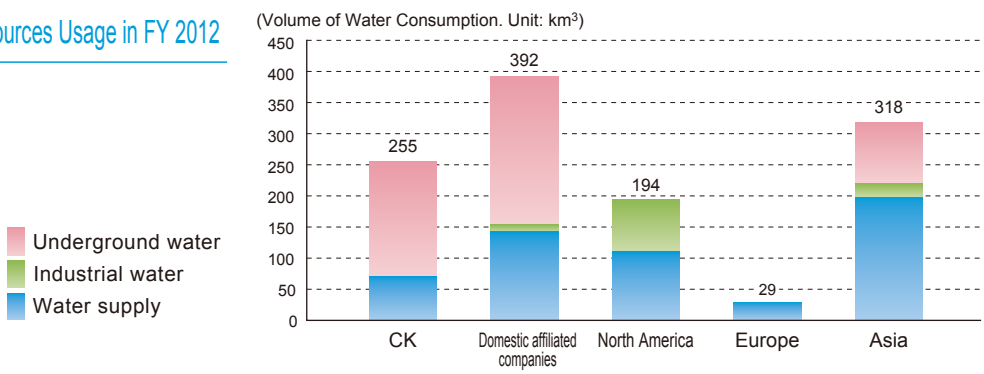
In order to achieve the goal described above, we targeted a 1% reduction in FY 2012, compared to FY 2011. Although we promoted reduction activities, the volume of water consumption per unit increased by 15.1%.

Management Item	FY 2009 (base year) Results	FY2011 Results	FY2012 Results	Achievement status	
				Compared with FY 2009	Compared with the Previous Year
Used water (km^3)	**734**	**651**	**647**	**—**	**—**
Water usage per unit (km^3/million yen)	**1.643**	**1.178**	**1.356**	**17.5%Reduction**	**15.1%Increase**

Activities and Discussion

We managed reduced the water usage fee per unit by adopting the measures shown below. However, the water usage per unit increased due to reduction of manufacturing volume, changes in manufacturing process, etc.
①Checking for leaks ②Cyclic use of cooling water

Regional Amount of Water Resources Usage in FY 2012

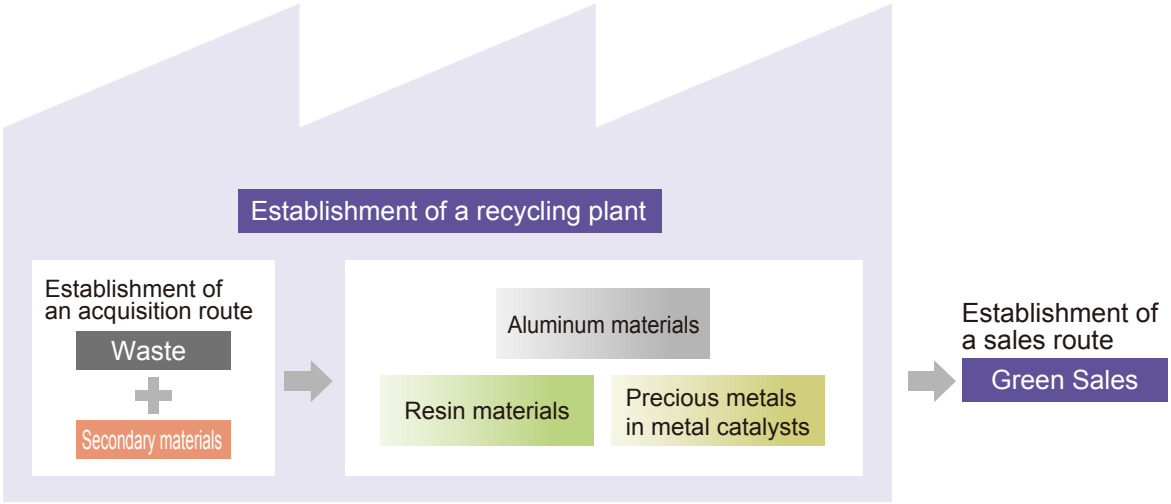


9 Recycling Activities

Calsonic Kansei has been consistently involved in recycling activities as a voluntary initiative for environmental conservation - even though this may affect profits. We will continue to promote recycling activities to meet the needs of a sustainable society.

1 Recycling System of Calsonic Kansei

Calsonic Kansei is promoting in-house recycling activities as well as the recycling of waste generated from outsourced business activities.



2 Activities in FY 2012

1 Secondary aluminum alloy

We collect aluminum mill ends, etc., generated in the manufacturing process used to recycle secondary aluminum alloy, and then reuse them for our affiliated companies' aluminum products. This contributes to resource recycling.

2 Collecting and Recycling Precious Metals from Used Catalysts for Purifying Exhaust Gases

We effectively separate and collect "materials containing precious metals (wash coat) that can be used as a valuable resource" from catalysts for purifying automobile exhaust fumes, etc. by using environmentally friendly dry separation devices.

Used catalysts for purifying exhaust gases

Collected powder (containing precious metals)

Precious metal

	Amount of collected and recycled aluminum	Amount of used catalysts collected for purifying exhaust gases
FY 2010 Results	**2,630t**	**13,052units**
FY 2011 Results	**2,350t**	**18,422units**
FY 2012 Results	**2,030t**	**21,075units**

10 Environmental Communication

Calsonic Kansei is ensuring that it not only discloses environment-related information to society but also communicates with every stakeholder supporting us in order to strengthen relationships and contribute to a trustworthy social framework.

1 Communication with Local Communities and Societies

By ensuring that all employees of the Calsonic Kansei Group commit themselves to solving environmental problems, we are helping to make a better environment, in cooperation with people in the local communities.

1 Environmental Communications with Local Communities

Calsonic Kansei Kodama Plant

In order to share accurate information concerning environmental risks among the relevant people including people who live near the Plant, our company and the local government organized environmental communication events to have mutual understanding and trust.

CKK Nakatsu Plant

We participated in the "Fureai Festival" in Imazu District of Nakatsu City and drew the attention of the participants to CKK's environment improvement activities.

Calsonic Kansei North America (USA)

We participated in a cleaning activity with the local communities.

2 Plant Tours and Internship for Students in Local Communities (work experience)

Calsonic Kansei Gunma Plant

Internship for a junior level student from a high school for children with special needs.

Calsonic Kansei Yoshimi Plant

5th graders (80 children) from a local elementary school visited the plant. We introduced the summary of the company and energy-saving activities.

Calsonic Kansei UK (UK)

Local students were invited to the company. We introduced the summary of the company and products.

3 World Environment Day

Calsonic Kansei Thailand

In 2012, trees were planted to increase green area.

Sapling for planting.

4 Support of Suppliers for Environmental Activities

Tokyo Radiator MFG Co., Ltd.

At the 2012 suppliers meeting on May 10 (Thu), we explained our FY2012 environment policy and asked for their continuous collaboration.

5 Cleaning Activities in Local Communities

Calsonic Kansei Oppama Plant

We conducted cleaning activities in the Hirakata bay and the area surrounding the plant.

CKP

We are regularly conducting cleaning activities in the industrial park.

CKGH Calsonic Kansei Guangzhou (China)

We conducted cleaning activities in the Dongfeng Nissan production line and its surrounding area.

Calsonic Kansei Oppama Plant Shonan Module

We conducted cleaning activities along the sidewalk and peripheral roads of the Nissan Shatai Co., Ltd. Hiratsuka District 2.

Calconic Kansei Utsunomiya

At lunch break on the cleaning activity day, we conducted cleaning activities (i.e. picking up trash, pulling up weeds) in the area surrounding the company.

CKGC Calsonic Kansei Guangzhou Component (China)

We are conducting cleaning activities in the area surrounding the company.

6 Volunteer Activities

Calsonic Kansei Iwate

We participated in the volunteer mowing activities in the area affected by the Great East Japan Earthquake.

2 Explanation provided to our Stockholder

We described our environmental efforts in our business report, actively publicizing our environmental conservation activities to our stockholders.

3 Community Partnership Activities & Green Partnership Activities

In FY 2008, Community Partnership Activities and Green Partnership Activities began as part of environmental efforts in the production departments, displaying a completion ratio (%) in order to evaluate each activity. Since we accomplished 100% of our completion ratio in FY 2010, we are now striving to maintain that status.

1 Community Partnership Activities

Community Partnership Activities are activities that promote our environmental efforts to the communities near our plants and to society in general.

Activities	Basic Evaluation Points
Supplying environmental information via our website	25 points
Explaining our environmental efforts to plant visitors	25 points
Explaining our environmental efforts at external lectures, etc.	25 points
Environment-related activities contributing to local communities	25 points
Total	100 points

2 Green Partnership Activities

Community Partnership Activities are activities that promote 3 Environmental Clean Chain Activities and environmental accident prevention in collaboration with cooperating companies.

Activities	Basic Evaluation Points
Conducting activities, targeting cooperating companies which enter the premises of our company.	20 points
Seeking cooperation for 3 Clean Chain Activities and environmental accident prevention activities	20 points
Standardizing the procedure for requesting cooperation and utilizing it.	50 points
A system is in place to promote activities.	10 points
Total	100 points

3 Environmental Clean Chain

No.1 CO_2 Reduction through CO_2 management

No.2 Effective use of resources in the production process

No.3 Reduction of emission of paint VOC, etc. through emission management

4 Communication with Society

We believe that it is essential for companies to disclose their corporate environmental activities and achievements in a timely manner. Therefore, we are publicizing our activities and achievements to the public and various groups by disclosing our environmental report on our website, explaining our activities through IR, etc.

■The efforts made by the Calsonic Kansei Corporation are shown on the Website of Calsonic Kansei Corporation

URL http://www.calsonickansei.co.jp/

5 Communication with Employees

1 In-house Communication

We are providing environmental information in a timely manner through the Intranet and by educating our employees, as well as the employees of our affiliated companies.

2 Measures taken in Offices

We carry out “Cool-biz” and “Warm-biz” practice in order to reduce energy consumption and help prevent global warming.

11 Environmental Performance Data

Calsonic Kansei Corporation

Gunma Plant

Address : 132 Shin-Nakano, Oura-cho, Oura-gun, Gunma
Area : 224,781m²
Buildings : 64,352m²
Major Products:Air-conditioning units, condensers,exhaust products, metal supports

Ordinance and Agreement	Gunma Prefecture Ordinance, Oura Town Agreement, Sewage Law		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	6.5~8.5	7.1	7.9
SS	30mg/l and less	6.4	22.3
BOD	20mg/l and less	4.5	12.2
N-Hex	3mg/l and less	1.8	
F	8mg/l and less	0.6	1.0
Zn	2mg/l and less	0.1以下	0.3
P	16mg/l and less	0.2	0.5
N	120mg/l and less	1.6	3.9
Cu	3mg/l and less	0.1 and less	
Ni	—	—	—
Fe	5mg/l and less	0.1以下	0.6
COD	—	—	—
E. coli bacteria	3000 and less	33	210
Dichloromethane	0.2mg/l and less	0.02 and less	
Total volume of water discharge			48.7(km³)
Drain field	Discharged into a river (subsidiary stream of the Tone River)		
BOD average			8.3(mg/l)
Amount of pollution load (BOD)			0.4(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			16,003(t)

Oppama Plant

Address : 18 Natsushima-cho, Yokosuka City, Kanagawa
Area : 22,514m²
Buildings : 17,434m²
Major Products:Exhaust products

Ordinance and Agreement	Kanagawa Prefectural Ordinance, Yokosuka Municipal Ordinance, Sewage Law		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.3	7.8
SS	300mg/l and less	1.0 and less	2.8
BOD	300mg/l and less	1.0 and less	1.7
N-Hex	5mg/l and less	0.5 and less	
F	—	—	—
Zn	1.0mg/l and less	0.1 and less	0.6
P	6.25mg/l and less	0.1 and less	0.1
N	50mg/l and less	2.1	4.5
Cu	1.0mg/l and less	0.1 and less	0.5
Ni	1.0mg/l and less	0.1 and less	
Fe	3mg/l and less	0.1	0.7
COD	—	—	—
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			8.6(km³)
Drain field			Sewage
BOD average			1.1(mg/l)
Amount of pollution load (BOD)			0.01(t)
SO_X			—
NO_X			0.162(t)
Soot Dust			0.032(t)
CO_2			1,546(t)

Calsonic Kansei Corporation

Yoshimi Plant

Address : 628 Ooaza-Kumeda, Yoshimimachi, Hiki-gun Saitama
Area : 141,784m²
Buildings : 49,700m²
Major Products:Instrument panels, center consoles

Ordinance and Agreement	Saitama Prefecture Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.0	7.5
SS	90mg/l and less	2.0	11.6
BOD	25mg/l and less	1.0 and less	3.5
N-Hex	5mg/l and less	0.5 and less	
F	—	—	—
Zn	—	—	—
P	8mg/l and less	2.9	6.3
N	60mg/l and less	7.9	23.2
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	60mg/l and less	6.6	13.6
E. coli bacteria	3000 and less	0	130
Dichloromethane	—	—	—
Total volume of water discharge			30.3(km³)
Drain field	Discharged into a river (subsidiary stream of the Ichino River)		
BOD average			2.2(mg/l)
Amount of pollution load (BOD)			0.07(t)
SO_X	No Sulfur content due to the use of city gas and LPG		
NO_X			1.18(t)
Soot Dust			0.011(t)
CO_2			5,040(t)

Kodama Plant

Address : 540-7 kyoei, Kodama-cho, Honjo City, Saitama
Area : 51,168m²
Buildings : 15,838m²
Major Products:Electronic control units

Ordinance and Agreement	Saitama Prefecture Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.0	7.9
SS	60mg/l and less	5.0	19.0
BOD	25mg/l and less	2.0	9.0
N-Hex	30mg/l and less	3.0 and less	
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	160mg/l and less	3.0	11.0
E. coli bacteria	3000 and less	30 and less	
Dichloromethane	—	—	—
Total volume of water discharge			10.4(km³)
Drain field	Discharged into a river (subsidiary stream of the Tone River)		
BOD average			4.4(mg/l)
Amount of pollution load (BOD)			0.05(t)
SO_X			0.062(t)
NO_X			0.671(t)
Soot Dust			0.006(t)
CO_2			3,135(t)

Calsonic Kansei Corporation

Testing Research Center

Address : 8 Sakae-cho, Sano City, Tochigi
A r e a : 73,829m²
Buildings : 47,141m²

Ordinance and Agreement	Tochigi Prefectural Ordinance, Sano Municipal Ordinance, Sewage Law		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.0~9.0	6.8	8.4
SS	600mg/l and less	1.0 and less	169.0
BOD	600mg/l and less	1.0 and less	148.0
N-Hex	5mg/l and less	1.0 and less	
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			56.1(km³)
Drain field			Sewage, Misugi River
BOD average			27.2(mg/l)
Amount of pollution load (BOD)			1.53(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			6,921(t)

R&D Center and Headquarters

Address : 2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama
A r e a : 33,047m²
Buildings : 10,704m²

Ordinance and Agreement	Saitama Prefectural Ordinance, Saitama Municipal Ordinance, Sewage Law		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.0~9.0	7.0	7.5
SS	600mg/l and less	159.0	278.0
BOD	600mg/l and less	54.6	256.0
N-Hex	30mg/l and less	—	—
F	—	—	—
Zn	—	—	—
P	32mg/l and less	3.0	5.3
N	240mg/l and less	9.7	19.9
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			27.2(km³)
Drain field			Sewage
BOD average			143.5(mg/l)
Amount of pollution load (BOD)			3.9(t)
SO_X			0.000(t)
NO_X			0.141(t)
Soot Dust			0.000(t)
CO_2			2,154(t)

Domestic Affiliated Companies

CKK (Headquarters and Usa Plant)

Address : 111 Ooaza-Waki, Usa City, Ooita
A r e a : 99,146m²
Buildings : 19,427m²
Major Products:Instrument panels

Ordinance and Agreement	Ooita Prefectural Ordinance, Usa Municipal Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	6.0~8.6	7.3	8.0
SS	60mg/l and less	2.0	18.0
BOD	60mg/l and less	1.0 and less	1.0
N-Hex	2mg/l and less	1.0 and less	
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	60mg/l and less	3.0	7.0
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			7.2(km³)
Drain field			Discharged into a river (Yorimo River)
BOD average			1(mg/l)
Amount of pollution load (BOD)			0.007(t)
SO_X			0.246(t)
NO_X			0.642(t)
Soot Dust			0.025(t)
CO_2			6,566(t)

CKK (Nakatsu Plant)

Address : 150-3 Ooaza-Inumaru, Nakatsu City, Ooita
A r e a : 48,646m²
Buildings : 17,803m²
Major Products:Air-conditioning units, radiators, exhaust products

Ordinance and Agreement	Ooita Prefectural Ordinance, Nakatsu Municipal Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	6.0~8.5	6.3	7.5
SS	30mg/l and less	1.0 and less	14.0
BOD	30mg/l and less	0.7	11.0
N-Hex	5mg/l and less	0.5 and less	0.67
F	—	—	—
Zn	—	—	—
P	8mg/l and less	0.42	5.5
N	60mg/l and less	2.8	28.0
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	3000 and less	0	5.0
Dichloromethane	—	—	—
Total volume of water discharge			(Living water-purification tanks) 8.6(km³)
Drain field			Discharged into a river (Inumaru River)
BOD average			4.4(mg/l)
Amount of pollution load (BOD)			0.04(t)
SO_X			0.116(t)
NO_X			0.245(t)
Soot Dust			0.018(t)
CO_2			8,799(t)

Domestic Affiliated Companies

CKF
(Headquarters and Nihonmatsu Plant)

Address : 5-1 Sumiyoshi, Nihonmatsu City, Fukushima
Area : 68,400m²
Buildings : 13,800m²
Major Products:Meters, tank units, a variety of sensors, switches

Ordinance and Agreement	Fukushima Prefectural Ordinance, Nihonmatsu Municipal Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.4
SS	70mg/l and less	1.6	6.0
BOD	25mg/l and less	1.0 and less	6.6
N-Hex	5mg/l and less	0.5 and less	0.6
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	3000 and less	0	
Dichloromethane	—	—	—
Total volume of water discharge			14.6(km³)
Drain field	Discharged into a river (subsidiary stream of the Abukuma River)		
BOD average			2.4(mg/l)
Amount of pollution load (BOD)			0.04(t)
SO_X	No Sulfur content due to the use of LPG		
NO_X			0.321(t)
Soot Dust			0.035(t)
CO_2			3,475(t)

CKF (Tanagura Plant)

Address : 12-1 Gyouninzuka, Ooaza-Uwadai,Tanagura-machi, Higashi-Shirakawa-gun, Fukushima
Area : 21,682m²
Buildings : 4,781m²
Major Products:Tank units, rotation sensors

Ordinance and Agreement	Fukushima Prefectural Ordinance, Tanagura Town Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.0	7.3
SS	200mg/l and less	1.0 and less	1.6
BOD	160mg/l and less	1.0 and less	3.8
N-Hex	5mg/l and less	0.5 and less	0.6
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	3000 and less	0	
Dichloromethane	—	—	—
Total volume of water discharge			2.3(km³)
Drain field	Discharged into a river (subsidiary stream of the Abukuma River)		
BOD average			1.6(mg/l)
Amount of pollution load (BOD)			0.004(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			531(t)

Domestic Affiliated Companies

CKF (Fukushima Plant)

Address : 11-1 Aza-Yamamichi, Arai, Fukushima City, Fukushima
Area : 8,512m²
Buildings : 4,970m²
Major Products:Resin molded parts, sirocco fans, gasoline caps, oil caps

Ordinance and Agreement	Fukushima Prefectural Ordinance, Fukushima Municipal Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.4	7.8
SS	200mg/l and less	2.2	12.0
BOD	160mg/l and less	10.0	11.0
N-Hex	5mg/l and less	0.5 and less	
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	3000 and less	0	3
Dichloromethane	—	—	—
Total volume of water discharge			0.9(km³)
Drain field	Discharged into a river (subsidiary stream of the Abukuma River)		
BOD average			10.5(mg/l)
Amount of pollution load (BOD)			0.01(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			1,083(t)

Tokyo Radiator MFG Co., Ltd.

Address: 2002-1 Endo, Fujisawa City, Kanagawa
Area: 88,254m²
Buildings: 41,004m²
Major Products:Radiators, EGR coolers, oil coolers, intercoolers, fuel coolers, oil pans, vacuum tanks, fuel tanks, SCR tanks, etc.

Ordinance and Agreement	Kanagawa Prefectural Ordinance, Fujisawa Municipal Greening Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.6
SS	90mg/l and less	1.0 and less	2.4
BOD	60mg/l and less	1.0 and less	9.0
N-Hex	5mg/l and less	0.5 and less	2.7
F	8mg/l and less	0.5	4.5
Zn	2mg/l and less	0.1 and less	
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	60mg/l and less	4.4	17.8
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			209(km³)
Drain field	Discharged into a river (subsidiary stream of the Isshiki River)		
BOD average			3.6(mg/l)
Amount of pollution load (BOD)			0.75(t)
SO_X	No Sulfur content due to the use of city gas		
NO_X			0.38(t)
Soot Dust			0(t)
CO_2			10,755(t)

Domestic Affiliated Companies

CKP (Sano Plant Area 1)

Address : 765 Aza-Ishihara, Takahagi-cho, Sano City, Tochigi
Area : 12,012m²
Buildings : 5,670m²
Major Products:Resin molded parts, intake, motor fans, liquid tanks, relief valves

Ordinance and Agreement	Tochigi Prefectural Ordinance, Sano Municipal Ordinance	
Items Regarding Waste Water Regulations	Regulation value	Results
pH	5.0~9.0	7.0
SS	600mg/l and less	1.0 and less
BOD	600mg/l and less	1.7
N-Hex	5mg/l and less	1.0 and less
F	—	—
Zn	—	—
P	—	—
N	—	—
Cu	—	—
Ni	—	—
Fe	—	—
COD	—	—
E. coli bacteria	—	—
Dichloromethane	—	—
Total volume of water discharge		5.6(km³)
Drain field		Discharged into a river (subsidiary stream of the Misugi River)
BOD average		1.7(mg/l)
Amount of pollution load (BOD)		0.01(t)
SO_X		—
NO_X		—
Soot Dust		—
CO_2		2,352(t)

CKP (Headquarters, Sano Plant Area 2)

Address : 14-4 Sakae-cho, Sano City, Tochigi
Area : 9,010m²
Buildings : 5,741m²
Major Products:Pressed parts, radiator caps, cup holders, switches, interior assemblies

Ordinance and Agreement	Tochigi Prefectural Ordinance, Sano Municipal Ordinance, Sewage Law	
Items Regarding Waste Water Regulations	Regulation value	Results
pH	5.0~9.0	7.4
SS	600mg/l and less	1.0 and less
BOD	600mg/l and less	1.0 and less
N-Hex	5mg/l and less	1.0 and less
F	—	—
Zn	—	—
P	—	—
N	—	—
Cu	—	—
Ni	—	—
Fe	—	—
COD	—	—
E. coli bacteria	—	—
Dichloromethane	—	—
Total volume of water discharge		3.3(km³)
Drain field		Sewage
BOD average		1.0(mg/l)
Amount of pollution load (BOD)		0.003(t)
SO_X		—
NO_X		—
Soot Dust		—
CO_2		588(t)

Domestic Affiliated Companies

CKP (Itakura Plant)

Address : 7 Aza-Futoi, Ooaza-Ookura, Itakura-cho, Oura-gun, Gunma
Area : 16,500m²
Buildings : 4,161m²
Major Products:Integrated switches for heating air-conditioners, controls, electronic circuits

Ordinance and Agreement	Gunma Prefectural Ordinance, Itakura Town Agreement	
Items Regarding Waste Water Regulations	Regulation value	Results
pH	5.8~8.6	6.4
SS	15mg/l and less	4.0
BOD	15mg/l and less	10.0
N-Hex	3mg/l and less	1.0 and less
F	—	—
Zn	—	—
P	—	—
N	—	—
Cu	—	—
Ni	—	—
Fe	—	—
COD	—	—
E. coli bacteria	1000 and less	30 and less
Dichloromethane	—	—
Total volume of water discharge		5.9(km³)
Drain field		Discharged into a river (subsidiary stream of the Watarase River)
BOD average		10(mg/l)
Amount of pollution load (BOD)		0.06(t)
SO_X		—
NO_X		—
Soot Dust		—
CO_2		1,428(t)

CKP (Tochigi Plant)

Address : 144-1 Shimokoyama, Shimono City, Tochigi
Area : 18,886m²
Buildings : 10,497m²
Major Products:Car interior resin parts, instrument panels, consoles, etc

Ordinance and Agreement	Tochigi Prefectural Ordinance, Shimono Municipal Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.9	
SS	50mg/l and less	1.6	3.6
BOD	30mg/l and less	1.8	2.7
N-Hex	5mg/l and less	0.5 and less	
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	30mg/l and less	2.9	3.4
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			6.4(km³)
Drain field			Discharged into a river (Sugata River)
BOD average			2.3(mg/l)
Amount of pollution load (BOD)			0.01(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			2,019(t)

Domestic Affiliated Companies

Calsonic Kansei Utsunomiya (CKU)

Address : 11-6 Kiyohara Industrial Park, Utsunomiya City, Tochigi

Area : 66,100m²

Buildings : 20,864m²

Major Products:Compressors for car air-conditioners, parts

Ordinance and Agreement	Tochigi Prefectural Ordinance, Utsunomiya Municipal Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.8	7.8
SS	40mg/l and less	1.0	6.4
BOD	20mg/l and less	1.0	13.8
N-Hex	5mg/l and less	0.5	0.6
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	20mg/l and less	4.8	15.7
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			2.8(km³)
Drain field	Via the Kiyohara Industrial Park Disposal Plant to the Kinu River		
BOD average			6.5(mg/l)
Amount of pollution load (BOD)			0.02(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			2,296(t)

Calsonic Kansei Iwate (CKI)

Address : 1-27-5 Tatekawame, Waga-cho, Kitakami City, Iwate

Area : 23,410m²

Buildings : 9,742m²

Major Products:Compressors for car air-conditioners

Ordinance and Agreement	Iwate Prefectural Ordinance, Kitakami Municipal Agreement		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.2	7.6
SS	200mg/l and less	2.0	11.0
BOD	160mg/l and less	1.5	28.0
N-Hex	5mg/l and less	0.5	
F	8mg/l and less	0.02	0.12
Zn	2mg/l and less	0.037	0.077
P	16mg/l and less	3.8	6.1
N	120mg/l and less	45.0	56.0
Cu	3mg/l and less	0.008	0.013
Ni	—	—	—
Fe	10mg/l and less	0.06	0.08
COD	160mg/l and less	6.7	32.0
E. coli bacteria	3000 and less	30	1100
Dichloromethane	—	—	—
Total volume of water discharge			9.8(km³)
Drain field	Discharged into a river (Waga River)		
BOD average			11.8(mg/l)
Amount of pollution load (BOD)			0.12(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			4,115(t)

Domestic Affiliated Companies

Calsonic Kansei Yamagata (CKY)

Address : 190 Chuo Industrial Park, Sagae City, Yamagata

Area : 10,616m²

Buildings : 5,077m²

Major Products:Aluminum die casting, parts processing

Ordinance and Agreement	Yamagata Prefectural Ordinance		
Items Regarding Waste Water Regulations	Regulation value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.6	7.1
SS	200mg/l and less	2.8	28.8
BOD	160mg/l and less	2.0	11.1
N-Hex	5mg/l and less	0.5 and less	1.3
F	—	—	—
Zn	—	—	—
P	—	—	—
N	—	—	—
Cu	—	—	—
Ni	—	—	—
Fe	—	—	—
COD	—	—	—
E. coli bacteria	—	—	—
Dichloromethane	—	—	—
Total volume of water discharge			18.8(km³)
Drain field			Sagae river
BOD average			5.7(mg/l)
Amount of pollution load (BOD)			0.11(t)
SO_X			—
NO_X			—
Soot Dust			—
CO_2			4,438(t)

Conclusions

Thank you for reading the "2013 Calsonic Kansei Environmental Report".

We have summarized the Calsonic Kansei Group's efforts for environmental conservation activities in FY 2012 in the "2013 Calsonic Kansei Environmental Report".

We have stressed the importance of "summarizing the environmental conservation activities of Calsonic Kansei as clearly as possible in this report to all readers" and "describing our updated activities and showing that they comply with all relevant guidelines."

We have also stopped issuing this report in written form on paper in order to help conserve the environment. We would like to stay in close communication with you through the Calsonic Kansei Environmental Report, now and in the future.

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Contact
Inquiries regarding this report
Environment & Energy Control Group
Calsonic Kansei Corporation
TEL: +81-48-660-2363 FAX: +81-48-661-1012

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http://www.calsonickansei.co.jp/

Calsonic Kansei Corporation

Research and Development Center/Headquarters

2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama
331-8501, Japan