Calsonic Kansei

Environmental Report 2011

Calsonic Kansei Corporation

CONTENTS

1 Company & Business Overview

Company Name
Calsonic Kansei Corporation

Headquarters
2-1917 Nisshin-cho, Kita-ku,
Saitama City, Saitama

Established
August, 1938

Capital
¥41.4 billion

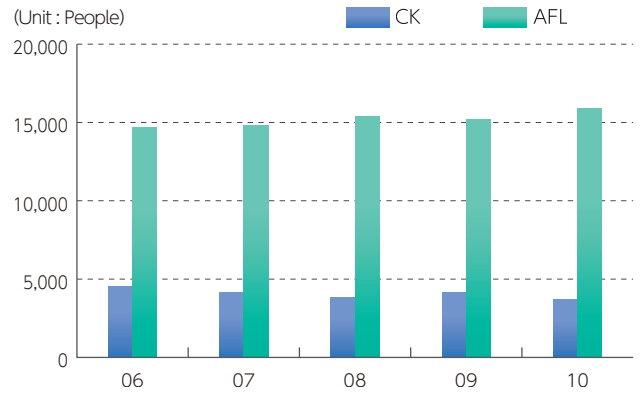
Consolidated Subsidiaries
30

Affiliates Accounted for Under Equity Method
16

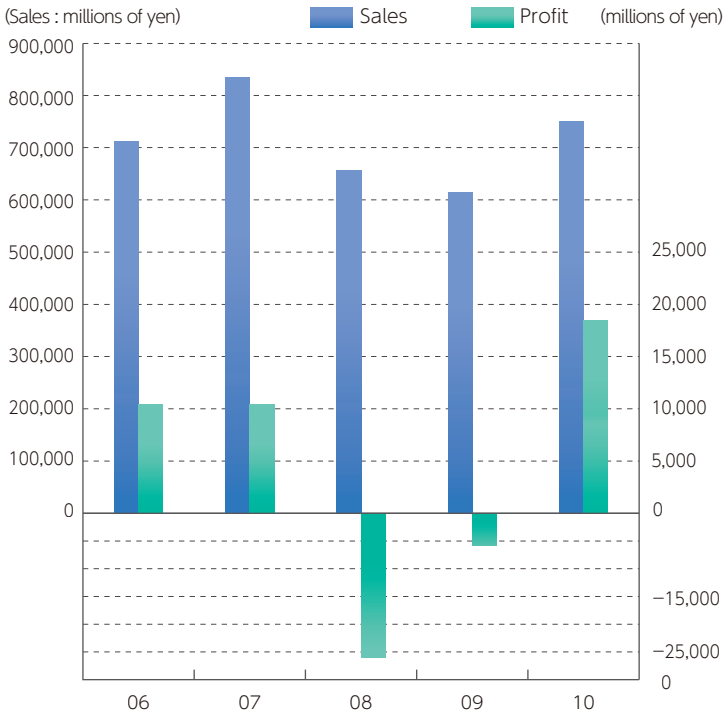
Stock Exchange Listings
Tokyo Stock Exchange (1st Section)

Field of Business
The Manufacturing and sales of parts for automobiles and industrial vehicles

Number of employees



Financial Status



Scope of This Report

- Organization
  Calsonic Kansei Corporation, domestic and overseas affiliate companies.
- Period
  Annual result data is for FY 2010 (period between April 2010 to March 2011), but the content of activities mentioned herein also includes FY 2011.
- Data
  The data is based on our affiliated companies, as well as all manufacturing plants that have established an environmental management system.

Guidelines Referred To

"Environmental Report Guidelines" (Ministry of the Environment)
"Environmental Accounting Guidelines" (Ministry of the Environment)

Abbreviations Used in This Report

The following major affiliated companies are abbreviated as follows in this report:

- Calsonic Kansei Corporation ⇒ CK
- CKK Corporation ⇒ CKK
- CKF Corporation ⇒ CKF
- Tokyo Radiator Mfg. Co., Ltd. ⇒ TRS
- CKP Corporation ⇒ CKP
- Calsonic Kansei Utsunomiya Corporation ⇒ CKU
- Calsonic Kansei Iwate Corporation ⇒ CKI
- Calsonic Kansei Yamagata Corporation ⇒ CKY

1 Company & Business Overview

Calsonic Kansei Group Subject to Environmental Management

Major Products

Module Products

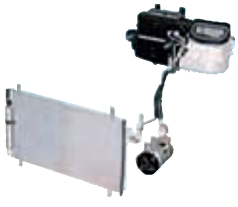
Developing a product by designing systems or components as a set of systems or components of a module can reduce the number of parts and the weight as well as contributing to fuel economy. Increasing cabin space created by modularizing the cockpit is a representative example of the benefits of this approach. As a supplier that can provide modules on a global scale, Calsonic Kansei is striving to be recognized by auto manufacturers as their best partner by developing and manufacturing modules in cooperation with them.

Cockpit Module (CPM)

Front End Module (FEM)

System Products

With the creation of earth- and people-friendly comfortable spaces as our motto, Calsonic Kansei develops and manufactures full systems, including heaters, air conditioners and intake blowers required for air-conditioning systems as well as intake and exhaust systems that meet contradictory requirements, such as muffling performance, exhaust gas cleaning performance and engine power performance, in a high-dimensional and well-balanced manner.



Air Conditioning System

Exhaust System

Calsonic Kansei Group Subject to Environment Management : 22 companies
(As of July 2011)

Calsonic Kansei (Wuxi) Corp.
Calsonic Kansei Components (Wuxi) Corp.
Calsonic Kansei (Guangzhou) Components Corp.

Calsonic Kansei Korea Corp.
Daihan Calsonic Corp.

Calsonic Kansei North America, Inc.
•Shelbyville Plant
•Lewisburg Plant

Calsonic Kansei Mexicana, S.A.de C.V.
•Aguascalientes Plant
•San Francisco Plant

Japan

Calsonic Kansei Corporation
- Gunma Plant
- Yoshimi Plant
- Kodama Plant
- Atsugi Plant
- Oppama Plant
- Experiment Study Center
- R&D Center · Headquarters

CKK Corporation
- Headquarters · Usa Plant
- Nakatsu Plant

CKF Corporation
- Headquarters · Nihonmatsu Plant
- Tanagura Plant
- Fukushima Plant

CKP Corporation
- Headquarters · Sano Plant
- Itakura Plant
- Tochigi Plant

Calsonic Kansei Utsunomiya Corporation
Calsonic Kansei Iwate Corporation
Tokyo Radiator Mfg. Co., Ltd.
KS Engineering Co., Ltd.
Calsonic Kansei Yamagata Corporation

Individual (Component) Products

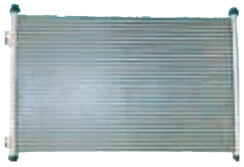
Components are regarded as the root of all Calsonic Kansei products.
We have always been up to the challenge of technical development that produces state-of-the-art components, and we have established a system that allows us to share technologies throughout the world and supply products with the same quality globally. As a result of this we are able to take market needs in advance and meet all requirements of customers.

Air Conditioner Products


Air-conditioner Units


Control (Integrated Switch)


Compressor

Condenser


Interior Electronics and Interior Products


Meters

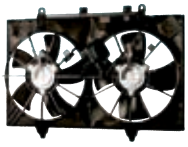

Instrument Panel


Keyless Entry

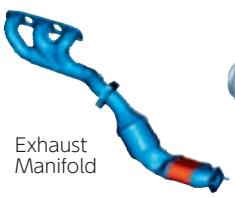

BCM (Body Control Module)

Heat Exchange Products


Radiator


Motor Fan

Exhaust Products


Exhaust Manifold


Flexible Tube

Body Structural Components


Radiator Core Support

2 Our Top Commitments

We endeavor to contribute to people around the world by creating a comfortable environment through the interactions of the Earth and human beings.

We would like to express our heartfelt sympathy to the victims of the Great East Japan Earthquake that occurred in March 2011.

CEO

吴 文精

Environmental Officer Managing Director

安達凡秀

Create environmental technology and products leading the world based on our new middle-term vision "CK GX4 T10."

We at Calsonic Kansei announced our new middle-term business plan in June 2011. This is named the "CK GX4 T10 (CK G by Four T10), and it will enable us to achieve "Implementation of T10." We will do this by executing our growth strategy, with the four Gs—Green, Growth, Global and Great Company — as the key areas, from 2010 to 2016.

Green
To create environmental technologies and products leading the world. To lead the industry in the production of next-generation environmental products via engineering synergy, with our total energy management technology as the core.

Growth
To grab demand for compact cars and low-priced cars and also expand business in newly developing countries through our marketing strategy, growth-supporting product and engineering strategy, and regional strategy.

Global
To foster personnel so that they become global business leaders and promote development of organizations and culture rich in diversity. Do this through global organizational operation and standardization of work processes and enhancement of manufacturing capability, in order to achieve true globalization.

Great Company
To promote activities for Green, Growth and Global in a comprehensive manner and establish an enterprise infrastructure appropriate for a Great Company, in order to achieve implementation of three T10s.

Implementation of T10s
① Create 10 new environment-responsive products leading the world.
② Achieve an amount of sales that reaches the Global top 10.
③ Also achieve a business profit level that reaches the Global top 10.

Calsonic Kansei has the basic philosophy of "We endeavor to contribute to people around the world by creating a comfortable environment through the interactions of the Earth and human beings." To become a global and trusted enterprise by achieving our new middle-term vision, we will promote environmental conservation activities with all employees working together from development and design to production and logistics, as a comprehensive automotive parts manufacturer.

Corporate Vision
Through "Tireless Pursuit of Quality" and "Providing New Value" we will attain the world's best products and service.

CK WAY
The Power of CK is the Heart and Performance of Each Person
In good faith, act with pride and confidence backed by professionalism
↑
The practice of each and every employee
↑
CK WAY Action Items

Management Guidelines
①Seek Harmony with the Environment and Safety.
②Promote highly transparent management with integrity and fairness.
③Utilizing personality and skill, the group aims to continually improve.
④Lead the market with attractive products.
↑
Achieving a Mid-term Business Plan
↑
Achieving Annual Action Plans
(Company, Division, Group, Team)
↑
Achieving Individual Action Plans

Management Philosophy
We endeavor to contribute to people around the world by creating a comfortable environment through the interactions of the Earth and human beings.

Efforts Toward Environmental Preservation

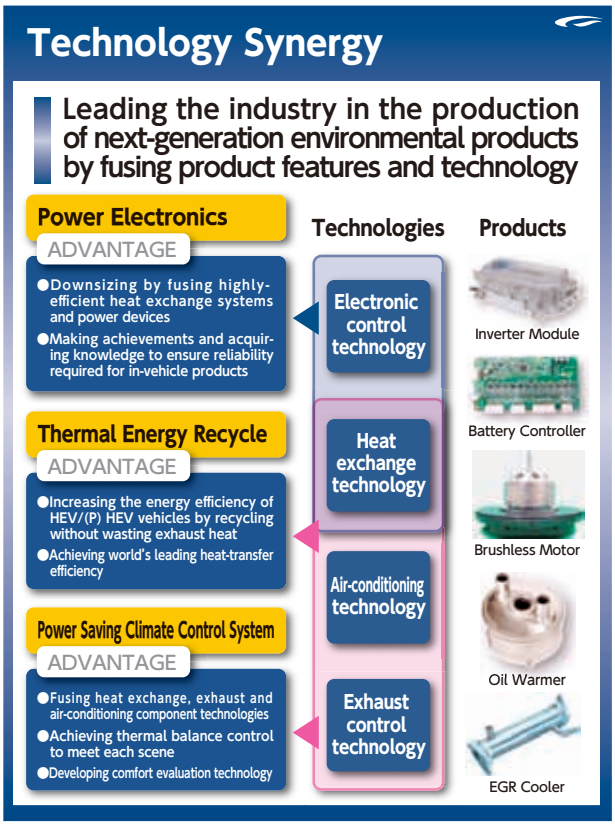
We achieved all the target values of our plan formulated for mid-term environmental action in 2006 "CKGP2010" based on our fundamental environmental philosophy. We newly set up the high-level environmental conservation target as our plan for mid-term environmental action "CKGP2016" (Calsonic Kansei Green Program 2016) for 2011 to 2016, aspiring to complete the plan with the Group's overall effort. Through these activities, we are making efforts toward environmental preservation by balancing environment friendliness and economy as well as having all our employees consistently remain environmentally conscious in their daily work.

Environmental Management

Activity organizations are formed also with the objective of reducing CO_2 and wastes produced by nonproduction business activities, thereby promoting these activities with the following four committees: Product Environmental, Production Engineering Environmental, Environmental Energy and Environmental Communication Committees. To ensure environmental management in the entire corporate group, we share our environmental policies and plans, and environmental representatives from the entire corporate group participate in close liaison meetings. We have already acquired ISO 14001 certification, but are continuing to improve environmental preservation globally by introducing more internal auditors at all of our sites.

Environmentally Friendly Product Development

We will create environmental technology and products leading the world by establishing Green in our new middle-term vision.



Prevention of Global Warming (CO_2 Emission Reduction)

In FY 2010, we greatly achieved a 37.5% reduction in gross emissions of CO2 from domestic plants set as the target of "from FY 2008 to FY 2012, achieve an average reduction of 7% compared with FY 1990" by JAPIA (Japan Auto Parts Industries Association). Also independently setting 2005 as the base point, we aim to reduce 7% of the amount of emission per unit (gross emissions/sales) by 2010. This target was greatly exceeded by a 26.0% reduction (reduced by 9.2% compared with last year). This resulted from continuation and enhancement of the Company-wide energy management activities that we began to conduct in FY 2009 and MTCR (Monotsukuri Total Cost Reduction) activities.

Zero Emissions

To effectively utilize the irreplaceable gifts from the Earth as resources for production activity in a manufacturing business, we promote environmental preservation activities that move us closer to zero waste disposal and to achieve zero emissions as a global corporate group. We also achieved the target of reducing the amount of emission per unit for industrial waste (waste that can be sold and other waste) from domestic plants by 16.5% compared with the 7.5% reduction target in 2005.

Contribution to Society/ Living Harmoniously with Local Regions

At Calsonic Kansei, we make sure we disclose environmental information to society and closely communicate with every stockholder that supports us to deepen our friendship and contribute to a society framework that can be trusted. We are not just contributing to the global society, but each of our employees confronts and pays attention to environmental problems, working closely with society globally.

To Everyone Reading This Report

With the objective of conserving resources, we stopped issuing paper from the time of this report and posted information only on our website. At Calsonic Kansei, we believe the Environmental Report is our greatest tool for communicating with you all.
We make an effort to solve issues needing improvement, fundamentally listening to the feedback of our customers for consistent continued development of society.
To everyone who reads and understands the environmental activity efforts of the Calsonic Kansei Group, please feel free to share any of your own opinions with us. By utilizing the opinions of everyone, we will strive to make further environmental improvements and deepen communication.

September 2011

3 Green Concepts

As a business group specializing in the production of automotive components, Calsonic Kansei Group comes together as single entity to advance our environmental conservation activities.

Environmental Policy (established in April 1993)

This policy is the basic principle for implementing the environmental conservation activities concerning mankind and is the basis for all Calsonic Kansei Group activities. While sharing our environmental policy throughout our group globally, this policy is the principal for our activities, earning the trust of society, our customers and stockholders through being environmentally friendly to realize a "self sustaining and developed society".

Management Philosophy

We endeavor to contribute to the people around the world by creating a comfortable environment through the interactions of the Earth and the human beings.

Management Guidelines

①Seek Harmony with the Environment and Safety.
②Promote highly transparent management with integrity and fairness.
③Utilizing personality and skill, the group aims to continually improve.
④Lead the market with attractive products.

Environmental Philosophy

To create a comfortable natural environment, Calsonic Kansei makes every employee always go back to the root of nature and at the same time, we strive for global environmental protection through intellectual revolution by new technology integration, contributing to the growth of spiritually affluent society.

Basic Environmental Policy

To contribute to the development of an affluent society by striving for environmental conservation in all levels of our corporate activity.

Environmental Policies

①To establish an organization that promotes environmental conservation activities.
②Enhancement and continued improvement of our environmental management system.
③To adhere to all environmental legislations.
④To conduct environmental audits.
⑤To perform resource-saving, energy-saving, reduction of waste, and recycling.
⑥To reduce or abolish the use of restricted hazardous substances.
⑦To develop environmentally friendly products.
⑧To promote the streamlining of logistics.
⑨To ensure the same level of environmental conservation in our overseas offices.
⑩To actively disclose environmental information.

CK WAY (Action guidelines carried out by each employee)

To act responsibly as a member of society, Calsonic Kansei plans global operation regulations fundamental to its business philosophy, and applies those operation regulations to Calsonic Kansei employees around the world.

To realize world's No.1 products and services through "pursuing the quality consistently" and "creating and providing new values"

(corporate vision)

The heart and performance of each employee are what make CK powerful and competitive.

~ Act with sincerity and with confidence and pride supported by expertise. ~

Action Guideline for Change

1. Transparent
2. Challenge
3. Cross Function/Cross Region
4. Commit & Target
5. Learning

Keeping Tradition of CK's DNA

1. Independence
2. Knows the Fact
3. Continuous
4. Originality
5. Diversity

4 Environmental Management

Calsonic Kansei is promoting environmental management by aiming for a trade-off between environmental awareness activities and costs, while each employee strives to be environmentally aware in their daily operations.

1 Group Environmental Management Promotion System

For environmental management, Calsonic Kansei builds and promotes a system to continually review the status of activities such as planning environmental operations within each committee, discussing and selecting plans at the Environment Management Meeting, following up on major themes and assuring the execution of those plans.

Functions of the Organization System and Committees

Environment Management Meeting

Chairman : EVP Production Division
Vice Chairman : EVP Development Division
Office : Environmental Energy & Conservation Gr.

Product Environmental Committee

Promotion of environmentally friendly product development, including development of environmentally friendly products investigation of the environmental indicators of products.

Japan, North America, Europe and Asia

Environmental Energy Committee

Promotion of the reduction of environmental burden caused by manufacturing operations, promotion of adherence to environmental laws, prevention of global warming/effective use of resources, reduction/abolition of regulated hazardous substances, ISO 14001 progress management, the performance of corporate environmental audits, etc.

Japan, North America, Europe and Asia

Production Engineering Environmental Committee

Promoting a reduction of environmental burden in production engineering, and adhering to environmental laws, promoting energy conservation and recycling, developing ways to reduce harmful and regulated substances and sharing environmentally friendly technology.

Japan, North America, Europe and Asia

Environmental Communication Committee

Societal and corporate communication activities based on conducting the plans set out for activities that contribute to society.
⇒ Website, external public relations activities using environmentally related public relations materials.
⇒ Intranet, public relations activities and education activities for employees using company magazines, etc.

2 CKGP2016 (Calsonic Kansei Green Program)

We will conduct activities by setting the following target for our plan for mid-term environmental action from 2011 to 2016.

CKGP2016 (Calsonic Kansei Green Program)

Item	Target					
	Classification	Region	Item	FY 2010 Results	F11 Target	FY16 Target
CO_2 Emissions Reduction (Reduction of energy use)	CO_2 from production	Domestic	Reduction of emission per unit (total emissions/sales)	26.0% reduction (to FY05)	2% reduction/yr	34.7% reduction (to FY05)
		Overseas	Reduction of emission per unit (total emissions/sales)	1.5% reduction (to FY05)	2% reduction/yr	9.7% reduction (to FY05)
	CO_2 from logistics	Domestic	Ton-kilometer	14% reduction (to FY06)	1% reduction/yr	20% reduction (to FY06)
	CO_2 from offices	Domestic	Reduction of emission per unit (total emissions/floor area)	6.1% reduction (to FY09)	1% reduction/yr	6% reduction (to FY10)
	Total	Global	Reduction of emission per unit	Base point	2% reduction/yr	8.3% reduction
Resource Recycling	Industrial waste (Waste + valuable resources)	Domestic	Reduction of emission per unit (total emissions/sales)	16% reduction (to FY05)	2% reduction/yr	28% reduction (to FY05)
		Overseas	Reduction of emission per unit (total emissions/sales)	Base point	1% reduction/yr	6% reduction (to FY10)
Conservation of Water, Atmosphere, Soil & Biodiversity •Reduction of water use •Chemical substance control	Water use	Domestic	Amount used per unit (amount used/sales)	15% reduction (to FY09)	1% reduction/yr	21.4% reduction (to FY09)
	PRTR	Domestic	Amount used per unit (amount used/sales)	Base point	1% reduction/yr	6% reduction (to FY10)

3 Environmental Operations Plan (Target and Results of FY 2010)

Formulation of a detailed plan from an environmental point of view, assessment of achievements and additional efforts toward improving our approach.

Major Issues	Plans for Mid-term Activities	
Environmental Management Promotion	Enhancing Acquisition and Maintenance of ISO 14001 Certification for all domestic plants, all domestic and overseas affiliated companies	
	Global enhancement of the Calsonic Kansei group environmental management promotion system	
	Community Partnership Activities	Efforts to promote the environmental actions of production departments, enhancement of activities to earn the trust of local communities 100% Enhancement by FY 2010
	Green Partnership Activities	Enhancement of the three environmental Clean Chain activities (The activities are CO_2 reduction, effective use of resources, and the reduction of environmental burden) and environmental mishap prevention activities that take place by means of mutual effort cooperation with other companies. 100% Enhancement by FY 2010
Development of Environment-Conscious Products	Enhancement of efforts for development in response to environmental issues	Adherence to laws/customer demands, reducing and prohibiting hazardous substances used in products (European ELV Directive: Electrical applications, lead solder abolished late December 2010)) (European REACH regulations support)
		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 emitted noise)
	Evaluation of environmentally friendly products	
Green Procurement	Expansion of green procurement	
Reduction of Environmental Burden in Manufacturing Activities	Prevention of global warming	Reduction of carbon dioxide (CO_2) emissions With 1990 as a base year, average of 7% reduction of emissions for 2008 to 2012 (CK + CKK + CKF)
		Reduction of carbon dioxide (CO_2) emission per unit (CO_2 emission units = total emissions/sales) With 2005 as a base year, 7% reduction of emissions per unit by 2010 (CK + all domestic affiliated companies)
	Effective use of resources	Enhanced industrial waste recycling (recycled volume/total waste output volume) Goal: achieve 100% recycling by FY 2010
		Reduction of industrial waste units (Total waste output volume/sales) With 2005 as a base year, 7.5% reduction of total amount of emission units by 2010 (CK + all domestic affiliated companies)
	Reduction of environmental burden substances	eduction of chemical substances covered by the PRTR law 30% reduction of 2001 levels by 2010
		Reduction of environmental burden substance units (PRTR amount used/sales) With 2005 as a base year, 10% reduction of total amount of environmental environmental burden substance units by 2010
	Environmental risk management enhancement	Purification and prevention of contamination of ground water
		Thorough water quality management
Environmental Communication	Active disclosure of environmental activities	

FY 2010 Target	FY 2010 Results	Page
Improve quality of ISO 14001 activities	Implemented a Calsonic Kansei environmental performance audit for all certified domestic sites	12
Enhancement of Calsonic Kansei Group Environmental Management Promotion System	Enhanced promotion of Calsonic Kansei Environment Management Meeting Enhancement of an emergency contact network in case an environmental mishap occurs in CK group (100% lateral spread information)	8
Completion of Community Partnership (actual assessment points/standard assessment points) 100%	Completion of Community Partnership 100% Implementation of cleaning of business site perimeters Dispatch of instructors for acceptance of factory visits for social education Accepting local junior and senior high school students for internships	31～32
Completion of Green Partnership (actual assessment points/standard assessment points) 100%	Completion of Green Partnership 100% Implement education for support during emergencies for cooperating companies Implement education in countermeasures to prevent incidents during environmental mishaps	
Reduction in VOCs included in vehicle interiors Promote adoption of Pb-free solder European REACH regulations support	Continue reduction of VOC in automobile interiors Pb-free solder adopted for some models Implement activities to support European REACH regulations	20～21
Prompt disclosure of materials data to customers	Carried out in accordance with customer instructions (Responding with IMDS)	
Promote the development of easily recyclable products	Frontend modules, cockpit modules, seamless hard instrument panel, paintless instrument panel	15～19
Promotion of light-weight, fuel efficient/energy efficient products	Front end module and cockpit module Development of front end/cockpit modules, small, high performance air conditioner system, variable capacity compressor for air conditioner, steering member, PCB harness, built-in oil cooler, lightweight radiator, EV inverter, EV battery controller	
Promote product development that prompts purification of exhaust gas	New metal support structure Urea aqueous tank, DPF	
Promote the development of products that reduce noise emitted	Low-noise exhaust systems	
Promote the creation of environmentally friendly products Promotion of a database for related data	Expansion of the way we think about environmental friendly product characteristics within the company and commencement of the review on operational procedure Promoted a CO_2 calculation system for the production stage	
Enhancement of the content of green procurement guidelines	Promoted approval of agreements with business partners	23
With 1990 as a base year, average of 7% reduction of emissions for 2010 (CK + CKK + CKF)	Achieved 37.5% reduction of emissions volume compared to FY 1990 (CK+CKK+CKF)	24～29
With 2005 as a base year, 7% reduction of emissions per unit (CK + all domestic affiliated companies)	Emissions per unit reduced 26.0% compared to FY 2005 (CK + all domestic affiliated companies)	
Improve waste recycling rate (achievement of zero emissions) 100% recycling	Recycling rate 100%	
With 2005 as a base year, 7.5% reduction of total amount of industrial waste units (CK + all domestic affiliated companies)	Total amount of industrial waste units reduced 16.5% compared to FY 2005 (CK + all domestic affiliated companies)	
30% reduction in amount discharged or moved compared with FY 2001 (CK+CKK+CKF)	70% reduction in amount discharged or moved compared with FY 2001 (CK + CKK + CKF)	21～22
With 2005 as a base year, 10% reduction of total amount of environmental burden substance units (CK + CKK + CKF)	With FY 2005 as the base year, 38.6% reduction of total amount of environmental burden substance units (CK + CKK + CKF)	
Continuation and expansion of ground water preservation	Thoroughly established countermeasures for contamination that has already occurred and countermeasures for the prevention of future contamination	23
Management of quality of water discharge and plant emissions by setting our voluntary targets at 80% of regulation values	Reaching voluntary target values	22
Enhancement of environmental reports	Widespread PR achieved for operations and results with the publication of an environmental report	30～32
Enhancement of environmental activity publicity outside the company	Completed " the Environmental Report" Corner of our Website PR for environmental activities focused on stockholders with " the mid-term report"	

4 Business Activities and Environmental Burden

No symbol: CK + Domestic and overseas affiliated groups
●: CK + domestic affiliated group
○: CK + CKK + CKF

Input

Raw Materials

Total Raw Materials
164,430t
● 69,852 t

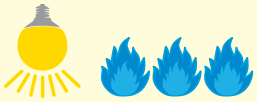
Steel Materials
38,269t
● 9,101 t

Nonferrous Metal Materials
72,424t
● 44,362 t

Resin Materials
47,304 t
● 15,557 t

Other
6,433t
● 832 t

Energy



Electric Power
401,531 Mwh
● 172,129 Mwh

Special Heavy Oil A
1,194 KL
● 1,194 KL

Diesel Oil
68 KL
● 47 KL

Kerosene
177 KL
● 173 KL

Utility Gas
10,313 Km³
● 2,053 Km³

Propane
4,255 t
● 3,005 t

Gasoline
464 KL
● 38 KL

Water

Total Water
1,187 Km³
● 717 Km³

Tap Water
534 Km³
● 240 Km³

Industrial Use Water
179 Km³
● 19 Km³

Ground water
474 Km³
● 458 Km³

Chemical Substances

Total Chemical Substances
○ 136 t

Calsonic Kansei Affiliated Group

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

Output

Reusable

Reusable Materials
● 15,384 t

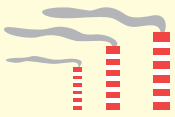
Waste
● 49 t

Green House Gases

CO_2
192,377 t CO_2
● 82,709 t CO_2

Other than CO_2
0 t
● 0 t

Exhaust Gas into the Atmosphere

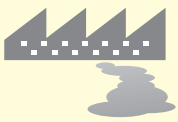


SOx
● 0.66 t
○ 0.66 t

NOx
● 3.52 t
○ 2.86 t

Soot
● 0.06 t
○ 0.06 t

Emissions to Drainage



Drainage
● 468 Km³
○ 180 Km³

BOD
● 1.47 t
○ 0.66 t

Chemical Substances

Total Chemical Substances
○ 96 t

Toluene / Xylene
○ 66 t

Other
○ 30 t

5 Sharing Environmental Policies/Plans in Corporate Group

At the Calsonic Kansei Group, environmental management representatives from all domestic Calsonic Kansei plants and from manufacturing group companies with plants, participate in the "CK Environmental Energy Committee Meeting" held twice a year, exchanging information about the situation and improvements, strengthening the efforts of the entire group.

6 Creating an ISO14001 Environmental Management System

Promoting the Acquisition of ISO 14001 Certification

○The Calsonic Kansei Group has been promoting acquisition of certification for ISO 14001, the international standard for environmental management systems, since 1998.
All Calsonic Kansei plants, Experiment Study Center for experiments, and domestic and foreign affiliated production companies, except those newly established, have been certified, further defining our environmental management globally.

○The Research & Development Center/Headquarters is creating an Environmental Management System and conducting introductory education in order to acquire ISO 14001 certification in March 2013.

Acquisition Status of Our Plants

	Plant Name	First Registration Date
Domestic	Atsugi Plant*	March 1998
	Gunma Plant	October 1998
	Kodama Plant	January 1999
	Oppama Plant	February 1999
	Yoshimi Plant	December 2001
	Experiment Study Center	January 2003
	R&D Center · Headquarters	Planned March 2013

* Closed in September 2010 (ISO certification acquisition status within our company)

Acquisition Status of Domestic Affiliated Companies

		Campany name	First Registration Date
Domestic	☆	Calsonic Kansei Iwate Corporation	June 1998
	☆	CKK Corporation	March 1999
	☆	Calsonic Kansei Utsunomiya Corporation	May 1999
	☆	CKF Corporation	December 1999
	☆	KS Engineering Co., Ltd.	December 2001
	☆	Tokyo Radiator Mfg. Co., Ltd.	March 2003
	☆	CKP Corporation	March 2004
	☆	Calsonic Kansei Yamagata Corporation	Planned October 2012
		NP Kasei	December 2002
		Nisshinkogyo Co., Ltd.	June 2004
		Iwashiro Seiki Co., Ltd.	December 2009

(☆) indicates companies subject to environmental management.

Acquisition Status of Overseas Affiliated Companies

		Campany name	First Registration Date
North America	☆	Calsonic North America, Inc., Shelbyville	September 2001
	☆	Calsonic North America, Inc., Lewisburg	September 2002
	☆	Calsonic Kansei Mexicana, S.A. de C.V., Aguascalientes	March 2005
	☆	Calsonic Kansei Mexicana, S.A. de C.V., San Francisco	March 2005
Europe	☆	Calsonic Kansei · Sunderland	September 1999
	☆	Calsonic Kansei Europe plc., Washington	October 1999
	☆	Calsonic Kansei Spain, S.A.	February 2000
	☆	Calsonic Kansei Europe plc., Llanelli	January 2002
	☆	Calsonic Kansei Romania S.R.L.	November 2008
Asia	☆	Daihan Calsonic Corporation	April 2004
	☆	Calsonic Kansei Korea Corporation (CKKR)	October 2004
	☆	Calsonic Kansei Malaysia	August 2007
	☆	Calsonic Kansei (Wuxi) Corp.	August 2007
	☆	Calsonic Kansei (Wuxi) Components Corp.	November 2008
	☆	Calsonic Kansei (Guangzhou) Components Corp.	January 2009
	☆	Calsonic Kansei (Thailand) Co., Ltd.	Planned July 2011
		Uni-Calsonic Corporation	April 2002
		Chien Tai Industry Co., Ltd.	November 2002
		Taiwan Calsonic Co., Ltd.	January 2003
		Siam Calsonic Corporation	August 2003

(☆) indicates companies subject to environmental management.

Continuous Improvement of the Environmental Management System

To improve the level of the environmental management system, while expanding the number of internal auditors within each base office, we implement periodic reviews using internal audits led by the Environmental Energy & Conservation Group and external audits by an auditing authority.

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 to publicize and quantitatively sum up the economic advantages accompanying environmental conservation measures, and the benefits of environmental conservation costs and activities, and what we publicize in the environmental report fulfills our commitment to explain business activities to our various stakeholders.

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

Those benefits are summed up quantitatively, and published to society as environmental accounting through environmental reports. Evaluation of quantitatively calculated results can also assist our practice of environmental management.

1 Goals of Environmental Accounting for the Calsonic Kansei Group

1

By disclosing quantitative measurement results actively to local citizens, stockholders, and general society, and boosting the transparency of the environmental activities of our company, we aim to have those parties named above gain an understanding of our corporate stance on the environment.

2

We use the quantification of both costs and physical materials that arise from corporate involvement in environmental activities as a means to make further decisions pertaining to the effective propulsion of future environmental activities.

3

In order to improve the conscientiousness of our employees, we have implemented a system that raises environmental awareness, focuses on it, and develops it further all through everyday workplace interaction.

2 Status of FY 2010

Environmental Conservation Costs

The environmental conservation costs are the investment and expenditures of our environmental activities measured in monetary units.

(Units: millions of yen)

Environmental Conservation Costs

Classification		Investment	Expenditure
1. Costs within business areas for reduction of the environmental burden		109	591
Pollution prevention costs	Prevention of air, water, soil, and noise pollution	52	228
Environmental conservation costs	Energy savings, resource savings, costs of phasing out materials with environmental burdens	51	119
Resource recycling costs	Reduction of industrial waste, recycling, and disposal costs	6	244
2. Up/downstream costs	Costs incurred to control the environmental burden occurring upstream/downstream of our business areas	0	128
3. Management operation costs	Human resource costs incurred for environmental policy organizations, and the construction, operation and certification of environmental management	6	149
4. Development of environmentally conscious products, research and development costs to control the environmental burden	Development of environmentally friendly products, research and development costs to control the environmental burden	366	2,763
5. Social activities costs	Support costs for environmental activities conducted by local citizens and groups conducting environmental conservation	0	2
6. Environmental damage support costs	Costs incurred to restore the natural environment, and for paying compensation for environmental damage caused	1	1,093
Total		482	4,726

Environmental Conservation Effects

Environmental conservation effects are evaluated using both economic effects that are evaluated in monetary terms and physical effects that are evaluated in amounts of substances that incur environmental burden.

Evaluation of Quantitative Effects of Environmental Conservation Policies

Classification		FY 2009	FY 2010	Effects
1. Environmental conservation effects related to resources used in business operations (quantity)	Total energy used after conversion to CO_2 (t)	88,565	91,851	△3,286
	Energy use reduction after conversion to CO_2 (t)	3,502	△3,286	△6,788
	Water used (km^3)	841	823	18
	Water use reduction (km^3)	70	18	△52
2. Environmental conservation effects related to waste discharged in business operations (quantity)	(For reference) Total amount of waste (t)	14,559	16,132	△1,573
	Amount recycled (t)	14,554	16,083	1,529
	Amount disposed (landfilled) (t)	5	49	△44
	PRTR substances (quantity discharged/moved) (t)	95	96	△1

Economic Effects of Environmental Conservation Policies

The economic effects are the allocation of the effects from the cutbacks in expenditures involved with environmental activities (substantial results from energy saving activities, etc.) and the amount of revenue involved with environmentally friendly activities (revenue from selling valuable resources, etc.).

(Units: millions of yen)

Classification		FY 2010
3. Economic effects of environmental conservation policies		11,723
	Energy costs reduced	134
	Reduction in water use	4
	Revenue from selling valuable resources	599
	Profit made from sale of environmentally friendly products	10,986

Basic Points of Statistics

1. Target Period : April 2010 to March 2011 (Fiscal year 2010)

2. Scope of Statistics: Calsonic Kansei Corporation
Gunma Plant, Oppama Plant, Yoshimi Plant, Kodama Plant, Atsugi Plant, R&D Center and Headquarters, Experiment Study Center

Domestic affiliated companies
CKK Corporation (Headquarters・Usa Plant, Nakatsu Plant)
CKF Corporation (Headquarters・Nihonmatsu Plant, Tanagura Plant, Fukushima Plant)
Tokyo Radiator Mfg. Co., Ltd.
CKP Corporation, (Headquarters・Sano Plant, Itakura Plant, Tochigi Plant)
Calsonic Kansei Utsunomiya Corporation
Calsonic Kansei Iwate Corporation
Calsonic Kansei Yamagata Corporation

3. Method for Statistics: Conforming to the guidelines issued by the Ministry of the Environment as reference, we have calculated costs other than environmental conservation, including the statistical characteristics and fundamental operation settings.

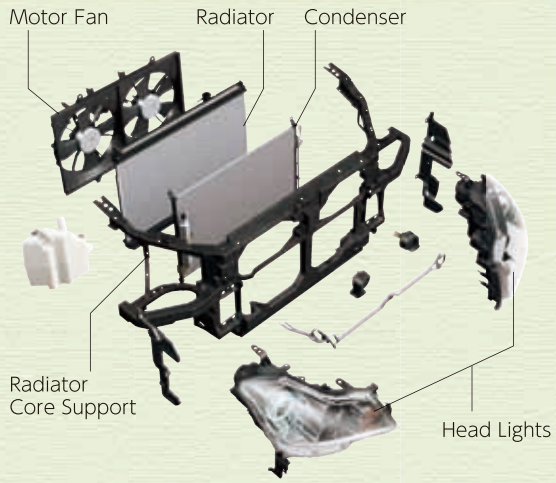
6 Environmentally Friendly Product Development

At Calsonic Kansei, we work toward developing products that reduce the environmental impact throughout the entire life cycle of our products with "environmentally friendly product development" as our concept.
When developing environmentally friendly products, we adhere to requirements in fuel efficiency/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 requirements from the first stage of development.
We are promoting the development of products for use with electric vehicles presently most considering environmental friendliness.
At Calsonic Kansei, in addition to development assessing the Quality, Cost, Delivery and patent, we promote environmentally friendly product development by assessing the environmental aspects.

1 Calsonic Kansei's Efforts and Products for Responding to Environmental Problems

Environmental Problems	Calsonic Kansei's Efforts to Respond to Environmental Problems		Calsonic Kansei products, etc.
Development Stage	Reduction of waste and hazardous materials	Reduction and elimination of hazardous materials used in products	Products that do not use hazardous substances(eveloping alternative material)
		Development of easily recyclable products — Disassembly-oriented	Cockpit modules, frontend modules, seamless hard instrument panel
		Development of easily recyclable products — Recycling	Integrated radiator and condenser, all aluminum radiator, paintless instrument panel
		Development of easily recyclable products — Longer life	Stainless steel exhaust muffler
		Development of easily recyclable products — Light-weight and compact design	Compact and high performance air-conditioning system, aluminum internal oil cooler, compact and lightweight exhaust manifolds, lightweight steering members, lightweight thin evaporator, lightweight thin condenser, lightweight radiator, PCB harness, built-in oil cooler
Usage Stage	Prevention of global warming	Fuel efficiency/energy efficiency — Improve efficiency of moving machinery	Low back pressure exhaust system, EV inverter, EV battery controller
		Fuel efficiency/energy efficiency — Reduce burden on moving components with reductions in movement	High efficiency car air conditioning system (external control compressor, dual pipe system)
		Fuel efficiency/energy efficiency — Improvements in the efficiency of power transmission / Improvement to automatic transmission	Oil warm-up system
		Fuel efficiency/energy efficiency — Easing of traffic congestion	Electronic Toll Collection system
	Ozone layer preservation	Reduction of HCFC — Development of air conditioning using a new coolant	Air conditioning system for new coolant
		Reduction of HCFC — Reduction in amount of greenhouse gases used	Reduction in amount of coolant used due to device improvements
			Reduction in amount of coolant leaked due to hose and joint improvements
	Air pollution prevention	Exhaust gas purification	Aqueous urea tank system, super thin metal substrate, EGR cooler, DPF, dual inside wall tube exhaust manifold
	Noise prevention	Reduction of exhaust noise	Low-noise exhaust system, radiated sound reduction device
	Resource depletion	Development of new energy sources — Fuel cell vehicles	Component development (heat exchangers, etc.)
		Development of resource saving products	Development of new composite metal catalysts carrier
Disposal Stage	Waste reduction	Recycling of used cars — Rebuilding/reusing	Rebuilding and reusing of air conditioning compressors
		Recycling of used cars — Material recycling	Recycling of instrument panels, and recovering of precious metals from catalysts
		Recycling of used cars — R&D for ASR reduction	
		Collection and destruction of CFC	Coolant (CFC) collectors

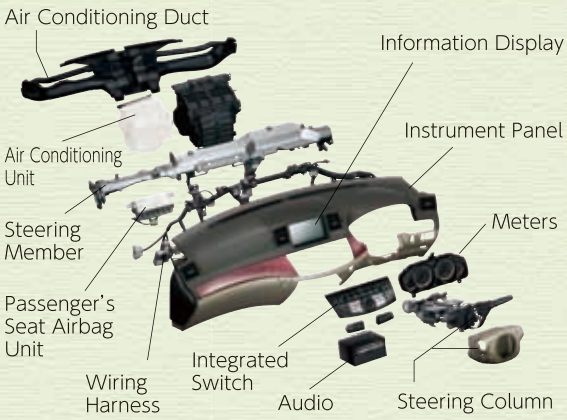
2 Total Reduction of Environmental Burden with Modularization



Front-end Module

The core support radiator acts as a support column and the front-end areas such as the radiator, condenser, and various other heat exchangers are integrated. We are improving the size, assembly and disassembly.

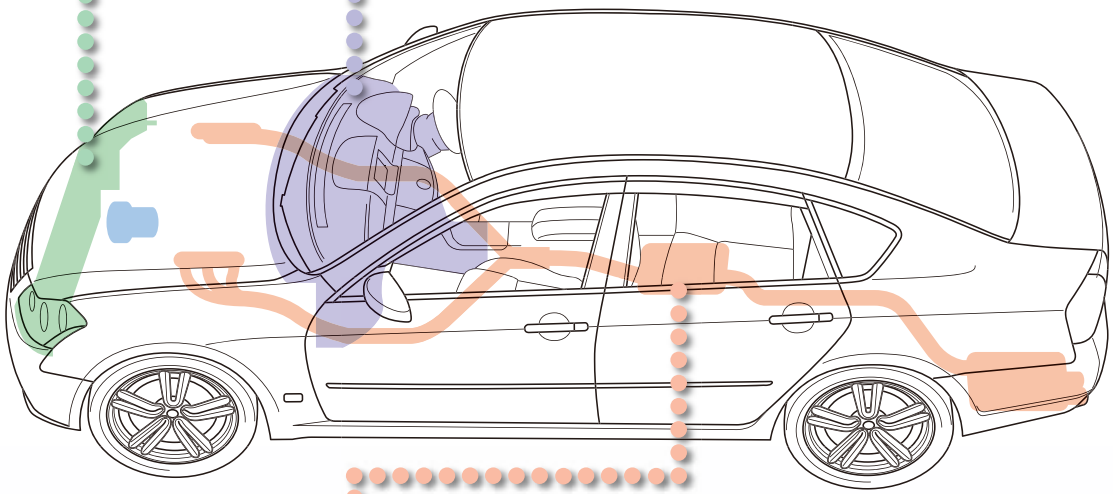
Reduction in the number of parts	35%~50%
Reduction in weight	5%~20%



Cockpit Module

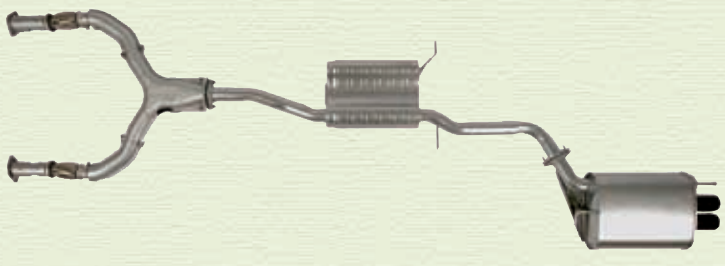
The steering member as a framework and the instrument panel, meters, air-conditioning unit, airbag, electronic control unit, etc are combined together. The keywords for our development are "light-weight" and "recyclability".

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



Engine Exhaust Module

We develop the most suitable exhaust gas purification systems from the exhaust manifold, catalytic converter, center muffler, rear muffler to the finisher.



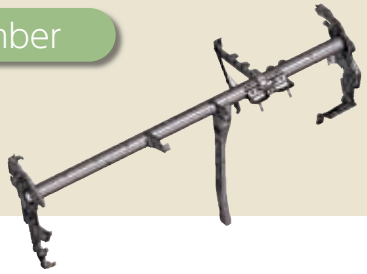
3 Prevention of Global Warming

We contribute to improving the energy efficiency of vehicles with development focusing on compact and lightweight design, and fuel/energy efficiency. This can be seen especially from many of our lightweight products.

Promoting Compact and Lightweight Vehicle Parts

①Steering Member

Reduction in weight (Compared with our conventional parts) 26%

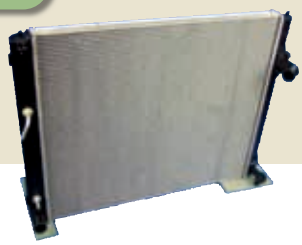


②PCB harness

Reduction in weight (Compared with our conventional parts) 20%

③Lightweight radiator

Reduction in weight (Compared with our conventional parts) 18%



④Built-in oil cooler

Reduction in weight (Compared with our conventional parts) 30%

Development of Fuel/Power/Electric Power Saving Products

Heat Pump A/C System for EV (PSD HP)

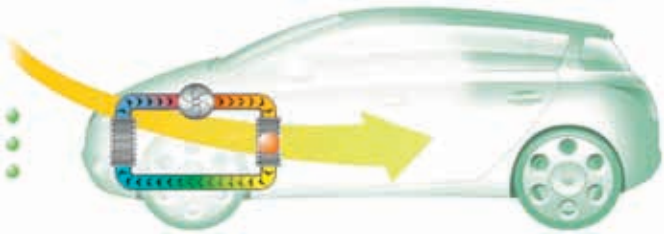
< Development Targets >

■ Reduction in A/C power consumption ■ 70% reduction in power consumption (ambient air at 0°C)

Characteristics/features

The CK heat pump can operate in two modes: power-saving and dehumidification

Power saving mode
(outside air heat absorption)



Dehumidification mode
(inside air circulation)

Calsonickansei proprietary

Inverter and Battery Controller for EV

The inverter features high-efficiency control technology and quick response performance.
The battery controller is a product to monitor and control the state of lithium-ion batteries.

Inverter for EV

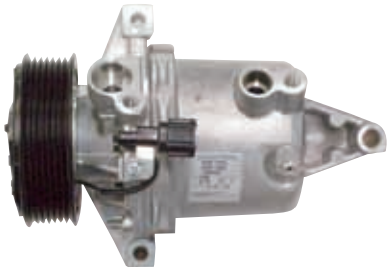
Battery Controller for EV

Compressors for Car Air-conditioners

Calsonic Kansei is offering high-performance Variable capacity swash plate type compressors with excellent energy-efficiency due to continuous variability, and vane rotary fixed displacement compressors which are compact and lightweight due to a simplified shape. They are environmentally friendly contributing to fuel and energy efficiency as well as the reduction of CO_2 emissions. We are also promoting the development of compressors for use with EV (Electric Vehicles).

Variable capacity compressor
FVC17

Fixed capacity compressor
CR08



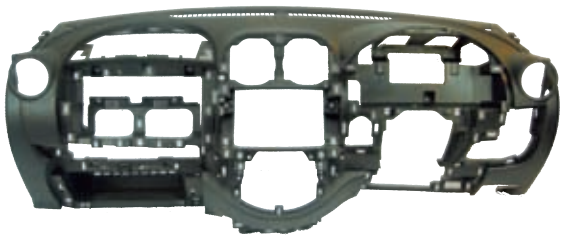
Development of Alternative Technology

Development of Alternative Refrigerant Air-conditioning Systems

Present refrigerants for car air-conditioners have caused some concern with regards to their contribution to global warming. We now are developing air-conditioning systems that use alternative refrigerants with a very low global warming potential.

4 Efficient Use of the Earth's Resources

At Calsonic Kansei, we strive to develop products that reduce the amount of new resources used by reducing the number of different types of materials in our products and developing products which are more disassembly-oriented and recyclable.



Paintless instrument panel

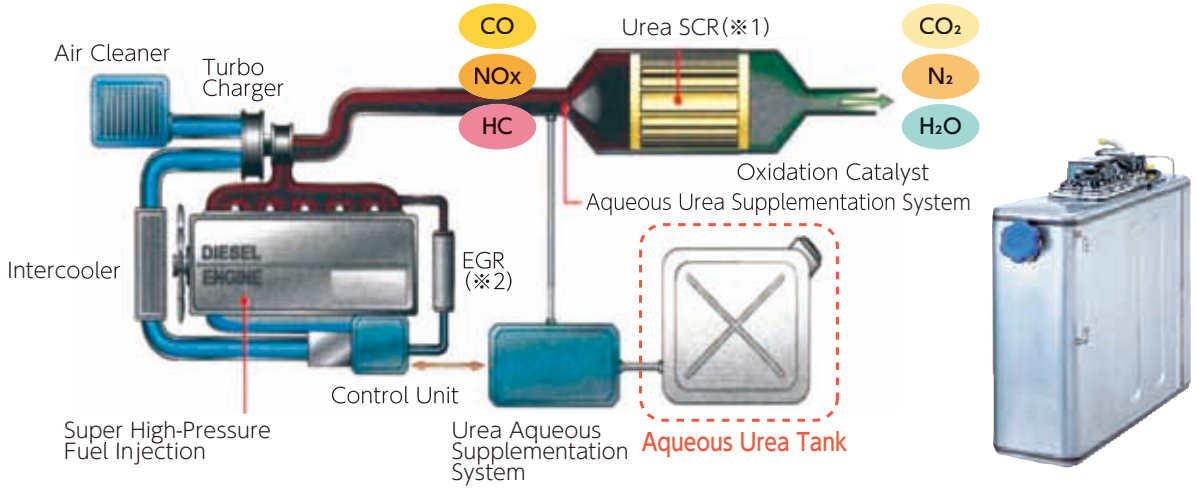
5 Prevention of Air Pollution - Purification of Vehicle Exhaust Gas

Trends for Vehicle Exhaust Gas Regulations

Exhaust gas regulations have become more stringent since the new long-term exhaust gas regulations was introduced in October 2005.

Urea Aqueous Tank – Urea SCR System

The nitrogen oxide (NOx) included in exhaust gas has properties that make it easily occur in high temperature and complete combustion conditions. By combining this NOx with urea aqueous, it can be broken down into harmless water and nitrogen. Urea SCR utilizes this mechanism to inject urea aqueous during catalyzing, and greatly reduce the amount of NOx.
The urea aqueous tank is an important component part that supports the urea SCR system.
As the tank is all stainless steel, it has excellent rustproof properties, along with the EGR cooler and 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 in the world that an urea aqueous tank has been mass-manufactured for vehicle installation. It is also highly durable and corrosion resistant.



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

6 Noise Prevention - Reducing Exhaust Noise in Exhaust Parts

By analyzing silencing elements using elemental technology, and combining the various silencing elements whose mechanism could be analyzed, this system realizes high performance silencing.

7 LCA Efforts (Product Environmental Impact Evaluation)

We believe by quantitatively evaluating and understanding the environmental impact of products, we will be able to take suitable environmental measures by deciding the appropriateness of product plans and whether development plans are required, and setting environmentally based priorities in the design and development and manufacturing processes of products.
By already calculating the internal environmental burden by unit by product at all of our manufacturing plants, we have entered this information in a database as LCA figures for in-house products.
The LCA figures are also calculated by selecting the target vehicle type product.
In 2006, we started inspecting the operations such as LCA indicator to assess product development from an environmental side and orienting the "WG Product Environmental Indicator" inspection of operations. In 2007, we built a CO_2 emissions computing system for our products during the production stage.

7 Efforts to Manage Chemical Substances

Substances that are damaging to the environment are used within products, and for the manufacturing of products, to improve the quality. Therefore, there are concerns of the great impact this could have on the environment during manufacturing, use of, and discarding of products.
The global consciousness of the environment is growing and requests to reduce/stop using these substances are growing every year from home and abroad.
With this as a backdrop, we adhere to the laws and regulations of each country, and not only work to fulfill our customer requests, but also promote the management of chemical substances (environmentally damaging substances) by setting our own goals.

1 Basic Reduction Concept

Thorough risk management of each department from products, the manufacturing process, purchased items, and processed materials, we adhere to these fundamentals: "Use as few harmful chemicals as possible", "Elimination of as many substances as possible while finding alternatives" and "Proper management of chemicals if used."

Environmentally Damaging Substances in Products

- Reduction of environmentally damaging substances used in products
- Immediate disclosure of the amount of substances of concern used in products

Substances of Concern Used in Manufacturing at Plants

- Reducing emissions of environmentally damaging substances used in the manufacturing process
- Properly managing used chemical substances

Substances of Concern of Purchased Items

Operations for Green Procurement

- Environmental Management of purchased items
  - ◎Reduction of environmentally damaging substances used in purchased items
  - ◎Reducing environmentally damaging substances from the manufacturing process of purchased items
- Confirming the environmental management of our business partners

2 Environmentally Damaging Substances in Products

Reduction of Amount of Environmentally Damaging Substances Used in Products

At Calsonic Kansei, we don't just comply with the legal restrictions of each country, but set our own goals, manage, and use follow-up systems, promote development of alternative technology, and work toward reducing the amount of environmentally damaging substances used in products.

《 Efforts by Calsonic Kansei to Comply with Regulations 》

Legislation			Calsonic Kansei Efforts					
Regulations	Substances	Regulatory Schedule	2006	2007	2008	2009	2010	2011
European ELV Directive	Four Substances (Lead, cadmium, mercury, hexavalent chrome)	Prohibited after July 2003	Compliance completed (Except for some exemptions)					
	Hexavalent chrome, corrosion coating	Prohibited after July 2007	Compliance completed					
Our Efforts	Reducing/abolishing the 13 VOC substances in vehicle interiors		Application began second term of 2006					
	Applying Pb-free solder		Currently working toward the application					
European REACH Regulations	SVHC*1			★Effective 6/1 Currently working				

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

Efforts toward Reducing VOC in Vehicle Interiors

At Calsonic Kansei, we are making efforts to reduce VOC of car interiors. We aim to reduce or abolish the 13 volatile organic compounds (VOC, such as formaldehyde, toluene, and xylene) used in materials of products installed within the vehicle interiors including adhesives and coating materials, which cause irritation to the nose and throat. We are expanding our application to related materials, reducing each coating, setting goals toward abolishing substances and started the same efforts for cockpit module products at the second term of 2006.

Materials

①Use materials without formaldehyde
②Use adhesives with less toluene and xylene

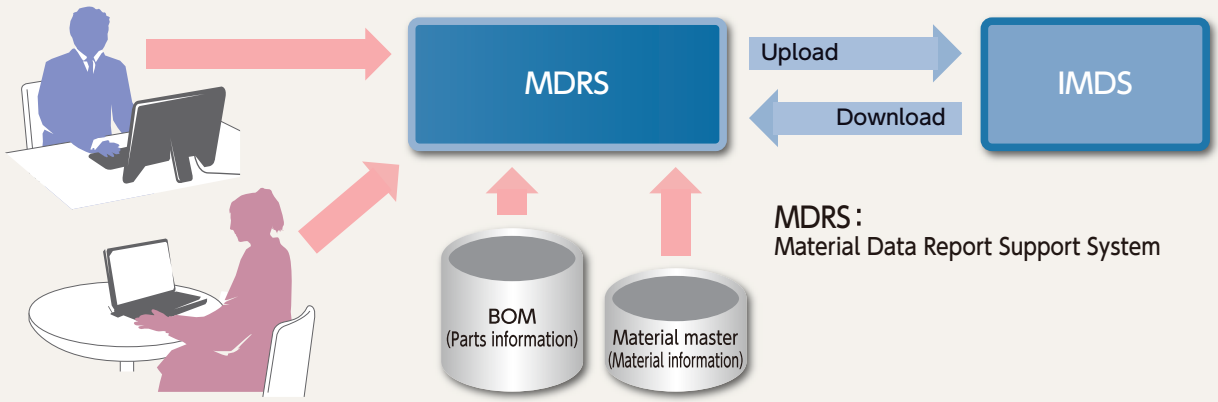
Coating

①Develop/use coatings with less toluene and xylene (TX Free Coatings)
②Develop water based coating (almost free of solvents)

Immediate disclosure of the amount of substances of concern used in products

Almost all of the automobile makers request suppliers including Calsonic Kansei to refrain from using prohibited substances, but also to report the materials and substance used in our products, through IMDS.
To meet this request, we developed and formulated an IMDS entry support system called Calsonic Kansei "MDRS," promoting prompt disclosure of information to customers.

In this system, the parts list is read and connected to the material information of the material master and then the data is uploaded to the IMDS from the server. This system allows the entry operator to create data with minimal work without seeing the IMDS Web screen.



3 Environmental Efforts at Plants

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

Domestic Implementing environmental compliance evaluation at each of our bases. In addition, to meet the VOC emission regulation, which became effective since the partial revision of the Clean Air Act, we installed thinner collection devices on the plants that are subject to control. As a result, our plants continue to be in operation without violating any regulations.

Overseas At each of our overseas bases, we are changing to the application of low-toluene and low-xylene paints.

Support for PRTR Legislation (Calsonic Kansei + CKK + CKF)

With a view to reducing environmental load substances, we achieved the target by the following: promoting the reduction of PRTR-regulated substances that are used by changing the coating materials containing those substances, confirming the discharged, moved and used amounts of those substances, and setting a goal of a 10% reduction in the amount of emission per unit by FY 2010 starting from FY 2005.

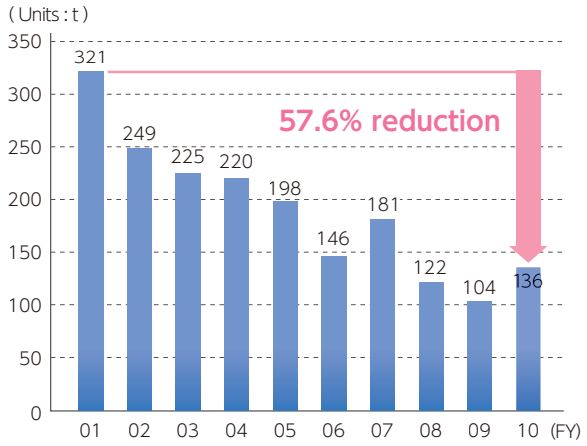
※ PRTR (Pollutant Release & Transfer Register, (Law for promoting the management of discharged chemical substances, published in 1999) Register discharged and movement of environmental pollutants.

※ The discharged, moved and used amounts of those substances increased because the number of controlled substances increased due to a law amendment.

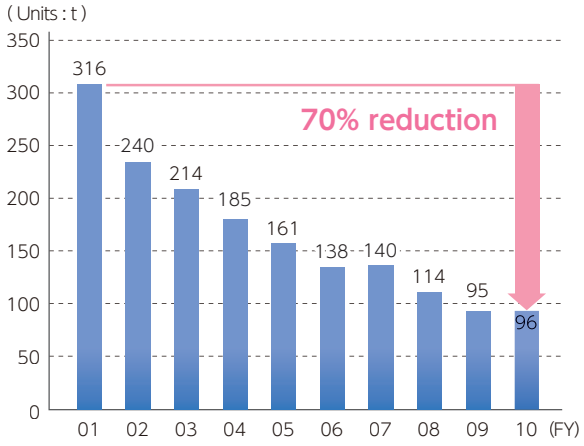
Target for FY 2010
Compared with FY 2005
Amount of emission per unit
10% reduction

FY 2010 Result
Amount of emission per unit
38.6% reduction

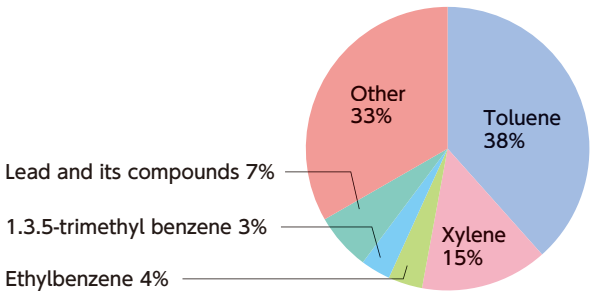
Amount Used (Calsonic Kansei + CKK + CKF)



Amount Discharged/Moved (Calsonic Kansei + CKK + CKF)



Amount of Waste Discharged and Moved in FY 2010 (Total 96.3t)



Management of PCB

Implementing appropriate management regulations for electrical devices that include PCBs as waste products for special management according to the law. The PCBs are also scheduled for prompt disposal already started at some bases.

Thorough water quality management

We have set our voluntary targets for the quality regulation values (80% of measured value), and we conduct stricter management than the law requires.

Thorough Management of the Atmosphere

Implement reductions of sulfur oxide (Sox) and CO_2 by switching Heavy Oil A fuel to Special Heavy Oil A fuel (only 10% of sulfur amount in Heavy Oil A is included in Special Heavy Oil A), converting to natural gas and LPG, and reducing the amount used itself with energy saving activities.

Environmental Contamination Accidents or Grievances

For 22 Calsonic Kansei corporations with environmental management ⇒ No accidents or grievances.

Efforts to Conserve Soil Ground Water and Prevent Contamination

We work to confront situations by making efforts toward plants already contaminated and implementing preventive measures and thorough investigations.

1 Efforts Made for Plants with Existing Contamination

We have also been taking measures for compliance with regulations at the Atsugi Plant that closed in September 2010.

2 Efforts for Advanced Prevention

○Switch subterranean fuel management above ground⇒ Completed.
○Converting Special Heavy Oil A to Natural Gas and LPG. (Including the reduction of CO_2)

3 Thorough Surveying

We have already conducted investigations on the soil in each area, including affiliated companies.
Also, in grouping as affiliated companies, we conduct an investigation.

4 Substances of Concern of Purchased Items

Promotion of Green Procurement

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

Operations for Green Procurement

The "Calsonic Kansei Green Procurement Guidelines" sets 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 to Purchased Items (Parts, Materials)

We conduct surveys of the substances included in purchased parts/materials and surveys of substances used in the manufacturing process of purchased items.

①Environmentally damaging substances used in purchased items
②Environmentally damaging substances used in the manufacturing process of purchased items
③That we can confirm that the items in question conform to the requirements indicated above

2 Investigation and Statistics for the Environmental Management System

①That accreditation for an environmental management system such as ISO14001 has been acquired.
②That the suppliers are promoting efforts to acquire accreditation for an environmental management system such as ISO14001, and have a clear plan with a concrete data for acquisition.
③The suppliers are conducting equivalent activities to either of the above.

8 Efforts Towards an Environmentally Balanced Factory

At Calsonic Kansei, we quantitatively evaluate the amount of environmental burden output resulting from industrial operations, and strive to reduce this burden by sufficiently understanding the impact of our operations.
From the point of view of global warming, reduction in the amount of carbon emissions and the emission per unit, and effective use of resources, we promote 100% reuse of those resources creating zero waste to become factories environmentally balanced with the Earth.

1 Preventing Global Warming

So far we reached our goal to reduce plant CO_2 emissions to an average of 7% during the span of five years (FY 2008 to FY 2012) compared to the level in FY 1990.
Starting in FY 2007, the entire Calsonic Kansei Group set a new goal to reduce the amount of CO_2 emissions per unit by 7% by FY 2010 in comparison to FY 2005, convert fuel, implement energy saving technologies and equipment, and aggressively move toward introducing natural energy for all domestic production plants and affiliated production companies.
For our overseas production plants, we aim to reduce the amount of CO_2 emission per unit by 1% compared to the previous year by FY 2010 with FY 2005 as a base year.
We also closed the Atsugi Plant to reorganize our production in FY 2010. This enables us to help reduce CO_2 emissions despite an increase in production volume.

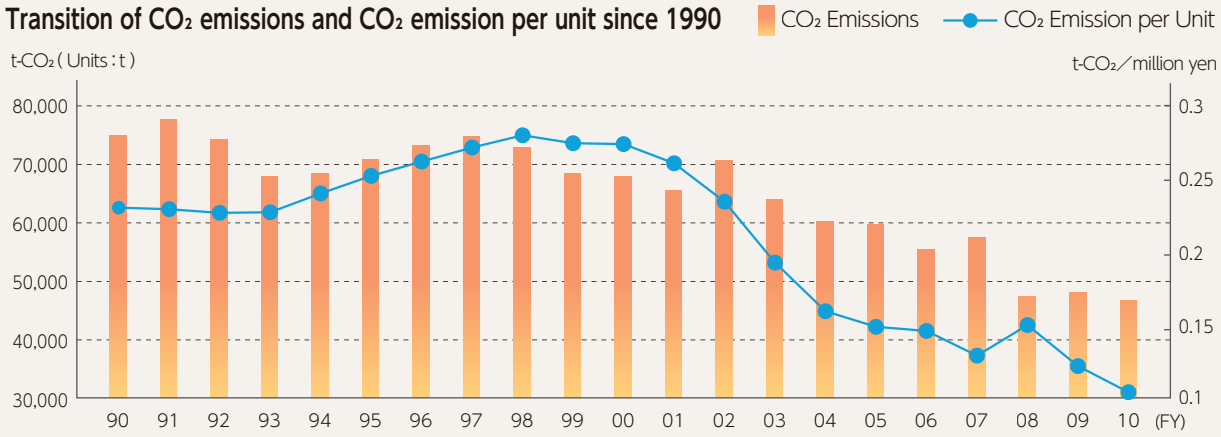
Overview of Activities to FY 2010 (Calsonic Kansei + CKK + CKF)

1 Plan to reduce CO_2

①Reduction Target for CO_2 Emissions
From the level in FY 1990, average of 7% reduction of emissions from 2008 to 2012 (CK + CKK + CKF)
②Reduction Target for the CO_2 Emission per Unit
Compared to FY 2005, 7% reduction of total amount of emission units by FY 2010

2 CO_2 Reduction Achievements

Transition of CO_2 emissions and CO_2 emission per unit since 1990



Management Item	FY 1990 (base year) Results	FY 2010 Results	Achievement Status
CO_2 Emissions (t-CO_2)	74,391	46,507	37.5% reduction
CO_2 Emission per Unit (t-CO_2/million yen)	0.229	0.104	54.7% reduction

(CO_2 conversion factor of electricity used was 0.33 due to comparison with FY 1990)

Overview of Activities to FY 2010 (Calsonic Kansei + all domestic affiliated companies)

Achievements reducing the amount of emission per unit by 7% compared to FY 2005 by FY 2010.

During FY 2010, the volume of production increased from the previous year, increasing the CO_2 emissions by 4.6%. However, promotion of the company-wide energy management activities enabled us to reduce the amount of emission per unit by 9.2% compared with the previous year, and by 26% compared with FY 2005.

Management Item	FY 2005 (base year) Results	FY 2009 Results	FY 2010 Results	Achievement Status	
				Compared with FY 2005	Compared with Previous Year
CO_2 Emissions (t-CO_2)	103,183	79,085	82,709	19.8% reduction	4.6% increase
CO_2 Emission per Unit (t-CO_2/million yen)	0.2173	0.177	0.1608	26.0% reduction	9.2% reduction

(Due to comparison with FY 2005, 0.38 was used as conversion factor for CO_2 electrical power.)

Overview of Activities to FY 2010 (all overseas affiliated companies)

Achievements reducing the amount of emission per unit by 1% compared with FY 2005 by FY 2010.

During FY 2010, the volume of production increased from the previous year; however, we decreased the amount of emission per unit by 6.3% compared with the previous year, and by 1.5% compared with FY 2005.

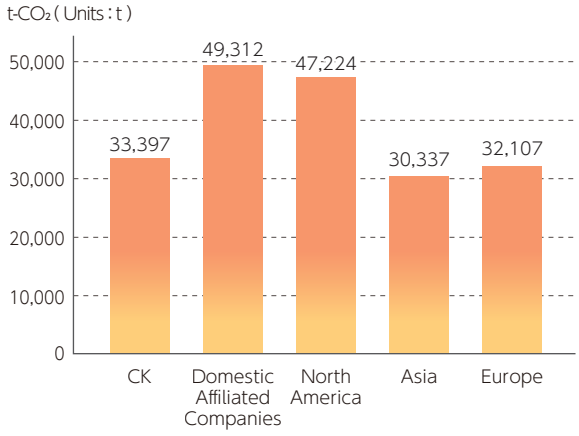
Management Item	FY 2005 (base year) Results	FY 2009 Results	FY 2010 Results	Achievement Status	
				Compared to 2005	Compared with Previous Year
CO_2 Emissions (t-CO_2)	79,507	90,176	109,668	38% increase	21.6% increase
CO_2 Emission per Unit (t-CO_2/million yen)	0.2919	0.3068	0.2876	1.5% reduction	6.3% reduction

(Due to comparison with FY 2005, 0.38 was used as conversion factor for CO_2 electrical power.)

Regional CO_2 Emission Status in 2010

The graph below indicates CO_2 emissions for our domestic and overseas affiliated companies.

Regional CO_2 Emissions in 2010



Examples of CO_2 emissions reduction activities through Company-wide energy management activities

Setting No-energy Day	90 t-CO_2
Review of furnace settings	227 t-CO_2
Reduction in air supply pressure	233 t-CO_2
Maintenance of energy-intensive equipment	358 t-CO_2

Amount of CO_2 produced

CK	Domestic Affiliated Companies	North America	Asia	Europe	Total
33,397	49,312	47,224	30,337	32,107	192,377

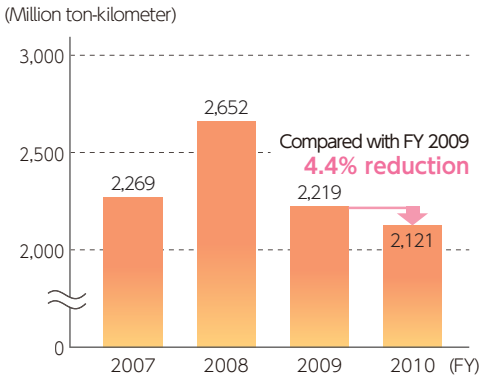
As one of our company-wide energy management activities, we conduct a saving energy diagnosis to check the usage of energy by visiting each base.

Achievements of ton-kilometer in logistics steps

FY 2009 Results 22.19 million ton-kilometer

FY 2010 Results 21.21 million ton-kilometer (Reduced 4.4% compared with previous year)

Less than 30 million ton-kilometer is not a subject of the notification. However, we created a reduction plan for logistics and reduction efforts are being made.



2 Natural Resource Conservation Activities

To conserve the limited resources the Earth provides, we are working to accomplish zero emissions as a core to the group globally, promote preservation activities while also working to limit the amount of materials used and the amount of emissions (waste and valuable resources).

Flow of Reuse Operations for Waste Discharged from Plants

Categories/Types	Method for handling/disposal	Disposal Location	Method of Recycling	Recycled Product
Oil waste (including benzine and waste LLC) Other oily water	Oil water separation	Cement manufacturers Calsonic Kansei (Fuel)	Sale as resources (Recycled heavy oil)	Fuel, cement, roadbed
High quality paper, newspaper, magazines	Sort/dissolve	Paper manufacturers	Sale as resources	Toilet paper, etc.
Cardboard		Paper manufacturers	Sale as resources	Recycled paper
Confidential documents (drawing, etc.)	Sort/dissolve			
Paper core	Sort/dissolve	Paper manufacturers	Sale as resources	Cardboard medium, etc.
Steel scrap Empty cans	Sort/dissolve	Metal refinement manufacturers	Steel making raw material	Steel, nonferrous metal (bronze, aluminum, stainless steel) materials
Oil waste (cooking oil waste)	Separate/recycle	Oleochemical manufacturer	Fuel for deochemical manufacturer company cars, feed	Bio diesel fuel, assorted feed
Fluorescent waste	Crush/separate	Material manufacturers	Recycled materials of each element	Recycled materials (mercury, glass, metal)
Glass bottles	Sort/crush	Glass manufacturers	Glass materials	Glass bottles
Waste plastic (light)	Crush, volume reduction and solidification	Resin recycling manufacturer	Boiler fuel	Solid fuel
Oil waste (oil bearing waste cloth)	Incineration	Waste heat boiler installed manufacturer	Utilization of heat (collecting steam)	Boiler fuel
Waste plastic (with metal) Waste plastic (hard) Waste plastic (plastic materials) Waste plastic (PET)	Crush/separate	General recycling manufacturers	Sort, steel making raw materials, fuel	Ferrous materials, solid fuel, fuel
Metal scarps (including aluminum chips) Florescent waste (crushed pieces) Contaminated waste Glass ceramic scraps Dry contaminants (flux) Contaminants (active aluminum) Oil waste (filter) Contaminants (dry battery waste)	Incineration fusion	Integrated steel manufacturer	Shaft furnace reducing agent	Steel, roadbed (incineration residue)
Contaminants (Grinding residue) Liquid contaminants (flux) Contaminants (liquid N-F)	Incineration	Integrated steel manufacturer	Utilization of heat (furnace heat reserves) Shaft furnace reducing agent	Roadbed (incineration residue)
Water contaminant (filter press)	Sorting	Integrated steel manufacturer	Processed granular materials	Raw cement materials
Wood scrap	Crush	Waste wood recycling manufacturer	Compressed graft cutting	Particle board
Wood clippings	Crush	Compost manufacturer	Compost materials	Compost
Grass	Ferment	Compost manufacturer	Compost materials	Compost

Emission Reduction Activities and Achievements

We achieved a 16.5% reduction in the amount of waste produced per unit compared with 7.5% in FY 2005, which was our midterm target.

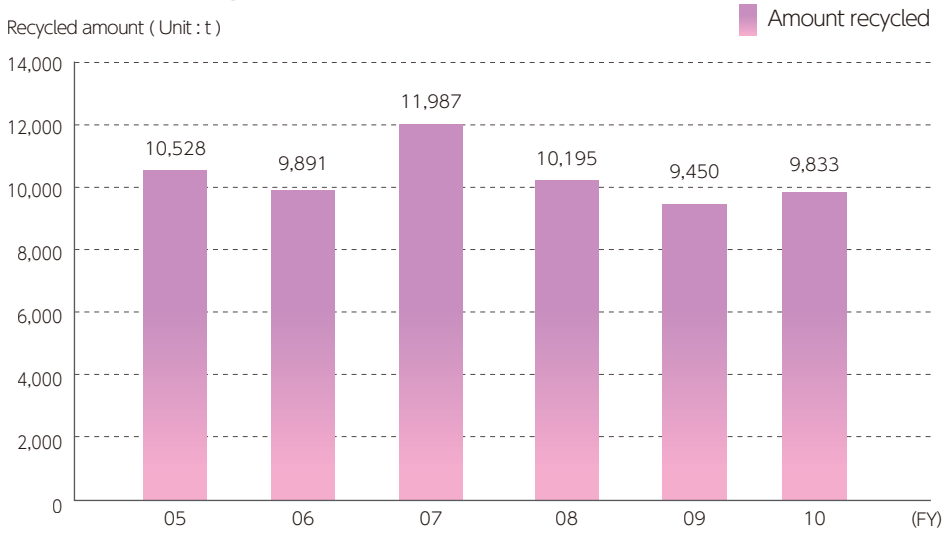
$$\text{Emission per unit} = \frac{\text{Amount of emission}}{\text{Sales}}$$

Waste Reduction Activities and Achievements to FY 2010 (Calsonic Kansei + CKK + CKF)

Item	FY 2005 results	FY 2008 results	FY 2009 results	FY 2010 results
Amount of emission * (t)	10,527	10,195	9,450	9,833
Amount disposed (residual amount land filled) (t)	23	0	0	0
Recycling rate (%)	99.8	100	100	100
Waste per Unit (kg/million yen)	26.3	32.3	24.1	22.0
FY 2005 reduction rate (%)	—	22.8 increase	8.4 reduction	16.5 reduction

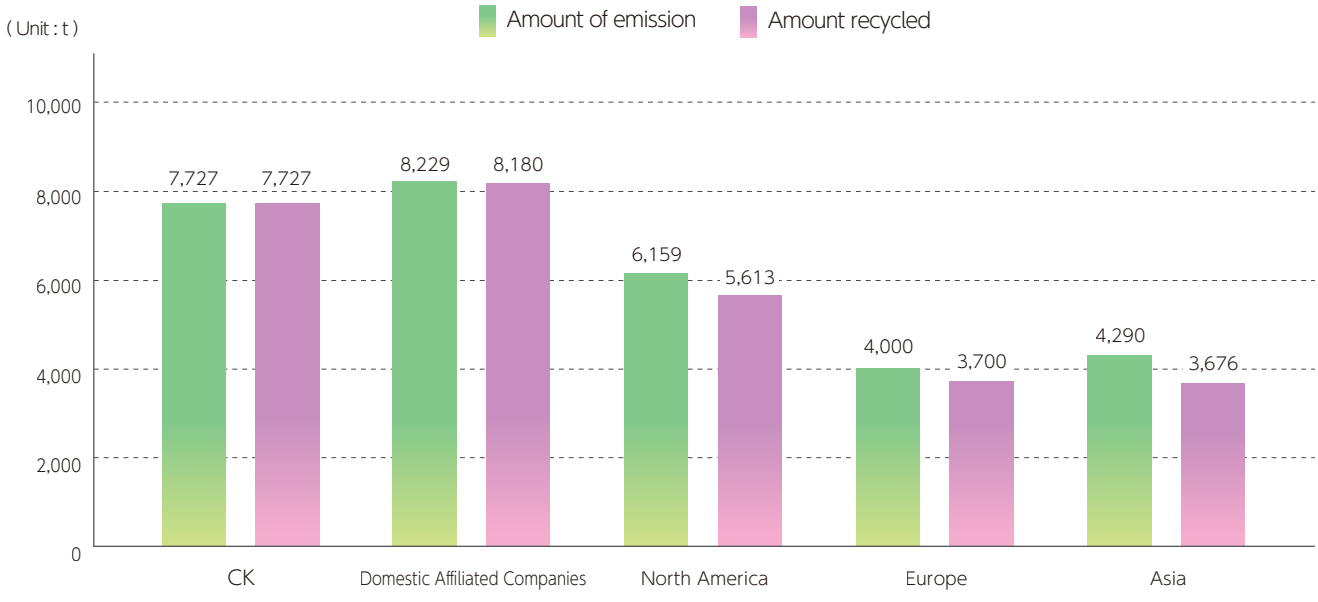
* Waste that can be sold is included in total amount of waste.

Transition of Recycled Amount



Regional Emission Status in FY2010

Amount of Emission and Amount Recycled



Activities toward "Zero Emissions"

We regard the "Zero emissions" activities designed to get the final amount of waste disposed closer to zero as our daily routine and implement them. Calsonic Kansei Yamagata Corporation newly joined our group. We will continue to manage and promote further improvement as the entire group.

Step3 Making 100% of all waste recyclable

Step2 Making more than 98% of industrial business waste and general business waste recyclable

Step1 Making more than 98% of industrial business waste recyclable

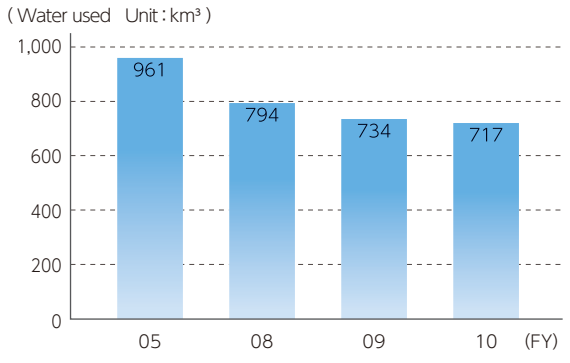
Status of Zero Emissions for Calsonic Kansei + All Domestic Affiliated Companies

	FY 2010 Plan	FY 2010 Results
Calsonic Kansei Plants (Gunma, Oppama, Yoshimi, Kodama, Atsugi)	⇒Step3 preservation activities	⇒Step3 was continued
CKK Corporation		
CKF Corporation		
Tokyo Radiator Mfg. Co., Ltd. (TRS)		
CKP Corporation		
Calsonic Kansei Utsunomiya Corporation (CKU)		
Calsonic Kansei Iwate Corporation (CKI)		
Calsonic Kansei Yamagata Corporation (CKY)	⇒ Step 1 activity starting	⇒ Step 1 activity continuation

Water Resources Used and Reduction Measures

We accomplished the target amount of emission per unit set for FY 2010 (reduced 15% compared with 1% in previous year).

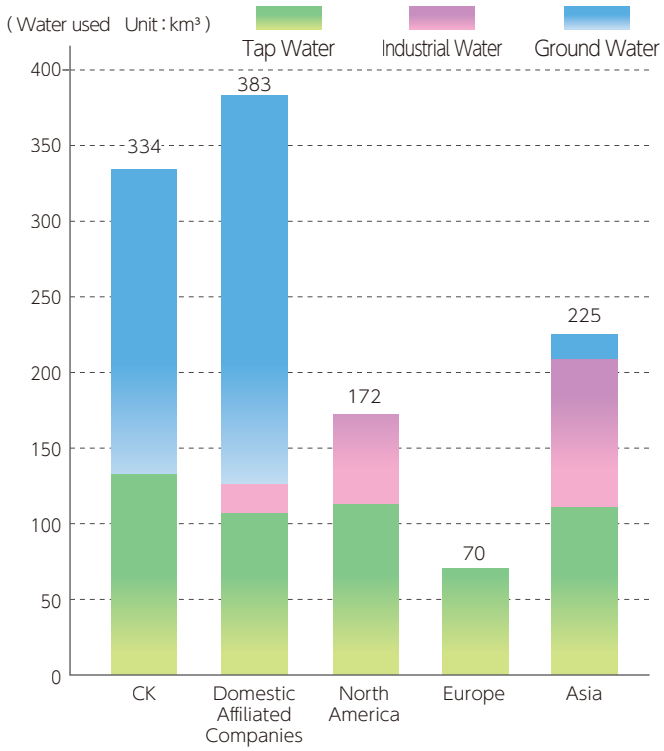
Overview of Activities to FY 2010 (Calsonic Kansei + all domestic affiliated companies)



Examples of Reduction Measures

- Installation of water-saving washers
- Cyclic usage of coolant water
- Replacing parts with those that do not require cleaning

Regional Water Resource Used Status in 2010

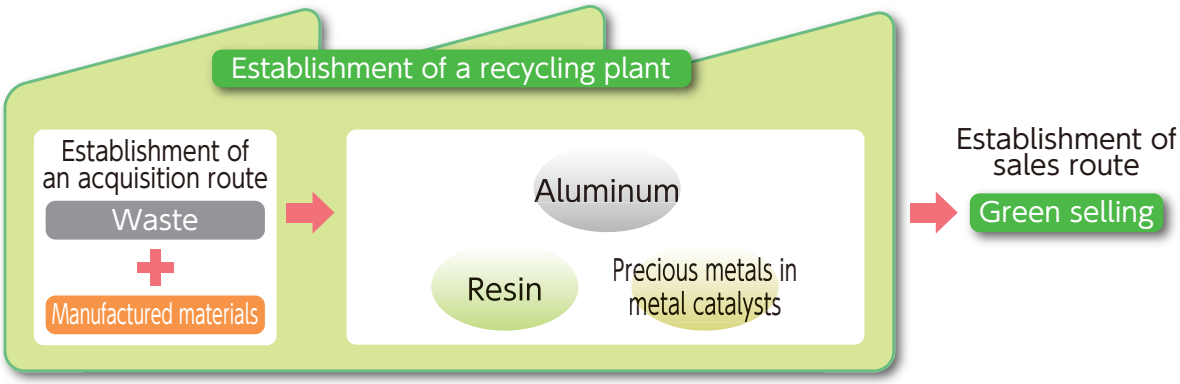


9 Recycling Activities

At Calsonic Kansei, we sincerely work toward recycling activities by means of voluntary environmental conservation efforts and placement that are contradictory to the securing of profits, but are consistent recycling activities. We will continue to promote recycling activities required for a sustainable society

1 Recycling System of Calsonic Kansei

Calsonic Kansei is building an efficient recycling system that focuses on the three R's (Reducing, Reusing, and Recycling).



2 FY 2010 Activities

①Secondary aluminum alloy

We collect aluminum mill ends and parts, etc. to reuse as secondary aluminum alloy, and recycle them in our affiliated companies' aluminum products.

②Collecting and Recycling Precious Metals from Used Catalyst Waste for Exhaust

We separate and collect "materials containing precious metals that can be used as a valuable resource (wash coat)" from all kinds of industrial metal catalysts (such as catalysts for purifying automobile exhaust fumes) using environmentally-friendly dry separation devices.

Used catalyst waste for exhaust → Collected powder (containing precious metals) → Precious metals

	Amount of collected aluminum recycled	Amount of exhaust catalyst collected
FY 2008 Results	2,651 tons	45,531 units
FY 2009 Results	2,054 tons	20,013 units
FY 2010 Results	2,630 tons	13,052 units

10 Environmental Communication

At Calsonic Kansei, we make sure to disclose environmentally related information to society as well as communicate with every stakeholder supporting us to deepen friendship and contribute to a society framework that can be trusted.

1 Communication with Local Regions and Society

By having each employee of the Calsonic Kansei Group involve themselves in environmental related volunteer work, we not only contribute to the local region and society, but work alongside everyone in the local community.

① Opening of the Regional Risk Communication

CK Kodama Plant

CK Yoshimi Plant

CKF

② Accepting local students for internships

CKK Nakatsu Plant
(Nakatsu Higashi Senior High School)

CK Gunma Plant
(Tatara Junior High School)

③ Implementation of the national skill qualification test

CK Gunma Plant

④ Plant tour by local students

CK Oppama Plant
(Sachigaoka Elementary School)

CKP Itakura Plant
(Itakura Senior High School)

CKI
(Waganishi/higashi Junior High School)

⑤ Other activities

- Performance of the community clean walk
- Beautification activities by placing flower planters
- Greening activities by greening plant walls

2 Explanation to our Stockholders

We include our environmental efforts in our mid-term report, actively promoting environmental conservation activities to our stockholders.

3 Community Partnership Activities & Green Partnership Activities

Starting in FY 2008, Community Partnership Activities and Green Partnership Activities began as environmental efforts in the Production Department.
At right the completion (%) of each activity, assessment items, and special points are shown, and activities are implemented with an aim of achieving 100% completion in 2010, based on FY 2007, maintaining and establishing such activities in FY 2011.

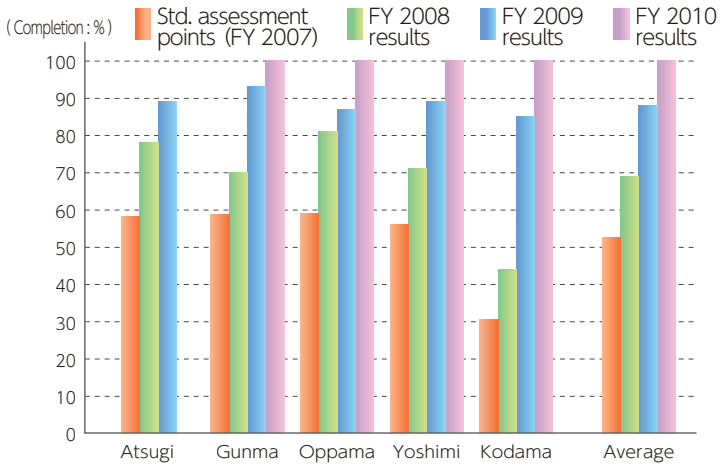
$$\text{Fulfillment of each site (\%)} = \frac{\text{Actual assessment points}}{\text{Total standard assessment points}} \times 100$$

Community Partnership Activities

These are activities that appeal to environmental efforts in areas adjacent to plants.

Assessment Items and Results of Activities

Assessment Items	Standard Assessment Points
Supplying Information with Our Website.	25
Explaining environmental efforts to plant visitors.	25
Explaining environmental efforts at external lectures.	25
Environmental activities contributing to regions.	25
Total points	100



※ Atsugi Plant: Not subject to attainment assessment because it closed down in September 2010.

Green Partnership Activities

The three environmental cleaning chain activities as well as accident prevention activities are conducted in corporation with the partnered companies.

3 Environmental Cleaning Chains

No.1
Reduce CO_2 through CO_2 management

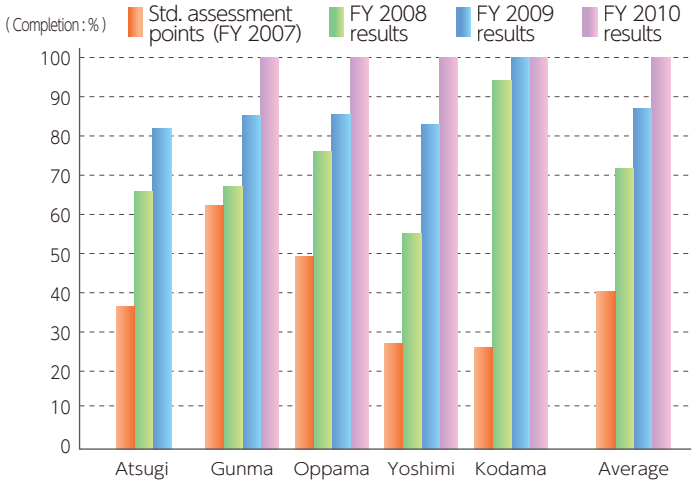
No.2
Efficiently use the resources during production process

No.3
Reduce emissions of the VOC coating through emission management

We are promoting global environmental activities based on the above 3 Environmental Cleaning Chains.

Assessment Items and Results of Activities

Assessment Items	Standard Assessment Points
Efforts toward all partner companies entering the premises.	20
Requesting cooperation in preventing environmental mishaps and three cleaning chain activities.	20
The cooperation request system is standardized and managed.	50
There is a process to promote the activities.	10
Total points	100



※ Atsugi Plant: Not subject to attainment assessment because it closed down in September 2010.

4 Communication with Society

Supplying Information with Our Website

The environmental efforts of Calsonic Kansei are published on our website.
URL http://www.calsonickansei.co.jp/

Publication of the Environmental Report

It is our responsibility as a business to disclose our environmental efforts and accomplishments in an "Environmental Report". By issuing an environmental report, we widely promote the content and accomplishments of our environmental efforts.

5 Communication with Our Employees

Providing Information Aimed at Our Employees Through Intranet Advertising

We provide timely supply of information to our employees and related companies using the environmental website on the intranet advertising created for our employees.

Efforts in Our Office

The implementation of "COOL BIZ" enables our employees to share an awareness of environmental problems such as global warming. For the three months from July to September, we recommend our employees dress casually and without a necktie, as far as is acceptable in society. This enables us to set our office air conditioning to 28℃, and reduce energy consumption.

Calsonic Kansei

Gunma Plant

Address: 132 Shin-nakano, Ora-cho, Ora-gun, Gunma
Area : 224,781 ㎡
Buildings: 64,352 ㎡
Major Products: Air conditioning unit, condenser, exhaust product, metal carrier

Regulations/Agreements	Gunma Prefecture Regulations, Ora Town Agreement, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	6.5~8.5	7.0	7.7
SS	30 mg/l or less	7.0	20.2
BOD	20 mg/l or less	3.7	8.6
N-Hex	3 mg/l or less	0.8	1.4
F	8 mg/l or less	0.7	1.6
B	–	–	–
Zn	2 mg/l or less	0.1 or less	0.1
T-P	16 mg/l or less	0.2	0.4
T-N	120 mg/l or less	2.2	7.7
Cu	3 mg/l or less	0.1 or less	0.1
Ni	–	–	–
Fe	5 mg/l or less	0.1 or less	0.6
COD	–	–	–
E. Coli Bacterium	Less than 3000	10	240
Dichloromethane	0.2 mg/l or less	0.02 or less	
Total Water Discharged			35 (km³)
Discharged to			River (tributary of the Tone river)
Average BOD			6.2 (mg/l)
Amount of Pollution (BOD)			0.22 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			17,422 (t)

Oppama Plant

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

Regulations/Agreements	Kanagawa Prefecture Regulations, Yokosuka-city Regulations, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.4	7.9
SS	300 mg/l or less	1.0 or less	4.4
BOD	300 mg/l or less	1.0 or less	2.0
N-Hex	5 mg/l or less	0.5 or less	
F	–	–	–
B	–	–	–
Zn	1.0 mg/l or less	0.1 or less	0.5
T-P	6.25 mg/l or less	0.1 or less	
T-N	50 mg/l or less	1.1	4.8
Cu	1.0 mg/l or less	0.1 or less	1.0
Ni	1.0 mg/l or less	0.1 or less	
Fe	3 mg/l or less	0.1 or less	0.8
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			18 (km³)
Discharged to			Sewer
Average BOD			1.3 (mg/l)
Amount of Pollution (BOD)			0.02 (t)
SOx			–
NOx			0.12 (t)
Soot Dust			0.012 (t)
CO_2			1,993 (t)

Calsonic Kansei

Yoshimi Plant

Address: 628 Oaza-Kumeda, Yoshimi-machi, Hiki-gun, Saitama
Area : 141,784 ㎡
Buildings: 49,700 ㎡
Major Products: Instrument panel, center console

Regulations/Agreements	Saitama prefecture regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.7
SS	90 mg/l or less	1.2	7.6
BOD	25 mg/l or less	1.0 or less	5.2
N-Hex	5 mg/l or less	0.5 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	8 mg/l or less	1.4	3.9
T-N	60 mg/l or less	4.9	30.0
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	60 mg/l or less	5.9	23.2
E. Coli Bacterium	Less than 3000	0	400
Dichloromethane	–	–	–
Total Water Discharged			42 (km³)
Discharged to			River (tributary of Ichino River)
Average BOD			2.6 (mg/l)
Amount of Pollution (BOD)			0.11 (t)
SOx			No sulfur because of city gas and LPG
NOx			0.62 (t)
Soot Dust			0 (t)
CO_2			7,070 (t)

Kodama Plant

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

Regulations/Agreements	Saitama prefecture regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.8	7.8
SS	60 mg/l or less	6.0	18.0
BOD	25 mg/l or less	2.0	15.0
N-Hex	30 mg/l or less	3.0 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	160 mg/l or less	3.0	21.0
E. Coli Bacterium	Less than 3000	30 or less	
Dichloromethane	–	–	–
Total Water Discharged			12 (km³)
Discharged to			River (tributary of the Tone river)
Average BOD			7.5 (mg/l)
Amount of Pollution (BOD)			0.09 (t)
SOx			0.18 (t)
NOx			0.49 (t)
Soot Dust			0.006 (t)
CO_2			3,321 (t)

Calsonic Kansei

Atsugi Plant

Address: 4012 Sakuradai, Nakatsu, Aikawa-cho, Aiko-gun, Kanagawa
Area : 128,559 ㎡
Buildings: 64,085 ㎡
Major Products: Radiators, motor fans, condensers, intercoolers, oil coolers, UCR (integrated radiators - condenser)

Regulations/Agreements	Kanagawa Prefecture Regulations, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.9	7.3
SS	300 mg/l or less	1.0 or less	1.2
BOD	300 mg/l or less	1.0 or less	1.7
N-Hex	5 mg/l or less	1.0 or less	1.5
F	8 mg/l or less	1.1	4.1
B	10 mg/l or less	0.1 or less	
Zn	2 mg/l or less	0.2 or less	0.1 or less
T-P	32 mg/l or less	0.1 or less	
T-N	125 mg/l or less	–	–
Cu	3 mg/l or less	0.1 or less	
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			30 (km³)
Discharged to			Sewer
Average BOD			1.2 (mg/l)
Amount of Pollution (BOD)			0.04 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			3,591 (t)

R&D Center · Headquarters

Address: 2-1917 Nisshin-cho, Kita-ku, Saitama-city, Saitama
Area : 33,047 ㎡
Buildings: 10,704 ㎡

Regulations/Agreements	Saitama Prefecture Regulations, Saitama-city Regulations, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.0~9.0	7.0	7.4
SS	600 mg/l or less	82.2	238.0
BOD	600 mg/l or less	41.3	125.0
N-Hex	5 mg/l or less	1.0 or less	1.0
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			26 (km³)
Discharged to			Sewer
Average BOD			80.8 (mg/l)
Amount of Pollution (BOD)			2.1 (t)
SOx			–
NOx			0.2 (t)
Soot Dust			–
CO_2			2,449 (t)

Calsonic Kansei

Experiment Study Center

Address: Sakae-cho, Sano-city, Tochigi
Area : 73,829 ㎡
Buildings: 47,141 ㎡

Regulations/Agreements	Tochigi Prefecture Regulations, Sano-city Regulations, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.0~9.0	7.2	8.3
SS	600 mg/l or less	1.0 or less	53.0
BOD	600 mg/l or less	1.0 or less	81.6
N-Hex	5 mg/l or less	1.0 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			81 (km³)
Discharged to			Sewer, River (Misugi River)
Average BOD			15 (mg/l)
Amount of Pollution (BOD)			1.22 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			6,693 (t)

Domestic Affiliated Companies

CKK (Headquarters·Usa Plant)

Address: 111 Oaza-Waki, Usa City, Oita
Area : 99,146 ㎡
Buildings: 19,427 ㎡
Major Products: Instrument Panels

Regulations/Agreements	Oita Prefecture Regulations, Usa City Agreement		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	6.0–8.6	7.3	8.0
SS	60 mg/l or less	4.0	26.0
BOD	60 mg/l or less	1.0 or less	4.0
N-Hex	2 mg/l or less	1.0 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	60 mg/l or less	4.0	8.0
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			7.7 (km³)
Discharged to			River (Yorimo River)
Average BOD			1.4 (mg/l)
Amount of Pollution (BOD)			0.01 (t)
SOx			0.28 (t)
NOx			0.83 (t)
Soot Dust			0.013 (t)
CO_2			5,094 (t)

Domestic Affiliated Companies

CKK (Nakatsu Plant)

Address: 150-3 Oaza-Inumaru, Nakatsu-city, Oita
Area : 48,646 ㎡
Buildings: 17,803 ㎡
Major Products: Air conditioner unit, radiator, exhaust products

Regulations/Agreements	Oita Prefecture Regulations, Nakatsu-city Agreement		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	6.0~8.5	6.1	7.3
SS	30 mg/l or less	1.0 or less	15.0
BOD	30 mg/l or less	1.4	22.0
N-Hex	5 mg/l or less	0.5 or less	0.89
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	8 mg/l or less	0.14	5.3
T-N	60 mg/l or less	1.9	45.0
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	Less than 3000	0	11
Dichloromethane	–	–	–
Total Water Discharged	(Only active septic tank) 8.8 (km³)		
Discharged to	River (Inumaru River)		
Average BOD	8.8 (mg/l)		
Amount of Pollution (BOD)	0.08 (t)		
SOx	0.2 (t)		
NOx	0.74 (t)		
Soot Dust	0.027 (t)		
CO_2	7,942 (t)		

CKF (Headquarters · Nihonmatsu Plant)

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

Regulations/Agreements	Fukushima Prefecture Regulations, Nihonmatsu-city Regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.6
SS	70 mg/l or less	1.2	9.6
BOD	25 mg/l or less	1.0 or less	8.9
N-Hex	5 mg/l or less	0.5 or less	0.8
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	Less than 3000	0	
Dichloromethane	–	–	–
Total Water Discharged	23.9 (km³)		
Discharged to	River (tributary of Abukuma River)		
Average BOD	3.1 (mg/l)		
Amount of Pollution (BOD)	0.07 (t)		
SOx	No sulfur because of LPG		
NOx	0.057 (t)		
Soot Dust	0 (t)		
CO_2	3,667 (t)		

Domestic Affiliated Companies

CKF (Tanagura Plant)

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

Regulations/Agreements	Fukushima Prefecture Regulations, Tanagura-machi Regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.5
SS	200 mg/l or less	1.0 or less	1.6
BOD	160 mg/l or less	1.0 or less	29.0
N-Hex	5 mg/l or less	0.5 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	Less than 3000	0	
Dichloromethane	–	–	–
Total Water Discharged	3.8 (km³)		
Discharged to	River (tributary of Abukuma River)		
Average BOD	3.4 (mg/l)		
Amount of Pollution (BOD)	0.01 (t)		
SOx	–		
NOx	–		
Soot Dust	–		
CO_2	564 (t)		

CKF (Fukushima Plant)

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

Regulations/Agreements	Fukushima Prefecture Regulations, Fukushima-city Regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.3	7.6
SS	200 mg/l or less	2.3	13.0
BOD	160 mg/l or less	3.1	12.0
N-Hex	5 mg/l or less	0.7	1.0
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	Less than 3000	0	
Dichloromethane	–	–	–
Total Water Discharged	0.8 (km³)		
Discharged to	River (tributary of Abukuma River)		
Average BOD	7.6 (mg/l)		
Amount of Pollution (BOD)	0.01 (t)		
SOx	–		
NOx	–		
Soot Dust	–		
CO_2	1,410 (t)		

Domestic Affiliated Companies

TRS

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

Regulations/Agreements	Kanagawa Prefecture Regulations, Fujisawa-city Greening Agreement		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	7.7
SS	90 mg/l or less	1.0 or less	4.0
BOD	60 mg/l or less	1.0 or less	9.4
N-Hex	5 mg/l or less	0.5 or less	0.9
F	8 mg/l or less	0.5	3.4
B	–	–	–
Zn	2 mg/l or less	0.1 or less	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	60 mg/l or less	3.9	13.6
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			240 (km³)
Discharged to			River (Isshiki River)
Average BOD			2.5 (mg/l)
Amount of Pollution (BOD)			0.6 (t)
SOx			No sulfur because of city gas
NOx			0.66 (t)
Soot Dust			0 (t)
CO_2			11,763 (t)

CKP (Sano Plant Area 1)

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

Regulations/Agreements	Tochigi Prefecture Regulations, Sano-city Regulations		
Effluent Regulation Item	Regulated value	Results	
pH	5.0~9.0	7.2	
SS	600 mg/l or less	10.0	
BOD	600 mg/l or less	2.3	
N-Hex	5 mg/l or less	2.3	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			3.7 (km³)
Discharged to			River (tributary of Misugi River)
Average BOD			2.3 (mg/l)
Amount of Pollution (BOD)			0.01 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			2,262 (t)

Domestic Affiliated Companies

CKP (Headquarters · Sano Plant Area 2)

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

Regulations/Agreements	Tochigi Prefecture Regulations, Sano-city Regulations, Sewerage Law		
Effluent Regulation Item	Regulated value	Results	
pH	5.0~9.0	7.3	
SS	600 mg/l or less	14.4	
BOD	600 mg/l or less	1.0 or less	
N-Hex	5 mg/l or less	1.0 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			3.6 (km³)
Discharged to			Sewer
Average BOD			1.0 (mg/l)
Amount of Pollution (BOD)			0.00 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			565 (t)

CKP (Itakura Plant)

Address: 7 Aza Futoi Ookura, Itakura-machi, Ora-gun, Gunma
Area : 16,500 ㎡
Buildings: 4,161 ㎡
Major Products: Switch for heater air conditioner, controls, electronic circuit

Regulations/Agreements	Gunma Prefecture Regulations, Itakura-machi Agreement		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.1	6.7
SS	15 mg/l or less	4.0	12.0
BOD	15 mg/l or less	5.0	11.0
N-Hex	3 mg/l or less	1.0 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	1000 or less	30 or less	
Dichloromethane	–	–	–
Total Water Discharged			6.7 (km³)
Discharged to			River (tributary of Watarase River)
Average BOD			6.6 (mg/l)
Amount of Pollution (BOD)			0.04 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			1,686 (t)

Domestic Affiliated Companies

CKP (Tochigi Plant)

Address: 144-1 Shimokoyama, Shimotsuke-city, Tochigi
Area : 18,886 ㎡
Buildings: 10,497 ㎡
Major Products: Interior plastic product parts for automotive, instrument panel, console, etc.

Regulations/Agreements	Tochigi Prefecture Regulations, Shimotsuke-city Agreement		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.1	8.4
SS	50 mg/l or less	5.2	15.6
BOD	30 mg/l or less	2.0	2.7
N-Hex	5 mg/l or less	0.5 or less	
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	30 mg/l or less	9.3	17.7
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			14.3 (km³)
Discharged to			River (Sugata River)
Average BOD			2.4 (mg/l)
Amount of Pollution (BOD)			0.03 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			2,411 (t)

CKU

Address: 11-6 Kiyohara Industrial Park, Utsunomiya-city, Tochigi
Area : 66,100 ㎡
Buildings: 20,864 ㎡
Major Products: Compressors for car air conditioner, parts

Regulations/Agreements	Tochigi Prefecture Regulations, Utsunomiya-city Agreements		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	7.2	7.7
SS	40 mg/l or less	1.0	4.4
BOD	20 mg/l or less	1.0	13.5
N-Hex	5 mg/l or less	0.5	0.7
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	20 mg/l or less	2.7	12.7
E. Coli Bacterium	–	–	–
Dichloromethane	–	–	–
Total Water Discharged			5 (km³)
Discharged to			Passes Kiyohara industrial disposal plant, Kinu River
Average BOD			6.2 (mg/l)
Amount of Pollution (BOD)			0.03 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			4,894 (t)

Domestic Affiliated Companies

CKI

Address: 1-27-5 Tatekawame, Waga-cho, Kitakami-city, Iwate
Area : 23,410 ㎡
Buildings: 9,742 ㎡
Major Products: Compressors for car air conditioner

Regulations/Agreements	Iwate Prefecture Regulations, Kitakami-city Agreements		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.4	7.5
SS	200 mg/l or less	1.0	13.0
BOD	160 mg/l or less	0.5	16.0
N-Hex	5 mg/l or less	0.5	0.8
F	8 mg/l or less	0.02	
B	–	–	–
Zn	2 mg/l or less	0.023	0.069
T-P	16 mg/l or less	4.9	5.9
T-N	120 mg/l or less	36.0	43.0
Cu	3 mg/l or less	0.005	0.007
Ni	–	–	–
Fe	10 mg/l or less	0.01	0.14
COD	160 mg/l or less	6.0	30.0
E. Coli Bacterium	3000 or less	30	2500
Dichloromethane	–	–	–
Total Water Discharged			14 (km³)
Discharged to			River (Waga River)
Average BOD			6.2 (mg/l)
Amount of Pollution (BOD)			0.09 (t)
SOx			–
NOx			–
Soot Dust			–
CO_2			3,894 (t)

CKY

Address: 190 Chuo Industrial Park, Sagae City, Yamagata
Area : 10,616 ㎡
Buildings: 5,077 ㎡
Major Products: Aluminum die casting, parts processing

Regulations/Agreements	Fukushima Prefecture Regulations, Fukushima-city Regulations		
Effluent Regulation Item	Regulated value	Results	
		Minimum	Maximum
pH	5.8~8.6	6.9	7.0
SS	200 mg/l or less	10.4	19.6
BOD	160 mg/l or less	8.1	72.8
N-Hex	5 mg/l or less	0.9	2.4
F	–	–	–
B	–	–	–
Zn	–	–	–
T-P	–	–	–
T-N	–	–	–
Cu	–	–	–
Ni	–	–	–
Fe	–	–	–
COD	–	–	–
E. Coli Bacterium	–		
Dichloromethane	–	–	–
Total Water Discharged			–
Discharged to			Discharge into river (Sagae River)
Average BOD			18.1 (mg/l)
Amount of Pollution (BOD)			–
SOx			–
NOx			–
Soot Dust			–
CO_2			3,160 (t)

Thank you for reading the “2011 Calsonic Kansei Environmental Report”.

We have gathered efforts toward Calsonic Kansei Groups environmental conservation activities for the FY 2010 in the “2011 Calsonic Kansei Environmental Report.” This has been edited to “state the environmental conservation activities of Calsonic Kansei as clearly as possible within this one report to all of the readers” and “included our updated activities with information following the related guidelines.”
We also stopped issuing this report in book form this year with the objective of helping to conserve the environment.
In the future, we would like to closely communicate with everyone through the Calsonic Kansei Environmental Report.

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