DAIKIN

Corporate Social Responsibility Report

2013

The Air You Live In

Air is something that surrounds us
24 hours a day.
In fact, our existence, as well as the Earth's,
depends on it.
At Daikin, the future of the world's
air is our greatest concern.
We use the knowledge, innovation and
technologies, dedicated to air,
cultivated over many years,
to improve the quality of air we breathe
and the quality of lives we live.
This is our mission.

Corporate Social Responsibility Report 2013

About This Report

This report covers the efforts of the Daikin Group's corporate social responsibility (CSR). It reports on our basic CSR philosophy, achievements in fiscal 2012, and plans for the future. We organized this CSR report by what we consider to be the key themes of our CSR activities—the environment, quality & customer satisfaction, human resources, and social contribution. We have features on two areas that we have particularly focused on in recent years: the prevention of global warming and the fostering of human resources.

Our website contains more detailed information and data on past activities. In addition to a section on environmental protection, the website has other sections organized by stakeholders: customers, business partners, shareholders and investors, employees, and communities. This makes it easier for each stakeholder to get to the information.

Sustainability Website

http://www.daikin.com/csr/

Shareholder and Investor Information Website

http://www.daikin.com/investor/

Please refer to the following website for the latest financial information, annual reports, and other IR information.

Daikin Organizations Covered:
This report covers Daikin Industries, Ltd. and its consolidated subsidiaries. Environmental performance data, however, covers four Daikin Industries, Ltd., production bases; eight production subsidiaries in Japan, and 41 production subsidiaries overseas. (See our website for company names and other information.)

Reference Guidelines:
Environmental Reporting Guidelines (fiscal 2012 edition) released by the Ministry of the Environment, Sustainability Reporting Guidelines Version 3.1 (G3.1) released by the Global Reporting Initiative (GRI), and ISO 26000

Term Covered:
This report covers fiscal 2012 (April 1, 2012, to March 31, 2013).

Publication Date:
June 2013 (Japanese edition)
The next publication (Japanese) is planned for June 2014.
The next English edition is scheduled for publication in September 2014.

Contact Information:
CSR & Global Environment Center, Daikin Industries, Ltd.
PHONE: +81-6-6374-9304 FAX: +81-6-6373-4380
Email: csr@daikin.co.jp

Note
In reporting on fiscal 2012 environmental protection activities, data was carefully reviewed and was revised in cases where discrepancies occurred between actual results and information reported for fiscal 2011. Also, because figures are rounded off, totals may not equal the sum of individual figures.

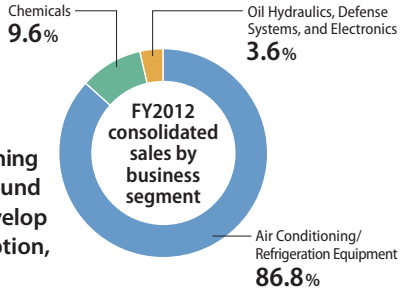
Forecasts, Expectations, and Plans
This report includes forecasts, expectations, and plans, in addition to past and present facts, about Daikin Industries, Ltd., and its subsidiaries (collectively called the Daikin Group). Please be aware that these are assumptions and judgments made based on the information available at the time this report was written and thus incorporate a degree of uncertainty. Consequently, there is a risk that events occurring in the future may turn out differently from the forecasts, expectations, and plans stated in this report.

Contents

Pursuing Global Business in Air Conditioning

Contributing to Society With World-Leading Technologies as a Pillar To Environmental Contribution

The Daikin Group offers products utilizing technologies in both air conditioning and fluorochemicals to provide comfort in all aspects of people's lives around the world. Through our strength in energy-efficient technologies, we develop and bring to market products and services that reduce energy consumption, thus contributing to sustainable development in society.



Air Conditioning Business

Achieving Both Comfort and Environmental Performance to Meet All Global Air Conditioning Needs

Hot Water and Space Heaters

Daikin ECOCUTE Air-to-Water Heat Pump Systems

Residential Air Conditioners

Ururu Sarara Series

Buildings

VRV Multi Air Conditioning Systems

Chemicals Business

World's Leading Lineup of Fluorochemicals

Automotive

Fluoroelastomers

Storage Batteries and Solar Cells

Materials for solar cells

Materials for lithium-ion rechargeable batteries

Refrigeration and Air Conditioning Systems

Fluorocarbon refrigerants

Oil Hydraulics, Defense Systems Business

Proprietary Technologies at Work in a Range of Industries

Construction Equipment

Hydraulic transmission

Machine Tools

EcoRich R

In-Home Medical Equipment

Oxygen concentrator

Company Profile (as of March 31, 2013)

Name: Daikin Industries, Ltd.

Address:
Umeda Center Building, 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka, Japan

Incorporated: February 11, 1934

Founded: October 25, 1924

Capital: 85 billion yen

Head Office: Kita-ku, Osaka

Tokyo Office: Minato-ku, Tokyo

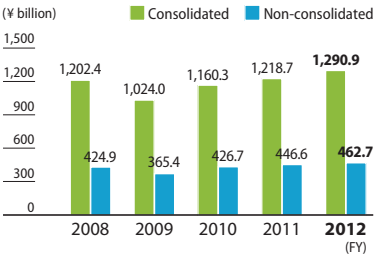
Sakai Plant (Sakai, Osaka Prefecture):
Air conditioning/refrigeration equipment, compressors

Shiga Plant (Kusatsu, Shiga Prefecture):
Air conditioning equipment, compressors

Yodogawa Plant (Settsu, Osaka Prefecture):
Fluorochemical products, oil hydraulic equipment, defense/medical equipment

Kashima Plant (Kamisu, Ibaraki Prefecture):
Fluorochemical products

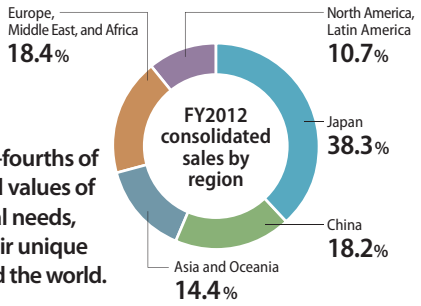
Net Sales

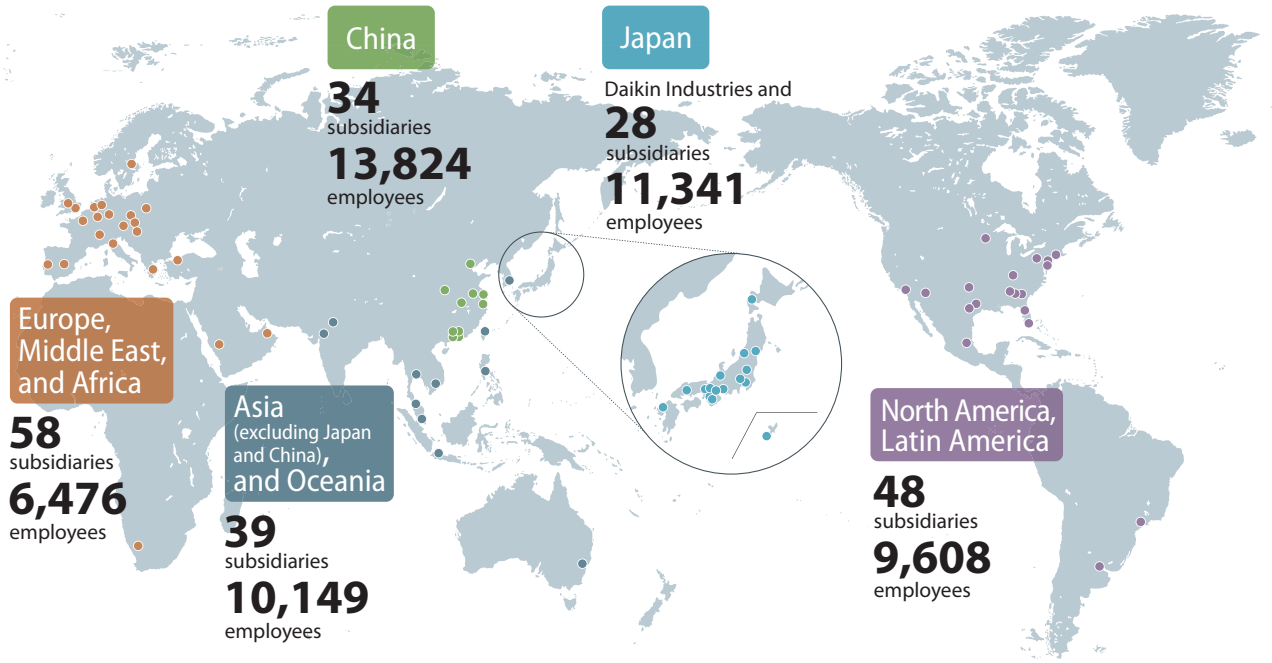


and Chemical Technologies

Contributing to Development of Local Communities while Respecting the Diverse Cultures and Values of Each Country

Overseas sales now account for 60% of the Daikin Group's total, and three-fourths of the Group's employees work outside Japan. By respecting the cultures and values of each country and region, by coming out with products that match regional needs, and by building a workplace that motivates employees and brings out their unique personalities, Daikin is contributing to development in communities around the world.





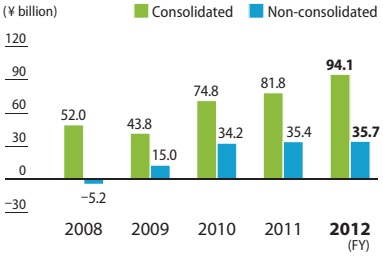
Through Acquisition of Goodman, Daikin Contributes to the Environment While Expanding Business in North American Air Conditioning Market

In fiscal 2012, Daikin acquired Goodman Global Group, Inc., the leading manufacturer and distributor in the U.S. residential unitary air-conditioning market. Using Goodman's leading nationwide distribution network, Daikin will introduce to the market environmentally conscious products that incorporate energy-efficient and other state-of-the-art technologies. Daikin will also make the most of Goodman's highly profitable corporate structure to expand business in both emerging and industrialized countries.

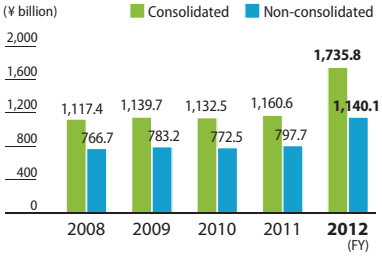
About Goodman

Name: Goodman Global Group, Inc.
Location: Texas, U.S.A.
Established: 1975
Business: Development, manufacture, and sale of air conditioners
Employees: 5,136 (as of December 2012)

Ordinary Profit (Loss)



Total Assets



Number of Employees

Aiming for Sustainable Growth through Two Pillars: Contributing to the Environment while Expanding Business, and Nurturing Human Resources

The Daikin Group strives to contribute to the sustainable development of both the company and society through its Fusion 15 strategic management plan, which encompasses the CSR challenges we face in carrying out our business. Fusion 15 is founded on two pillars: contributing to the environment while expanding business, and nurturing human resources.

Amidst the difficult business environment of 2012, when the European economy stagnated and economic expansion slowed in emerging countries, the Daikin Group took numerous key measures that gave it firmer footing towards achieving its business goals.

Our acquisition of Goodman Global Group, Inc., the leading manufacturer in the residential air conditioner field in the United States, presents us with a rare opportunity to use our inverter technologies to boost our competitiveness in the North American Air conditioner market, which is at the crossroads of stricter environmental regulations. By complementing Goodman's strength in the mass-consumer market with Daikin's environmental technologies, we are aiming to achieve Fusion 15's goal of contributing to the environment while expanding business.

Pursuing New Environmental Technologies such as the Adoption Of R32, a New Refrigerant

In 2012, the Daikin Group's bold technological challenges reaped new rewards. In November, we became the world's first company to introduce an air conditioner, the Urusara 7, running on R32, a new refrigerant that reduces global warming impact to just one-third that of conventional refrigerants. The Daikin Group has been working to get the use of R32 air conditioners adopted in numerous countries, doing what is expected of one of the world's leading air conditioner manufacturers by working closely with partners in the air conditioning field through the exchange and provision of information related to revising international standards. We are also offering technical support towards the adoption of R32 in emerging countries, where the use of new

refrigerants is crucial, by disclosing free of charge the patents needed to make adoption a reality.

We are working to expand business in emerging countries by offering both convenience and environmental benefits; for example, in India and Turkey, we are boosting manufacturing bases and bringing to market low-cost, energy-efficient inverter products.

For its superb energy efficiency, Daikin's Urusara 7 won the Minister's Prize, the Ministry of Economy, Trade and Industry in the fiscal 2012 Grand Prize for Excellence in Energy Efficiency and Conservation. In the same Grand Prize for Excellence in Energy Efficiency and Conservation, Daikin's energy-saving solutions for commercial air conditioners won the Chairman's Prize, the Energy Conservation Center, Japan. We will continue to make the most of such equipment and solutions to contribute to greater energy efficiency.

The amount of greenhouse gases is expected to increase as we expand our business. To counter this effect, we are doing all we can to achieve our ambitious target of reducing fiscal 2015 greenhouse gas emissions to just one-third of fiscal 2005 levels.

As well, the Daikin Group is working to protect and revitalize nature, such as through its project in the UNESCO World Heritage Site of Shiretoko, and through regular employee volunteer cleanup activities. Since employees are the ones who plan and carry out activities, we strive to raise their environmental awareness and nurture them to become people who can contribute to the environment through Daikin's business activities.

Striving for Global Human Resource Development and Diversity

We believe that the "cumulative growth of all Group members serves as the foundation for the Group's development." That's why we strive to create an environment in which employees can use their talents to the fullest in carrying out exciting and rewarding work.

The Daikin Group has a sales network covering 90 countries and manufacturing bases in 64 locations. The key to business growth is a company that is interwoven with the countries and regions where it does business and that allows its locally hired employees to use their talents to the fullest. We thus have made nurturing globally minded human resources a core strategy of Fusion 15 as we develop human resources at all of our worldwide operations. By nurturing employees ideally suited to the needs of both Daikin as a whole and the local community, we are contributing to sustainable growth of Daikin bases and their host countries and regions.

Having a diverse range of people and personalities in an organization makes a company more dynamic. To make the Daikin Group more diverse, we strive to give women a greater role, re-employ retired workers, and hire people with disabilities. Daikin's efforts in this respect have been recognized with its being granted the "Nadeshiko Brand," a designation by Japan's Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) for companies that are exceptional in encouraging women's success in the workplace.

Contributing to Society In Response to the Expectations Of Worldwide Stakeholders

In 2008, the Daikin Group began participating in the United Nations Global Compact, under which we abide by principles including the support of human rights and labor rights, protection of the environment, and abolition of corruption. We also plan and implement CSR-related activities in accordance with the ISO 26000 standard for social responsibility.

To become a sustainable company that responds to the expectations of stakeholders by achieving new growth and progress, we believe that we must respond to the changing times with flexibility and agility. We will continue our efforts to be a company that responds to society by contributing to society.

June 2013

Noriyuki Inoue
Chairman and CEO
Daikin Industries, Ltd.

Incorporating CSR into Company Strategy in Order to Achieve Sustainable Growth by Responding to Society's Challenges And Demands

For a company to achieve sustainable growth, it must strategically respond to society's challenges and demands by incorporating them into its management policy and action. Daikin is a global company that has experienced rapid business expansion. Based on Our Group Philosophy and People-Centered Management, we incorporate the challenges we face into the Fusion 15 strategic management plan and fulfill our corporate social responsibility (CSR) to respond to the expectations and trust of our worldwide stakeholders.

Basic Management Policy of the Daikin Group

Our Group Philosophy and People-Centered Management Go Hand-in-Hand

We believe that if employees and company executives put both Our Group Philosophy and People-Centered Management into practice, we can respond to the trust of our customers and become a corporate group that employees are proud to work for and that contributes to sustainable development and growth.

Our Group Philosophy

The basis for the shared thoughts and actions of all employees

People-Centered Management

The cumulative growth of all Group members serves as the foundation for the Group's development

Our Group Philosophy

1. Create New Value by Anticipating the Future Needs of Customers
2. Contribute to Society with World-Leading Technologies
3. Realize Future Dreams by Maximizing Corporate Value
4. Think and Act Globally
5. Be a Flexible and Dynamic Group
6. Be a Company that Leads in Applying Environmentally Friendly Practices
7. With Our Relationship with Society in Mind, Take Action and Earn Society's Trust
8. The Pride and Enthusiasm of Each Employee Are the Driving Forces of Our Group
9. Be Recognized Worldwide by Optimally Managing the Organization and its Human Resources, under Our Fast & Flat Management System
10. An Atmosphere of Freedom, Boldness, and "Best Practice, Our Way"

Philosophy of CSR Action

Respond to Stakeholder Expectations By Stressing Four Key Themes

We respond to stakeholder expectations by implementing four key themes that are the bases for our world-class activities: human resources; the environment; quality and customer satisfaction; and social contribution.

International Guidelines

United Nations Global Compact
ISO 26000

Sustainable Development

CSR and Management Strategy

Carry Out Management Strategy Based On CSR Challenges in Order to Achieve Sustainable Development for Both the Company and Society

In light of the CSR challenges we face in conducting our business, we have incorporated medium-term CSR targets and plans into our Fusion 15 strategic management plan as we aim to contribute to the sustainable development of both our company and society.

Four New Growth Strategy Themes:

Innovation that incorporates the changes of the era as growth

- Fully enter emerging markets and the high-volume market.
- Develop solutions businesses that meet customer needs.
- Expand environment-related innovative businesses.
- Accelerate growth through alliances, partnerships, and M&A.

Four Management Constitution Reform Themes:

Sophistication of the management platform to succeed in the new era

- Innovate product development, production, procurement, and quality capabilities.
- Strengthen global marketing function.
- Comprehensively develop capacity to utilize IT.
- Fundamentally reinforce profitability.

Group-Wide Core Strategies of Fusion 15 Strategic Management Plan

Three Themes to Enhance HR Capabilities Based on People-Centered Management

- Implement People-Centered Management and make it more sophisticated.
- Accelerate measures to secure and develop quality HR.
- Speed up management localization and promote communication between Group companies.

CSR Challenges Facing Daikin

Challenge 1: Safeguarding the climate system

Challenge 2: Contributing to societies

Meeting increasing air conditioner demand in emerging countries

Air conditioner demand is rapidly increasing in emerging countries like China, India, and Turkey, and this in turn is driving up electricity consumption. Companies must make energy-efficient products that match the needs of the region.

Preventing global warming

Japan faces an energy shortage following the March 2011 earthquake and tsunami. Air conditioners consume an especially large amount of electricity, and companies must make these products energy efficient.

Mitigating environmental load by refrigerants

Ozone-depleting refrigerants have been replaced with non-ozone-depleting ones, but these refrigerants are still considered a cause of global warming.

Increasing employment, developing human resources, and helping communities develop

Emerging countries require the creation of more new jobs and the training of human resources to support their development and raise the standard of living of their people.

Conduct Steady and Thorough Action Based on Medium-term CSR Goals and Plans

With an eye to responding to society's challenges and demands, we are steadily implementing the medium-term goals and plans of each of the key CSR themes incorporated in our Fusion 15 strategic management plan, which we launched in fiscal 2011.

Key CSR Themes	Medium-term CSR Goals and Plans (by Fiscal 2015)

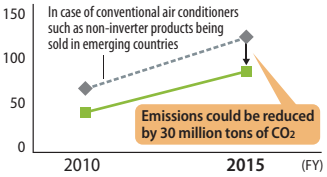
Environment

We engage in environmental activities with global warming prevention as the most important priority.

Providing the World With Products That Help Customers Reduce CO_2 Emissions

- Increasing use of inverter products
- Increasing use of heat-pump type heating systems
- Offering energy-saving solutions
- Developing future refrigerants

Contributing to CO_2 Emission Reductions through Daikin Products*1

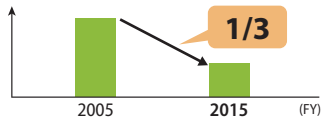


- **Increase use of environmentally conscious products in emerging countries, where growth is particularly remarkable.**
  Increasing sales of inverter air conditioners and other energy-efficient products could reduce CO_2 emissions in emerging countries by 30 million tons of CO_2.
- **Create global demand in the power conservation business.**
- **Develop technologies and introduce products that comply with refrigerant restrictions.**

Minimizing Environmental Impact in Production

- Reducing greenhouse gas emissions
- Effectively using water and other resources
- Reducing chemicals

Reducing Greenhouse Gases



By 2015, reduce greenhouse gas emissions to one-third of fiscal 2005 levels

Expanding "Green Heart"*2

- Reforestation and tree-planting
- Environmental education

Expanding a Green Heart

Protecting biodiversity around the world

*2 Green Heart: Think of the Earth and take care of the environment

Quality and Customer Satisfaction

We anticipate the needs of communities and the general public, and provide high-quality products that bring customers satisfaction.

Giving Customers Unmatched Satisfaction

- **Safety & Quality**
  Products are designed from the perspective of the customer to assure safety and quality.
- **Customer Satisfaction**
  We strive to achieve the ultimate in quality service: speed, accuracy, and good manners.

- **Daikin's quality standard gives superior, optimal products that earn customer trust.**
- **We have a system for developing products that meet the needs of customers, wherever they live.**
  We are switching to a global development system and strengthening our marketing research functions throughout the world.

Human Resources

Employees form the basis of all our activities, and we provide a workplace where each employee can grow in his or her own unique way.

Through People-Centered Management, Creating a Workplace Where Employees Can Demonstrate Their Abilities

- **Human Resource Development**
  The entire Daikin Group trains human resources to match business growth.
- **Diversity of Employees**
  We strive to build a diverse workplace where everyone can play an important role by respecting each other regardless of age, sex, nationality, or physical disabilities.
- **Balancing the Responsibilities of Work and Family**
  We allow employees to work flexible schedules so that they can have quality time with their families.
- **Occupational Safety & Health**
  We strive for employee satisfaction by building a safe, comfortable workplace where employees can enjoy both mental and physical well-being.

- **Becoming a corporate group with global values by working autonomously and freely in line with Our Group Philosophy and shared policies and strategies**
- **Communication between head office and local bases**
- **Making greater use of women and experienced employees**

Social Contribution

Wherever we do business, we seek to meet society's needs in a way that only Daikin can.

Employees Taking the Initiative In Local Grassroots Action

- **Through contributions to environmental protection, education support, and arts and culture, Daikin employees take the lead in community service aimed at providing each region with the support it needs.**

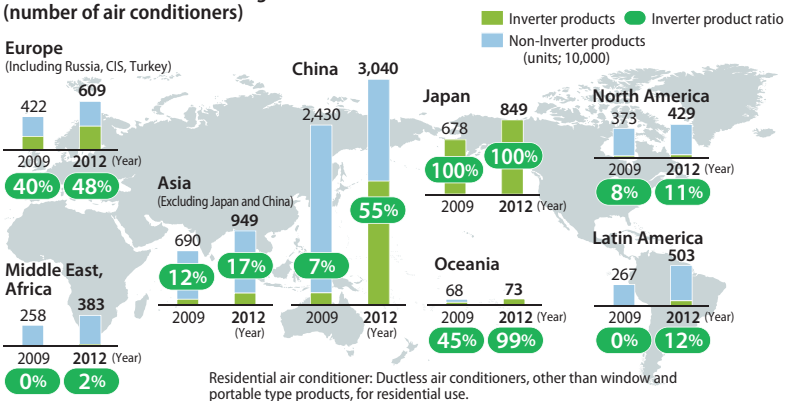
- **Contribute to society as a respected and trusted company with roots in communities around the world.**

Fiscal 2012 Achievements

CO_2 Emission Reductions in Emerging Countries: Estimated 18 Million Tons*1 (Through Daikin Products)

*1 Calculation of annual reduction amount as a result of using energy-efficient inverter products, compared to the baseline of annual greenhouse gas emissions in the case of using conventional air conditioners such as non-inverter products; based on guidelines of Japan Electronics and Information Technology Industries Association (JEITA). The figure for CO_2 emission reductions is the annual reduction amount multiplied by the number of air conditioners in operation.

Inverter-Products as Percentage of Residential Air Conditioner Demand (number of air conditioners)



Residential air conditioner: Ductless air conditioners, other than window and portable type products, for residential use.
Only in North America does this category include duct-type air conditioners for residential use.

Source: Figures for market demand from report on estimates of worldwide air conditioner demand, published by Japan Refrigeration and Air Conditioning Industry Association; figures for inverter products as percentage of entire market, from Daikin Industries.

• Practical Application of Next-Generation Refrigerant

World's First Adoption of R32, a Refrigerant with Low Global Warming Potential

Feature 1 ⇒ pages 15–18

• Products with Low Environmental Impact

• 68% Reduction in Greenhouse Gases

• Protection of Biodiversity

(At Three Levels: Globally, Locally, and at Daikin Sites)

Global Air Conditioner Development Sites

• Quality Assurance in Emerging Countries

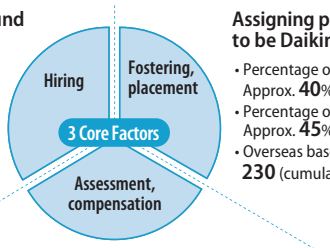
Striving to Achieve the Level of Quality Sought by Global Customers

Feature 2 ⇒ pages 19–20

Building an HR System Suitable for a Corporate Group with Global Values

Hiring talented HR from around the world

- Conduct internship programs worldwide
- Participate in on-campus recruiting worldwide



Assigning people of all nationalities to be Daikin executives

- Percentage of presidents hired locally: Approx. **40**%
- Percentage of locals in executive positions: Approx. **45**%
- Overseas base practical training: **230** (cumulative)

Unifying HR and compensation systems for senior management at all bases.

• Development of the Urusara 7

Opening Feature ⇒ pages 11–14

• Global Personnel Development

Achieveing Globally Minded Management Emphasizing Unity of the Daikin Group

Feature 3 ⇒ pages 21–22

Activities with Strong Community Ties

• Social Contributions with Strong Community Ties

Strengthening Ties with Communities

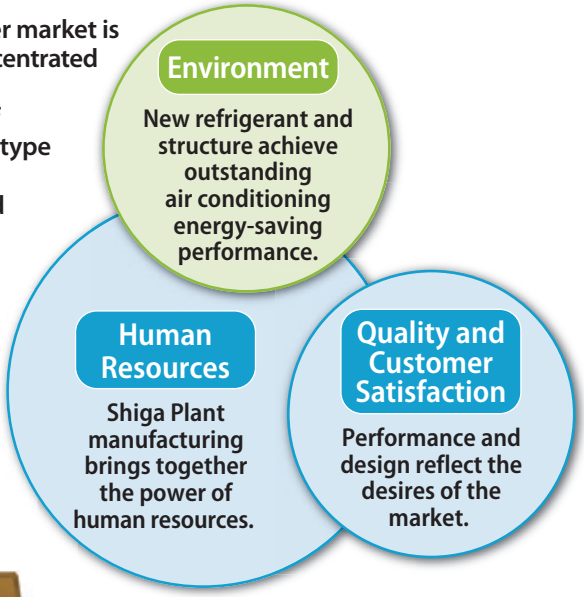
Feature 4 ⇒ pages 23–24

• Social Contribution Activities

The Embodiment of Daikin CSR Development of Urusara 7

The Ultimate in Manufacturing Achieves Outstanding Energy Efficiency and Comfort

Competition among manufacturers in the global air conditioner market is heating up. Amidst a changing market environment, Daikin concentrated the strengths of its *monozukuri* (the art of manufacturing), which is aimed at performance quality, and the capabilities of its human resources, to develop an air conditioner offering the type of Japanese quality that the world has come to expect. The result was Urusara 7, a residential air conditioner released in November 2012 and winner of that year's Grand Prize for Excellence in Energy Efficiency and Conservation. From the very beginning of product development, Daikin adopted a concurrent system that brought together personnel from all relevant company divisions. Thanks to the passion and ingenuity intrinsic to Daikin manufacturing, the Urusara 7 was able to achieve outstanding energy efficiency and comfort. Development of this product could also be called the embodiment of Daikin CSR, since it centered on human resources in pursuit of solutions based on the environment, quality, and customer satisfaction (CS).



For the industry-leading*2 energy efficiency of the Urusara 7, Daikin received the Minister's Prize, the Ministry of Economy, Trade and Industry in the Fiscal 2012 Grand Prize for Excellence in Energy Efficiency and Conservation.

Product: Urusara 7 (S40PTRXP, S56PTRXP, S63PTRXP, S71PTRXP)
Minister's Prize, the Ministry of Economy, Trade and Industry
Fiscal 2012 Grand Prize for Excellence in Energy Efficiency and Conservation (Product Category & Business Model Category)
Sponsor: The Energy Conservation Center, Japan

7 Features of the Urusara 7

1 World's first product*1 using the new refrigerant R32 (HFC32)

The new refrigerant helps to mitigate the effects of global warming with 1.5 times the heat-carrying capacity of conventional refrigerants and just one-third the global warming potential.

2 APF 7.0, the industry's highest*2

With an annual performance factor (APF) increase of 0.4 (6%), the product achieves the industry's highest energy efficiency.

3 Innovative airflow method: "Circulating airflow"

Thanks to a new flap and dual intake structure, the product achieves a circulating airflow that takes air to every corner of even a large living room.

4 Sarara drying operation gives comfort and energy efficiency

Since only a portion of the heat exchanger is cooled, dehumidifying occurs without excessive cooling of the room. Plus, power consumption is only about half that of conventional reheating dehumidification (Daikin comparison).

5 Ururu humidifying operation offers improved no-water-supply humidification

Daikin's unique technology allows the Ururu to use the moisture already present in the air for humidification. Plus, the outdoor unit is 20% smaller.

6 New Yuragi-pattern airflow reproduces a natural breeze effect

We improved our airflow control technology to achieve a natural breeze effect that is comfortable on the human body even over long periods of time.

7 Unique air purifying technology: Streamer discharge

Daikin's unique technology traps, breaks down, and eliminates airborne particles such as mold and pollen while also keeping the inside of the air conditioner clean.

*1 For residential wall-mounted room air conditioners as of date of release (November 1, 2012).
*2 For residential wall-mounted room air conditioners (40-kW, 5.6-kW class) as of date of release (June 26, 2013).
Seasonal power consumption: AN40PRP model: 1,145 kWh; AN56PRP model: 1,840 kWh

Human Resources

Concurrent Development System Transcends Company Divisions

Shiga Plant Manufacturing Brings Together the Power of Human Resources

First True Test of Daikin's New Development System

A new development system came about because employees wanted to preserve the Daikin spirit of manufacturing. The new system's first target was revolutionary: achieve annual performance factor (APF) 7.0, a target that would require pooling the talents and energies of employees transcending company divisions.

Our Group Philosophy states that "the cumulative growth of all Group members serves as the foundation for the Group's development." This belief formed the basis of a revision of our development system as we embarked on a project that brought together employees from all relevant divisions under a new concurrent system.

Free and Open Discussions Overcome Technical Barriers

Rather than just involving employees in the development and design divisions, we decided from the start of the development process that we needed to make everyone—whether they were from production technology, procurement, the factory, or marketing—a part of the manufacturing process. This allowed all employees to work as a team in preparing for and solving all challenges in all processes (for example, design, assembly of parts based on blueprints, and marketing). By looking ahead through the entire process until final product delivery, we were able to come up with entirely new ideas through constant discussion and debate.

By sharing the ideas and hopes of employees in all divisions in a customer-oriented process that brings out the collective ideal, we were able to both nurture employee talents and create products we could truly be proud of.

A Word from the Project Leader

All Employees Set a Revolutionary Target To Demonstrate the Strength of Japan's *Monozukuri*

APF is normally raised by between about 0.1 and 0.2 points each year, and this year we felt around 6.6 was a reasonable figure. However, we didn't believe that this was high enough to demonstrate the strength of Japanese manufacturing. We therefore set an extremely high target of APF 7.0 for the Urusara 7 and went about reaching this by revamping all facets of our development culture so that employees in all divisions, be it design, production, procurement, or marketing, could work as one unified team in re-thinking all aspects of the air conditioner—from refrigerant to indoor and outdoor units—from the ground up.

Takahiro Okamoto
Product Development Group, Air Conditioning Manufacturing Division

Urusara 7 Mass Production Begins in November 2012
At Daikin's Shiga Plant, a manufacturing base in Japan. On opening day, more than 100 employees from different divisions gathered to get a glimpse of the fruits of their efforts. It was a testament to the power of teamwork.

A Word from the Mechanical Design Manager for Indoor Units

Pursuit of Energy-Savings Gives Birth to Circulating Airflow and Even Room Temperature

With conventional air conditioners, cool air tends to stay at floor level. We solved this problem with the new dual intake structure, which although developed to give greater energy savings also ensures greater comfort by evenly distributing the airflow. Using new flaps employing the Coanda effect in which airflow clings to a nearby surface, we succeeded in creating a circulating airflow that draws in air from underneath and sends it quickly along the ceiling to all parts of the room. Air is efficiently circulated, even in spacious living rooms, to enable comfortable air conditioning in half time at even the temperature.

Masanao Yasutomi
Product Development Group,
Air Conditioning Manufacturing Division

Environment Creating a New Design Structure through Ground Up Development

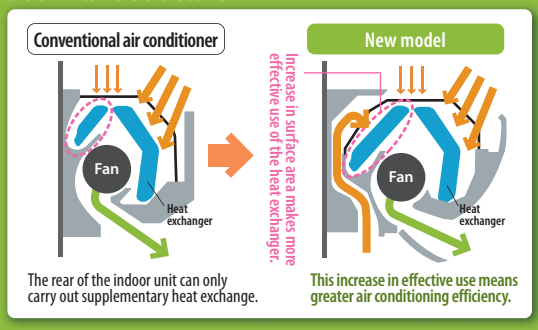
New Refrigerant and Structure Achieve Outstanding Air Conditioning Energy-Savings Performance

World's First Product*1 Using New Refrigerant R32

Recent events in Japan like the Great East Japan Earthquake of March 2011, along with trends like the increase in living rooms larger than 20 square meters, have created a need for air conditioners that heat and cool spacious rooms while achieving low electricity costs. What eventually came out of this need was the use of the new refrigerant R32. Not only is R32 superior in energy savings, with 1.5 times the heat-carrying capacity of conventional refrigerants; it is also effective in mitigating the effects of global warming, with a global warming potential that is one-third that of conventional refrigerants. The difficulty, however, lies in controlling R32. Daikin utilized microfabrication technology to allow optimal control of R32 and developed a heat exchanger that takes full advantage of R32's characteristics. The result was the market release of the world's first air conditioner to use R32 refrigerant. (See pages 15–18 for more on R32.)

Developing control technology for R32 refrigerant

Dual Intake Structure



■ Annual Performance Factor (APF)

7.0 (for 4.0-kW class)

Completely Revamping the Indoor Unit Design Structure to Increase Efficiency

Conventional air conditioners that draw air from the upper part of the unit do not allow sufficient utilization of the heat exchanger on the back of the indoor unit. By redesigning the interior unit from scratch and giving it a specially developed, industry-first*1 flap with dual intake structure so that it sucks air from below, we boosted the efficiency of the heat exchanger.

This quest for energy efficiency resulted in the release of the Urusara 7, an air conditioner with an industry-best*2 APF 7.0. For this revolutionary improvement in energy efficiency, Daikin was honored with the Minister's Prize, the Ministry of Economy, Trade and Industry in the Fiscal 2012 Energy Conservation Grand Prize.

*1 For residential wall-mounted room air conditioners as of date of release (November 1, 2012).
*2 For residential wall-mounted room air conditioners (40-kW, 5.6-kW class) as of date of release (June 26, 2013). Seasonal power consumption: AN40PRP model: 1,145 kWh; AN56PRP model: 1,840 kWh

Quality and Customer Satisfaction

Giving Consumers the Comfort They Want

Performance and Design Reflect the Desires of the Market

Customers Testing and Retail Installation Verification

Daikin listened closely to the opinions of customers and dealers as it verified the performance and design during product development.

We designed the indoor unit of the Urusara 7 to have higher energy efficiency and give users greater comfort. However, these changes also gave it a dimensional depth of 37 cm, which was greater than previous indoor units. We did our best to make the design unobtrusive and conducted tests to learn what users thought of a thicker indoor unit. After installing this thicker unit in showrooms and asking user opinions, results showed that most people understood the energy efficiency and airflow benefits and did not care about the thickness as long as it offered energy-efficient performance. This provided the impetus for us to continue development with this thicker indoor unit. We also installed units in retail stores to get the opinion of dealers.

Working with Researchers to Recreate a Natural Breeze Effect

We also strove to make sure the wind from the Urusara 7 was comfortable on the human body. Working jointly with researchers from the Prefectural University of Kumamoto to analyze the characteristics of wind in nature and improve our airflow control technology, we successfully developed a new flap that can instantly change the direction of airflow, just like natural breeze. All participants in the university experiments said that the new cooling breeze airflow that we developed felt good on the body, even over long periods of time.

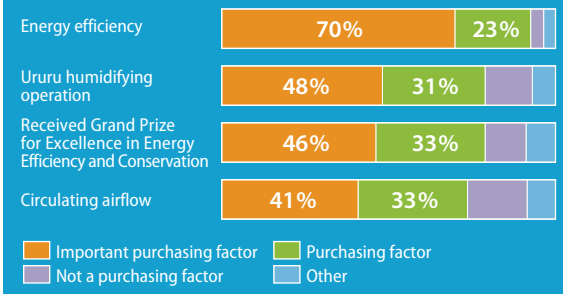
Analyzing comfortable airflow

What Users Are Saying

- Although it seemed big when I saw it in the store, after having it installed, **I found it quite attractive.** (30-year-old woman)
- I've only used the heating function so far, but **it keeps my feet warm and it can humidify,** so I don't need a separate humidifier. (50-year-old woman)
- The airflow control and motion sensor give **greater comfort than I expected.** (60-year-old man)
- I'm very satisfied that it **heats the room evenly, has sufficient heating power, and quickly makes the room comfortable.** (30-year-old man)

Top Four Reasons Why People Purchased an Urusara 7 Air Conditioner

Energy efficiency and comfort made the sale



Source: March 2013 survey for purchasers of air conditioners. Conducted at stores by Daikin Industries (254 respondents, multiple answers).

reddot design award winner 2013

The Urusara 7 was chosen from among 4,662 entrees from 56 countries in the Red Dot Design Awards

As a result of the collective work of many people, the Urusara 7 was an immediate hit in helping Daikin boost its air conditioner sales. It was also lauded for its looks as it took home a prize in the product design category of the prestigious Red Dot Design Awards 2013.

We conducted multiple simulations of the product in homes and stores to find out what end users and dealers thought about the design.

Feature 1

Environment

Practical Application of Next-Generation Refrigerant

World's First Adoption of R32, a Refrigerant With Low Global Warming Potential

R32 Used in Residential Air Conditioners in Japan

In November 2012, Daikin released for the first time in the world an air conditioner using R32, a refrigerant with just one-third the global warming potential of conventional refrigerants.

Dialogue with Environmental and Air Conditioning Experts around the World

The refrigerant circulates inside the air conditioner and carries heat: it is, for all practical purposes, the "lifeblood" of the product. At the same time, it is also the cause of problems like ozone depletion and global warming. As the world's only company making both air conditioners and refrigerants, Daikin has adopted a new refrigerant for air conditioners, R32, that has just one-third the global warming potential of conventional refrigerants. To create greater understanding of the significance of this fact, we engaged in dialogue with environmental and air conditioning experts at numerous international conferences.

Urusara 7 Residential Air Conditioner

Urusara 7 with new R32 refrigerant has world's highest* energy efficiency.
(See page 11 for more on the Urusara 7.)

* For residential wall-mounted room air conditioners (40-kW, 5.6-kW class) as of date of release (June 26, 2013). Seasonal power consumption: AN40PRP model: 1,145 kWh; AN56PRP model: 1,840 kWh

Newly Developing Countries in Urgent Quest for Next-Generation Refrigerants

HFCs such as R410A are the most commonly used refrigerants in industrialized countries. But developing countries are still using HCFCs because of the later date for their phasing out under the Montreal Protocol. These countries are thus still a source of these ozone-layer-depleting substances.

But starting in 2013, developing countries begin a schedule to reduce the amount of HCFCs used. Demand for air conditioners is rapidly increasing in these countries, and the amount of refrigerants is naturally expected to also increase. Because global warming will rise if developing countries follow industrialized countries in adopting R410A, there are increasing calls to bypass R410A and instead adopt a refrigerant with lower global warming impact. Industrialized countries are also aiming to reduce HFC emissions and like their developing country counterparts are on an intensifying quest for a next-generation refrigerant.

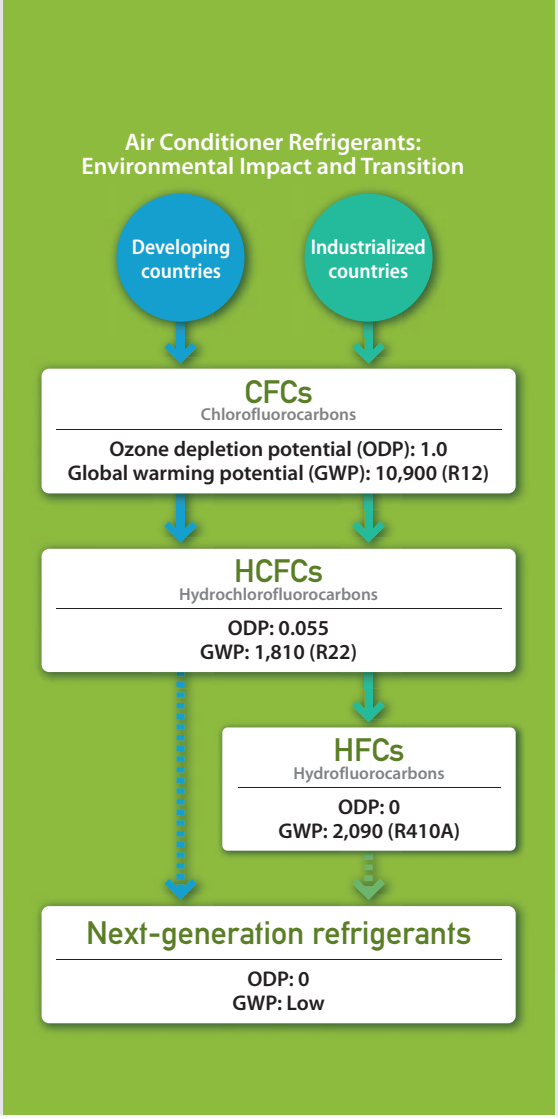
Background

Refrigerants Must Not Harm the Ozone Layer or Contribute To Global Warming

There is growing worldwide interest in finding a next-generation refrigerant that does not harm the ozone layer or contribute to global warming.

At one time, CFCs were used as air conditioner refrigerants, but the 1987 Montreal Protocol designated CFCs as substances that seriously deplete the ozone layer and therefore called for their total phasing out. HCFCs became substitutes for CFCs; however, even they were later added to the list of banned substances under the Montreal Protocol since HCFCs also deplete the ozone layer. All HCFC production must be completely phased out in industrialized countries by 2020 and in developing countries by 2030.

Industrialized countries are in the process of replacing HCFCs with HFCs, which do not harm the ozone layer but which do contribute to global warming. The Kyoto Protocol, adopted in 1997, called for a reduction in HFC emissions.



Decision on Next-Generation Refrigerants Must Consider All Factors, Not Just Environmental Performance

Being the only manufacturer in the world making both air conditioners and refrigerants, Daikin is going full speed ahead to realize the practical application of next-generation refrigerants.

A number of substances are being considered as a next-generation refrigerant: R32, a type of HFC with a relatively low GWP; HFO refrigerants, which have a low GWP; and natural substances such as CO_2 and propane, which have refrigerating characteristics.

A refrigerant may have a low GWP, but if its production requires large amounts of energy, or if the air conditioner using it exhibits poor energy efficiency, then the result will be a greater contribution to global warming. There are also safety considerations: the lower a refrigerant's GWP, the higher its flammability tends to be. Furthermore, besides the high cost of a refrigerant, the high cost of making an air conditioner using that refrigerant will make the product more expensive to buy. This means fewer people will buy it. In short, a decision on which next-generation refrigerant to adopt must take into account all relevant factors, including its contribution to global warming, its safety, economic viability, and efficiency.

Similarly, the functions needed in a refrigerant vary depending on the size and type of the air conditioner it will be used in, so it's necessary to select the most suitable refrigerant for each particular application.

Characteristics Needed in a Next-Generation Refrigerant

Environmental performance
No impact on the ozone layer and lower global warming impact

+

Safety
No toxicity, and extremely low risk of flammability

Economic performance
Low cost of refrigerant, low air conditioner production costs

Efficiency
Capacity at least equivalent to that of conventional refrigerants while offering energy efficiency during air conditioner use

International conference on next-generation refrigerants

International Discussions For Next-Generation Refrigerants

In changing to a new refrigerant, there are numerous matters to be considered, such as standards of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), national regulations and standards, safety standards, installation and maintenance methods, refrigerant supply, and disposal of equipment. Choosing a refrigerant is not the work of one single company, but rather an exercise in international collaboration.

This is why Daikin takes part in discussions involving worldwide governments, regulatory organizations, industry groups, and air conditioner and refrigerant manufacturers. We also provide the information needed to make decisions on international rules and government policies, and when requested we provide information such as the results of tests.

By presenting information that is logical and objective from a perspective of what is best for society as a whole, we strive for dialogue that leads to the selection of the most appropriate refrigerant.

Commercialize R32 Products and Demonstrate Daikin's Direction

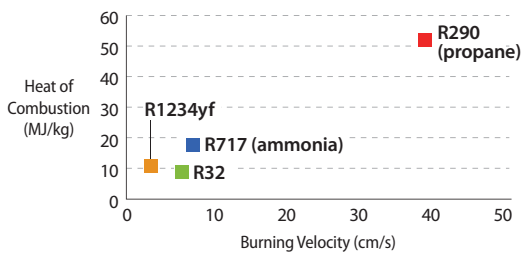
After the numerous aforementioned activities in which we considered and evaluated refrigerants from all possible angles, Daikin determined R32 to be the most suitable refrigerant for air conditioners. One reason is that its GWP is just one-third that of R410A (an HFC mixture), the most common refrigerant in use in industrialized countries at present. In addition, R32's superb energy efficiency means that air conditioners using it emit fewer greenhouse gases and require less refrigerant volume to operate. And since it is not a mixture of different types of refrigerants like R410A, R32 will be ideal in the near future when the international community plans to have refrigerant recycling systems in place.

Characteristics of Possible Next-Generation Refrigerants (for Residential and Light Commercial Air Conditioners)

		Environmental performance		Safety		Economic performance	Efficiency
		ODP	GWP*	Flammability	Toxicity	Equipment cost	Efficiency
Refrigerants currently used in developing countries	R22 (HCFC)	0.055	1,810	○	○	○	○
Refrigerants currently used in industrialized countries	R410A (HFC)	0	2,090	○	○	○	○
Possible next-generation refrigerants	R1234yf (HFO)	0	4	△	○	△	×
	R32 (HFC)	0	675	△	○	○	○
	R744 (CO_2)	0	1	○	○	×	×
	R717 (ammonia)	0	0	△	×	×	○
	R290 (propane)	0	3.3	×	○	○	○

* GWP is quoted from the Fourth Assessment Report of the IPCC.
Note: × indicates a condition not met. △ indicates a condition partially met. ○ indicates a condition met.

Flammability of Possible Next-Generation Refrigerants



■ GWP of R32 Compared to Current Refrigerant (R410A)

Approx. 1/3

■ Effect if Daikin Air Conditioners for the Japanese Market Used R32 Instead of R410A

Reduction of

46,000 tons-CO_2 per year

(Reduction during one year after installation)

Although a number of industrialized countries have been proposing next-generation refrigerants with consideration for factors like their own competitiveness and economic performance, it has proven hard to come up with new technologies and actually release products. Daikin believes that its job as the leading air conditioner company is to first commercialize products and show developing countries the direction it is taking.

World's First R32 Air Conditioner Released In Japan and India

R32 has a slight degree of flammability, and until November 2012, it had not been commercialized as a refrigerant. However, countries around the world have begun to accept refrigerants that are mildly flammable with the goal of reducing global warming. Even the International Organization for Standardization (ISO) is currently revising safety standards for refrigeration and air conditioning equipment.

In November 2012, for the first time ever Daikin began using R32 for residential air conditioners for the Japanese market. In October 2012, prior to market release, we held seminars for our installation contractors all over Japan to explain the characteristics of mildly flammable R32 and to talk about the procedures for handling it. Our goal was to ensure that our contractors were qualified to install R32 air conditioners and that all installation work would be of the highest quality.

In March 2013, India began the sale of residential air conditioners using R32. Our next step is to release R32 air conditioners in other countries and have R32 employed in commercial air conditioners.

Manufacturing R32 air conditioners in India

R32 briefing for trainees from 7 Asian countries

Open Licensing of Basic Patent to Promote Refrigerant Shift in Developing Countries

Daikin does everything it can to contribute to the shift to refrigerants with minimal environmental impact. Specifically, to promote adoption of R32 in developing countries nearing conversion to next-generation refrigerants, in September 2011 Daikin began giving free access to its "Basic Patent Indispensable for the Manufacture and Sale of Air Conditioners Using R32 Single Component Refrigerant." Daikin also participated in a developing country support program sponsored by Japan's Ministry of Economy, Trade and Industry and the Japan International Cooperation Agency (JICA), in which Daikin hosted trainees from seven Asian countries to provide them with detailed information on next-generation air conditioners.

Daikin continues to work towards the practical application of next-generation refrigerants. We continue to carry out research. And like our successful launch of water heaters using the natural refrigerant CO_2, we are on the lookout for other suitable uses of next-generation refrigerants beyond air conditioners.

We will continue to provide support upon request from various countries as we contribute to the switch to refrigerants with lower environmental impact in the process of helping to protect the ozone layer and mitigate the effects of global warming.

What Stakeholders Are Saying

Outstanding Example of Safeguarding the Ozone Layer and Climate System

With their high global warming potential, HFC refrigerants have proven to be a double-edged sword. In products such as refrigerators and air conditioners, they are much needed substitutes in the movement to phase out CFCs and HCFCs, which are ozone-depleting gases. At the same time, however, HFC refrigerants are extremely powerful global warming gases. Their widespread and continued use would jeopardize the success of the Montreal Protocol.

Good news comes from Daikin: the company has successfully brought to market air conditioners using R32, a refrigerant with a relatively low global warming potential and shorter atmospheric life. It is also focusing on enhancing the energy efficiency of air conditioning systems that use R32. This is an outstanding example of safeguarding the ozone layer and the climate system.

Rajendra Shende
Chairman, TERRE Policy Centre
Former Director of United Nations Environment Programme (UNEP)

Striving to Achieve the Level of Quality Sought by Global Customers

Air Conditioner Installation in India
Daikin engineers are improving their skills to help us keep up with rapidly growing demand in India.

Raising the Bar at Dealers and Authorized Service Providers

India is a key country in expanding Daikin's overseas business, but its air conditioner market is very different from Japan's. To meet the particular needs of customers in this market, Daikin is holding service training programs at its bases and at its dealers and authorized service providers in India in an effort to raise the quality of service offered to customers.

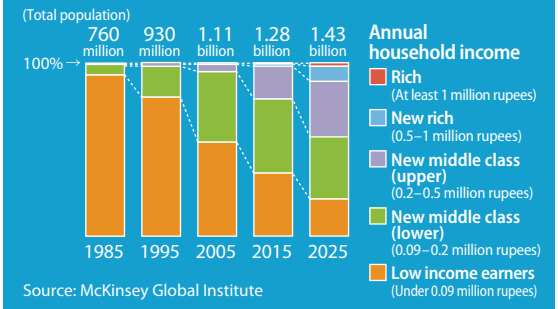
Background

India: Key Market with Hidden Potential

Under our Fusion 15 strategic management plan, we aim to gain full entry into emerging countries and volume-zone markets. One of these is the booming economy of India, where there is a rapidly growing population of potentially free-spending middle-income earners in large cities, where demand continues to grow for consumer durables like air conditioners. Established in 2000, Daikin Airconditioning India Pvt. Ltd. is Daikin's manufacturing and sales base in India. The company's fiscal 2012 sales grew by an astounding 5.3 times between fiscal 2009 and 2012.

Nonetheless, only 36.8% of households in the five largest cities have air conditioners, and nationwide the figure is just 2.7%. Despite being a country with temperatures that can reach almost 50°C, India still has very few homes with air conditioners and is regarded as a market with great hidden potential.

Indian Population by Income Level (Forecast)

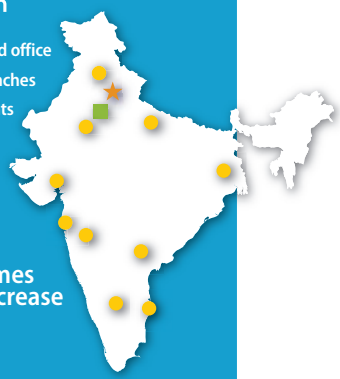


Source: McKinsey Global Institute

Daikin's Business Expansion in India

(No. of employees)
Fiscal 2009: 550
Fiscal 2011: 1,500
Approx. 2.7 times increase

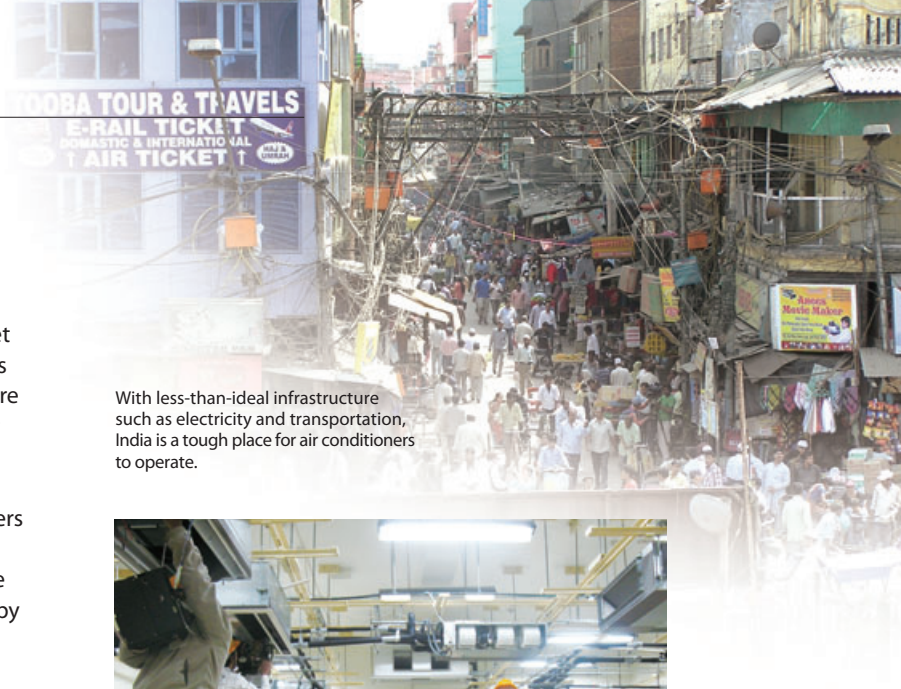
(No. of retailers)
Fiscal 2009: 300
Fiscal 2011: 1,600
Approx. 5.3 times increase



Dealing with India's Extreme Air Conditioner Environment

India's air conditioner market is very different from Japan's and requires products and services that meet local conditions and needs of locals. Air conditioners operate under extreme conditions in India. Infrastructure such as electricity and transportation is poor, power outages and voltage fluctuations occur frequently, and heat exchangers get clogged with dust.

Daikin Airconditioning India Pvt. Ltd. sells stabilizers to handle voltage fluctuations, and call centers take customer inquiries on repairs and other matters. The Company's after-sales service system is rounded out by 11 service centers.



With less-than-ideal infrastructure such as electricity and transportation, India is a tough place for air conditioners to operate.

Surveying Customer Needs and Training Employees to Raise Service Quality

We have been conducting customer satisfaction surveys to determine what kind of after-sales service customers want. Surveys have revealed what they want most are skilled service engineers and quick access to repair help.

To respond to this need for prompt and careful maintenance, we concentrate on training service engineers. Our training program is led by three full-time managers. Service engineers can receive training at the Neemrana Plant or at service centers to learn the basics of air conditioners and inverters; the skills needed to carry out periodic inspections and troubleshooting; and the correct approach for handling customers.

Air conditioners must be installed properly if customers are to enjoy air conditioning to its fullest. Currently about 60% of breakdowns are due to faulty installation. That's why we are working to improve installation quality through training that boosts installation skills.

In many cases, residential air conditioner installation is carried out by local dealers or authorized service providers. To ensure that customers get professional installation from pleasant personnel, our training and skills workshops are open to service engineers from not only Daikin but from its dealers and authorized service providers as well.

We will continue to provide service geared to local needs so that we can expand business in India by being the type of air conditioner manufacturer that customers expect.

Training is open to service engineers from dealers and authorized service providers.

Results of Customer Satisfaction Surveys

Level of service users expect	How Daikin ranks (Among four main companies)
1 Skilled service engineers	1st
2 Quick access to repair help	3rd
3 On-time arrival for repair service calls	1st
4 Short time from inquiry to service call	1st
5 Explanation of repair details	1st

Fiscal 2012 Service Training Participants

Total **7,510**

(116 from Daikin and 7,394 from dealers and authorized service providers)

What Stakeholders Are Saying

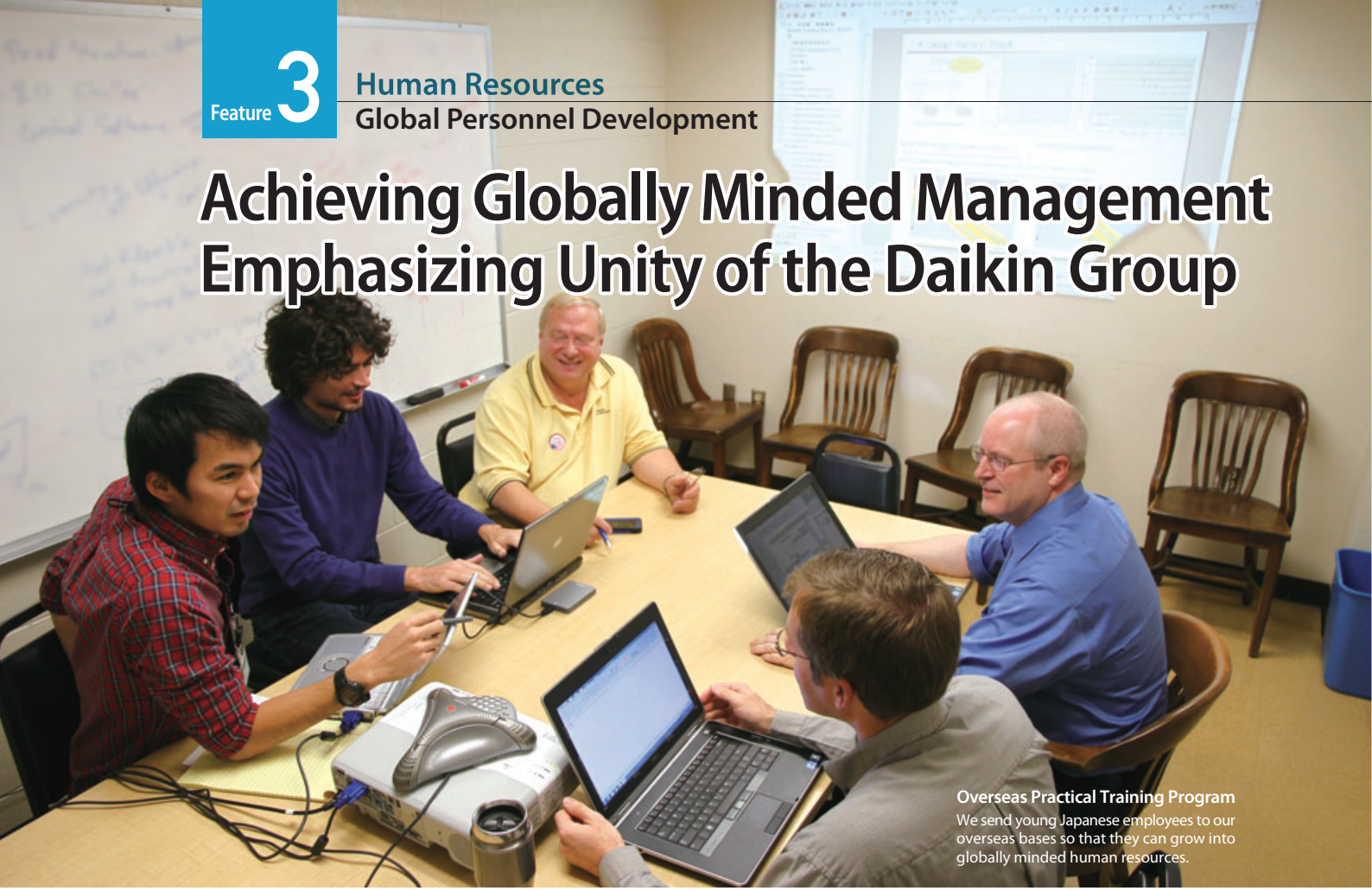
Proper Maintenance Gives Customers a Good Feeling toward Daikin

Three years ago, we had a VRV system installed and signed a yearly maintenance contract. Since the 26 outdoor units and 128 indoor units were installed, Daikin has been continuously conducting thorough maintenance of these, and we are pleased with the way the service engineers treat us.

Daikin engineers appeared to be extremely skilled at their jobs. I am expecting the engineers from the dealer carrying out periodic inspections to be just as skilled.

Ashishi Mathur
Chief Engineer
Optus Sarovar Premier

Achieving Globally Minded Management Emphasizing Unity of the Daikin Group



Overseas Practical Training Program
We send young Japanese employees to our overseas bases so that they can grow into globally minded human resources.

Training People Who Can Be a Bridge Between Countries

Sharing Our Group Philosophy and engaging in communication are critical for success in globalizing company management and fostering a sense of unity as a group at overseas bases. Consequently, special attention is given in the development of global human resources that are to become bridge persons that can play an active role in any region of the world.

Background

Centrifugal Forces and Cohesive Forces Indispensable to Overseas Strategy

Daikin sells products in over 90 countries. Amidst the globalization of the world's economy, Daikin's Fusion 15 strategic management plan calls for accelerated globalization of our management and better communication between the head office and Daikin bases around the world.

To stay close to regional markets of the world and rapidly develop business that conforms to local needs, it is essential that we globalize management by actively promoting local human resources to executive positions and retain a "centrifugal force" in which each base demonstrates autonomy. Similarly, to maximize management efficiency of the entire Group with an increased sense of unity as a group and a corporate culture where employees enjoy high job satisfaction, it is essential that we have communication between the head office and local bases and retain a "cohesive force" in which bases pursue overall optimization of the Group by sharing Our Group Philosophy.

Manager meeting where local senior managers engage in communication with the Daikin top management

Accelerate Management Globalization By Training Local Management Candidates At Overseas Bases

Daikin has already localized strategic functions at major overseas bases in areas such as product development, marketing, and financial strategy and is aiming to accelerate this centrifugal force in training local nationals to be executives at overseas bases.

At the group companies of the O.Y.L. Group, headquartered in Malaysia, we are training local nationals to be future Daikin Group executives by giving them the necessary skills and know-how in the Young Executive Program.

Thanks to efforts like these, about 40% of the presidents at overseas Daikin bases were local nationals and about 45% were directors as of the end of fiscal 2012. Of Daikin's 15 European sales bases, 13 of them had local nationals as presidents.

Focusing on Global HR Development That Brings Together the Head Office and Bases And Drives Home Group Philosophy

At the same time Group values and direction are shared as corporate philosophy, it is also necessary to have a cohesive force that binds the organization and leads us to overall optimization. Thus, even as we allocate resources for training "global HR" that can play a role transcending country and regional boundaries, we are also enhancing opportunities for communication to gain each person's acceptance, bridging gaps between Japan and overseas bases, and instilling the corporate philosophy throughout the Daikin Group.

One opportunity for communication is manager meetings where Daikin executives travel to our main overseas bases to speak directly with local executives and managers. Another is the Daikin Business School, which has trained many local candidates to take on management positions at Daikin companies. The school was temporarily stopped but will start again in 2013.

Our overseas practical training program fosters global human resources by sending young employees to overseas bases for one year. While assisting with work duties, they learn the local culture and customs with the goal of one day contributing to the Daikin Group through a global viewpoint that transcends borders. So far, 230 employees have taken this training, and we will continue by sending 40 employees every year to Daikin bases in emerging and other countries.

We will continue to accelerate overseas business expansion by training managers who can contribute to both local communities and the overall optimization of the Daikin Group.

Overseas practical training program fosters individuals who can act as bridges between Japan and the rest of Daikin

Percentage of Presidents at Daikin Bases Who Are Local Nationals

About 40%

Percentage of Directors at Daikin Bases Who Are Local Nationals

About 45%

Overseas Practical Training Program Participants

Cumulative total since fiscal 1999 230

What Stakeholders Are Saying

Daikin Among the Most Globalized Japanese Companies

While recent years have seen accelerating efforts by leading international companies in Asia and the West to globalize, Japanese companies are being left behind. I feel, however, that Daikin is doing a better job than most Japanese companies at globalizing its management. For example, its solid globalization measures include putting as many local nationals as possible in key managerial positions at its overseas bases and taking advantage of the strengths and autonomy of companies that it acquires.

Daikin's core competence is nurturing employees by maximizing its fast and flat management system. This core competence must be incorporated into Daikin's worldwide group organization and human resources. By taking responsibility to do this, Daikin will show that it is a leading global company.

Seiichi Yamamoto
Director
Deloitte Touche Tohmatsu LLC

Feature 4

Social Contribution
Social Contributions with Strong Communiting Ties

Strengthening Ties with the Community

Daikin Festival
This event held by the Decatur Plant of Daikin America Inc. goes back almost 20 years. An annual fixture in the local community, the Daikin Festival welcomes large numbers of locals who love the warm, homespun hospitality.

Community Contributions as the Core Of Daikin Management

As a responsible corporate citizen, the Daikin Group is continuously sensitive in meeting and solving the needs and issues of the communities in which it does business. Daikin America is one of Daikin's oldest manufacturing bases overseas, and its Decatur Plant has been involved in a range of community service activities ever since it started operation in 1994.

Background

Community Understanding and Cooperation Essential for a Chemical Company

The Decatur Plant of Daikin America is one of the Group's key factories for manufacturing fluorochemicals. The United States is a huge market for fluorochemicals, accounting for 30% of worldwide demand, and the Decatur Plant opened in 1994 to respond to this large demand.

Operating a plant requires the understanding and cooperation of local citizens. In particular, plants making chemicals must earn acceptance from the community through environmental, safety, and other measures that dispel any concerns that locals may have. Daikin America will continue to meet the needs and expectations of the community through dialogue and social interaction that boost understanding of Daikin, and through financial and other support measures for local activities.

Overview of Daikin America, Inc.

Decatur Plant, Daikin America, Inc.

Location: Decatur, Alabama, U.S.A.
Established: May 1994
Products: Chemical products (fluororesins)
Employees: 350

Neighbors Night brings Daikin America and the community together for dinner and dialogue.

Homespun Event with Local Residents Educates Public about Japan

The Daikin Festival is a well-established, huge event put on each year by the Decatur Plant. At the 18th festival held on May 25, 2012, about 22,000 people, the equivalent of 40% of the city's population, joined in the festivities.

Joining an authentic Bon dance just like in Japan and learning to write calligraphy and do other Japanese arts are just some of the things to be enjoyed at the Daikin Festival. There are booths with information on Daikin products, 12 lit-up hot-air balloons, fun attractions for children, and karaoke. Daikin employees join local resident volunteers in offering homemade Japanese and American foods like *yaki soba* (fried noodles), barbecued meat and vegetables, and hamburgers.

Daikin America employees plan and run the entire event, and have fun doing it as they strengthen ties with the community, boost the Daikin brand image, and earn new fans of Daikin and Japan.

Contributions to the Community Recognized with Alabama Business Award

Every year since its start in 1994, the Decatur Plant has taken about a dozen local high school students and teachers to Japan for one week. The students get to experience Japan firsthand as they stay with the families of Daikin employees in Osaka, tour the Yodogawa Plant, practice the sport of *kendo* (Japanese fencing), and visit the historic city of Kyoto.

Another regular event is a charity golf tournament where about 200 invited suppliers and business partners donate money through aid agencies for causes such as disaster relief and support of people with disabilities. The fiscal 2012 tournament marked the 12th edition of the event, which has so far collected about 300 million yen for charity.

Other continuing efforts at Daikin America include a semiannual Neighbors Night dinner with local residents and community leaders, art contests, Christmas parties, and scholarships. For these and other initiatives, on June 20, 2012, Daikin America received the 2012 Alabama Medium Manufacturer of the Year Award for companies committed to improving Alabama in terms of community development, safety, and the environment. Daikin America employees will continue to initiate social contribution efforts that make their company a trusted member of the community.

About 250 students have visited Japan under Daikin America's homestay program.

■ Visitors to Fiscal 2012 Daikin Festival

Approx. 22,000

(Decatur's population is about 57,000)

■ Money Gathered at the Charity Golf Tournament So Far

About 300 million yen; donated to various social causes

What Stakeholders Are Saying

A Familiar Company with Local Roots

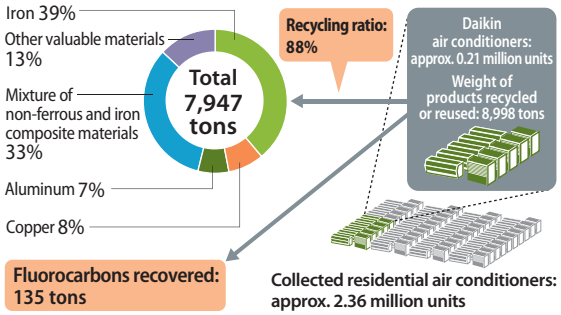
Decatur is in the process of recovering from a recession but has not gotten its economy back to previous levels quite yet. Daikin is nurturing our region through its continuous support of the community and hiring of local residents. I know of no other company with such strong roots in the community.

Many years ago, before I was mayor, my son was selected as a Daikin homestay participant. Through the Daikin homestay program I learned a great deal about the genuine concern and caring Daikin has for the community, and how Daikin strives to be a good community member. Through its support of both the economy and spirit of Decatur, I think Daikin is a perfect example of a good corporate citizen.

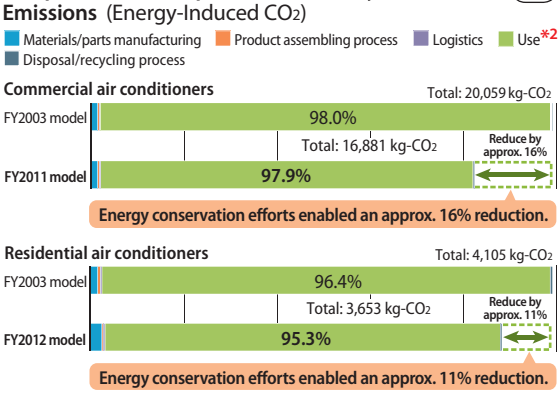
Don Kyle
Mayor
City of Decatur

Low-Impact Products

Recycling of Residential Air Conditioners in FY2012 JG



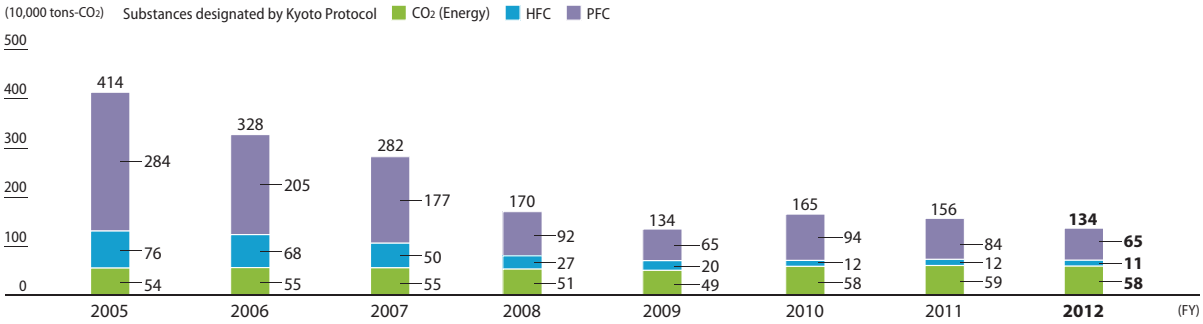
Sample of LCA: Comparison*1 of Life Cycle CO_2 Emissions (Energy-Induced CO_2) JG



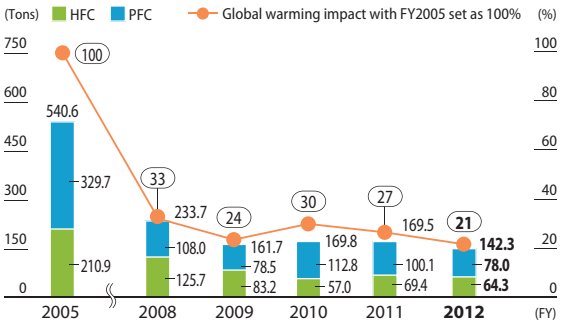
*1 Based on Daikin standards for 14-kW class commercial air conditioners and 2.8-kW class residential air conditioners.
*2 The seasonal power consumption is calculated in accordance with the standard of the Japan Refrigeration and Air Conditioning Industries Association for commercial air conditioners and the Japanese Industrial Standards (JIS) for residential air conditioners.

Low-Impact Production

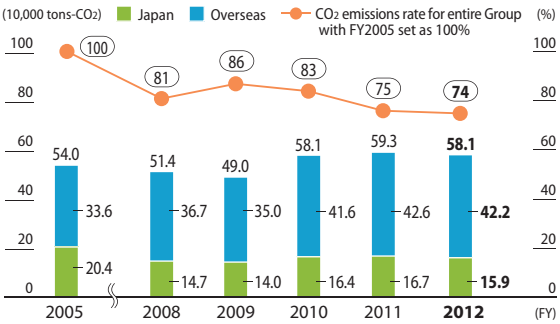
Greenhouse Gas Emissions OJG



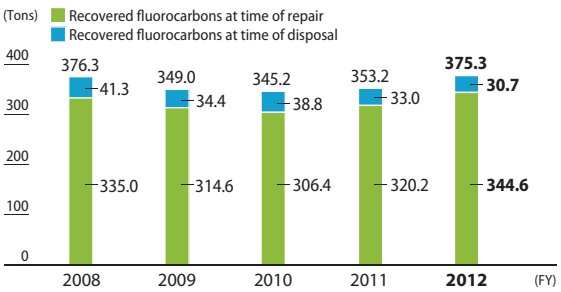
HFC, PFC Emissions and Global Warming Impact OJG



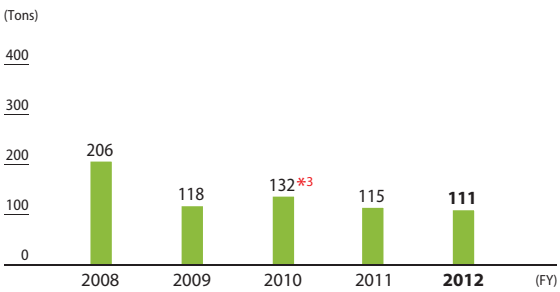
Total CO_2 Emissions, CO_2 Emissions per Production Output OJG



Recovered Fluorocarbons (At Time of Repair and at Time of Disposal) D

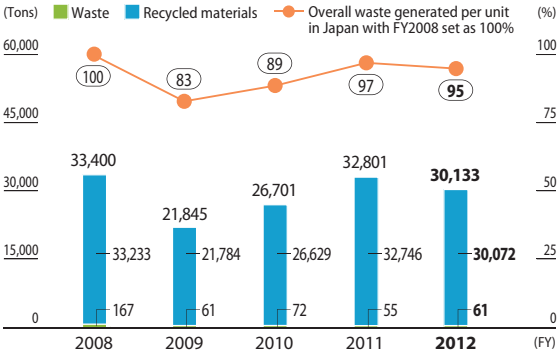


Release of Substances Designated by the Pollutant Release and Transfer Register Law JG

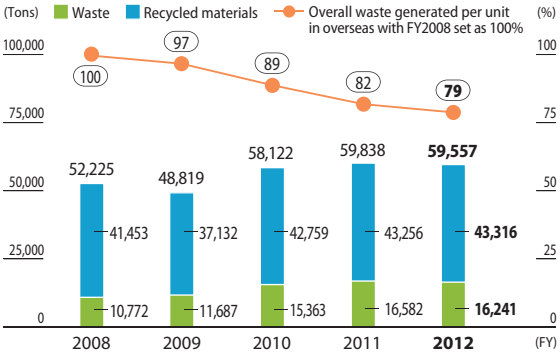


*3 Under revisions to the Pollutant Release and Transfer Register Law (effective October 1, 2009), the number of designated substances increased from 354 to 462.

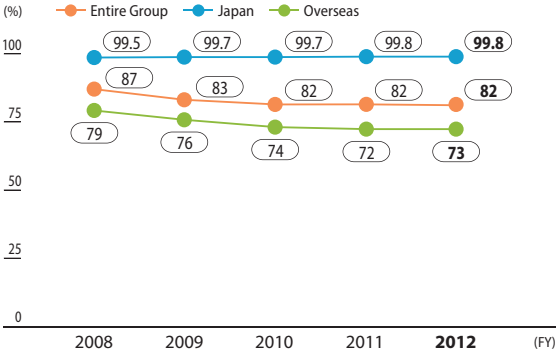
Amount of Waste and Recycled Materials/ Amount of Waste and Recycled Materials per Unit of Production Output (JG)



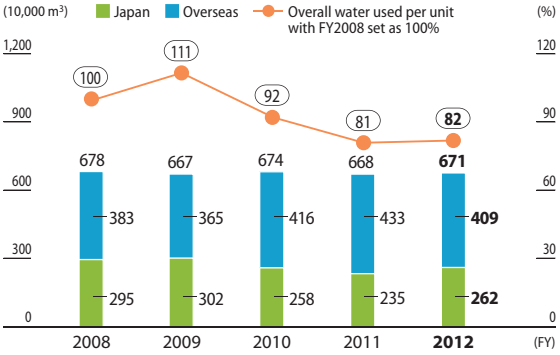
Amount of Waste and Recycled Materials/ Amount of Waste and Recycled Materials per Unit of Production Output (OG)



Recycling Ratio (OJG)



Water Used/Water Use per Unit of Production Output (OJG)



Green Procurement Rate by Region*4 (%) (OJG)

	Japan	China	Thailand	Other countries in Asia and Oceania	Europe	North America	All regions
FY2009	99	89	97	85	63	—	83
FY2010	99	89	97	85	82	45	87
FY2011	96	91	98	87	81	3	84
FY2012	99	92	98	90	83	36	88

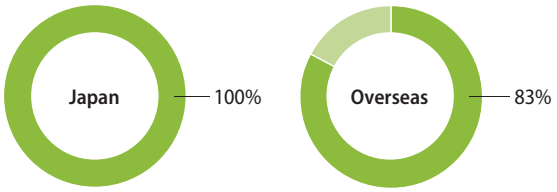
*4 Green procurement rate= Value of goods procured from suppliers who meet our assessment criteria / Value of all goods procured

Environmental Management

Report from Audits (FY2012) (JG)

	Problems found from internal environmental audits	Problems found by third-party certification institutes
Major non-conformance	5	0
Minor non-conformance	43	0
Items improved	229	6

Ratio of Employees Belonging to Facilities That Obtained ISO 14001 Certification (FY2012) (OJG)



Environmental Action Plan 2015

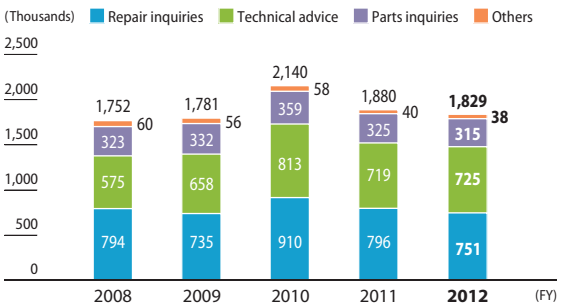
Environmental Action Plan 2015

Action targets		FY2015 target values		FY2012 results	Self assessment
Providing Environmentally Conscious Products Provide the world with products that help customers reduce CO_2 emissions.					
Spread use of energy-efficient air conditioners to reduce CO_2 emissions. **Spread use of heat-pump type heating systems.** **Offer energy-saving solutions.** **Develop future refrigerants.**		Through expansion in the widespread use of energy-saving products such as those using inverters, aim to help curtail CO_2 emissions by 30 million* tons for emerging countries. * Calculation of annual reduction amount as a result of using energy-efficient inverter products, compared to the baseline of annual greenhouse gas emissions in the case of using conventional air conditioners such as non-inverter products; based on guidelines of Japan Electronics and Information Technology Industries Association (JEITA). The figure for CO_2 emission reductions is the annual reduction amount multiplied by the number of air conditioners in operation.		Estimated 18 million ton curtailment	★★★
Eco-conscious Factories & Offices Minimize environmental impact from production and other activities.					
Greenhouse gases	**Reduce CO_2 emissions.**	Reduce fiscal 2015 levels to 1/3 (67%) of the level compared with fiscal 2005.		68% reduction	★★★
		Japan	Reduce per-unit CO_2 from energy use by 20% against fiscal 2005.	25% reduction	★★★
		Overseas	Reduce per-unit CO_2 from energy use by 10% against fiscal 2010.	12% reduction	★★★
Waste	**Reduce overall amount of waste by effectively using resources.**	Japan	Machinery-related: Reduce per-unit emissions by 5% against fiscal 2010.	7% reduction	★★★
			Chemical-related: Reduce per-unit emissions by 10% against fiscal 2010.	15% reduction	★★★
		Overseas	Reduce per-unit emissions by 10% against fiscal 2010 at all bases.	11% reduction	★★★
Water	**Reduce amount of water used.**	Japan	Reduce per-unit emissions by 5% against fiscal 2010.	4% reduction	★★★
		Overseas	Reduce per-unit emissions by 10% against fiscal 2010 at all bases.	25% reduction	★★★
Chemicals	**Minimize emissions of environmentally harmful substances.**	Japan	Reduce PRTR substances by 15% against fiscal 2010.	16% reduction	★★★
			Reduce VOCs by 20% against fiscal 2010.	20% reduction	★★★
		Overseas	Reduce per-unit VOCs by 10% against fiscal 2010 at all bases.	Analyzed data on substances	★
Green Heart Factories	**Achieve environmentally friendly plants.**	Have major production sites certified as Green Heart Factories.		8 bases in Japan 9 bases overseas	★★★
Green Heart Offices	**Achieve environmentally friendly offices.**	Have major bases in Japan certified as Green Heart Offices.		Efforts began at all bases in Japan	★
Environmental Cooperation with Stakeholders Expand the Green Heart circle to Daikin worldwide.					
Environmental and social contribution activities	**Join local governments, citizens, and NPOs to make environmental and social contributions at each global base according to regional characteristics.**	Continue to carry out environmental and social contribution activities (forest restoration, tree-planting, environmental education, protection of biodiversity within Daikin bases) at worldwide bases.		Sign new agreement with Osaka Prefecture for forest protection	★★★

Self assessment: Shows level of achievement of targets in three designations: ★★★ : Succeeded ★★ : Will soon succeed ★ : Doing all we can

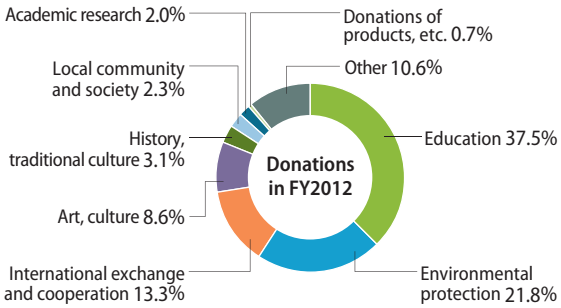
Quality & Customer Satisfaction

Number of Inquiries to the Contact Center (JG)



Social Contribution

Donations in FY2012 (D)

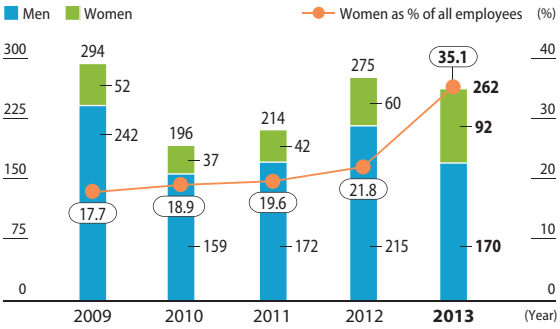


Human Resources

Daikin Industries Employees by Gender (D)

	Men	Women	Total
As of end of March 2013	5,726	942	**6,668**

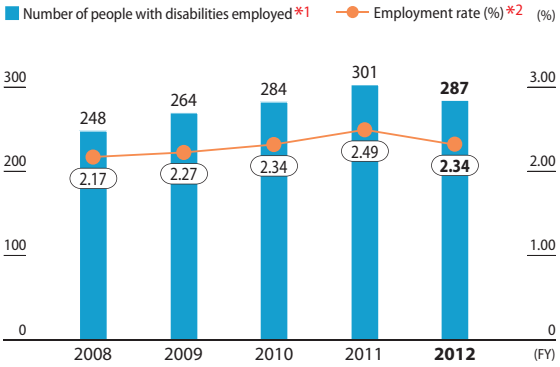
Number of Women Periodically Hired; Percentage of All Employees (D)



Note: Figures are those during April of each year.

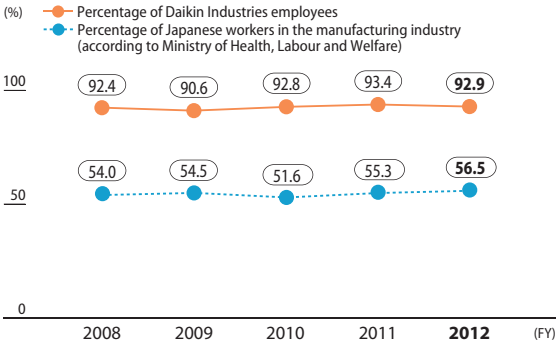
Number of Re-employed Workers and Percentage Re-employed after Retiring (D)

Number of People with Disabilities Employed and Employment Rate (JG)

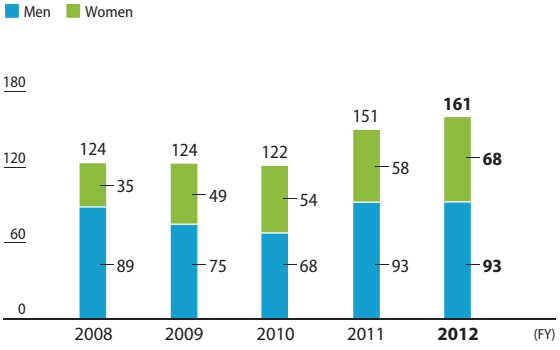


*1 Legally, one severely disabled person employed is counted as two people with disabilities.
*2 Employment rate = number of people with disabilities employed ÷ number of people employed.

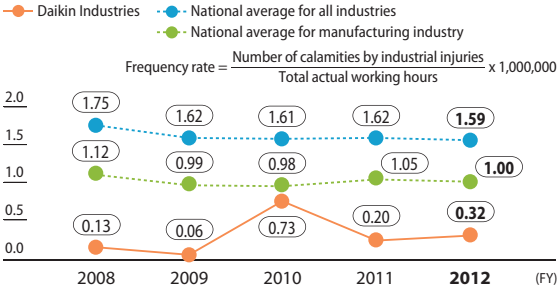
Percentage of Employees Taking All Paid Leave (D)



Employee Taking Childcare Leave (D)

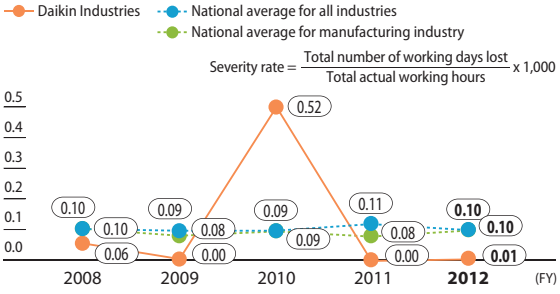


Frequency Rate (D)



Note: This shows the frequency of work-related calamities, expressed in number of calamities for every 1,000,000 working hours.

Severity Rate (D)



Note: This shows the severity of the calamity, expressed in man-days lost per 1,000 hours worked.

Honors for Daikin (FY2012)

Overall CSR (Include SRI)

Daikin Group

Socially Responsible Investment Indexes
Chosen for inclusion in the Dow Jones Sustainability Asia Pacific Index

Chosen for inclusion in the Morningstar Socially Responsible Investment Index

Granted the "Nadeshiko Brand"

Daikin Air-Conditioning Technology (Shanghai), Ltd.

Named a "Trusted and Responsible Company" by the Shanghai Household Appliances Association

Environment

Daikin Industries

Urusara 7 won the Minister's Prize, the Ministry of Economy, Trade and Industry in the fiscal 2012 Grand Prize for Excellence in Energy Efficiency and Conservation.

Daikin's electricity-saving solution for commercial air conditioners won the Chairman's Prize, the Energy Conservation Center, Japan in the fiscal 2012 Grand Prize for Excellence in Energy Efficiency and Conservation.

Daikin's Japanese website for its reforestation project in Indonesia, won the Biodiversity Prize in the 12th Environmental Goo Awards.

Daikin's inverter technology using no electrolytic capacitor was developed to help spread the use of air conditioners in emerging countries. For this technology, Daikin won a Technical Achievement Award in the Consumer Electronics category from the Japan Electrical Manufacturers' Association (JEMA).

Daikin Australia

Head office building received 5.5 stars in Australia's NABERS system for ranking energy-efficient buildings

Daikin Refrigeration (Suzhou) Co., Ltd.

New Suzhou Plant
Awarded two stars in China's Green Building Design Label system

Daikin Airconditioning (Singapore) Pte. Ltd.

Magnetic centrifugal chiller Selected for the Singapore Green Building Council's Green Chiller

Quality & Customer Satisfaction

Daikin Industries

Urusara 7
Won a Red Dot Design Award

Daikin New Zealand

Honored in the heat pump category of the fiscal 2012 Canstar Blue Most Satisfied Customers Awards

Daikin (China) Investment Co., Ltd.

Won a fiscal 2012 Trendsetting Brand Award from *Rayli* magazine

Selected Excellent Business Partner in the air conditioner category of the 2012 China Real Estate Developers Top 500

Daikin Air-Conditioning Technology (Shanghai), Ltd.

Awarded a rank of "A," the highest, in the Household Appliances Maintenance Awards, given by the Shanghai Household Appliances Association

ROTEX

HPSU Compact and GSU Compact received 2013 Plus X Awards

Social Contribution

Daikin America Inc.

Received Alabama Medium Manufacturer of the Year Award

Human Resources

▼ Recognition of Occupational Safety and Health

Daikin Industries (Thailand) Ltd.

Thai Ministry of Industry
Received the Prime Minister's Industry Award 2012, Safety Management

Daikin Airconditioning (Singapore) Pte.

Ranked BizSafe Star Level

Note: Ranked according to the implementation level of occupational safety and health.

▼ Recognition of Personnel Systems

Daikin Industries

Won in the Employee Diversity category of the 5th Diversity Management Awards, sponsored by the *Weekly Toyo Keizai*

Daikin Europe N.V.

Chosen for the Top Employers 2013 awards for the eighth year in a row

Daikin (China) Investment Co., Ltd.

Chosen one of the top 100 companies in China in 2012 in maximizing the strength of its human resources

Daikin Refrigeration (Suzhou) Co., Ltd.

Commended as a company with an advanced system for subsidizing employee housing

Daikin America Inc.

Received the Diversity Award from the Decatur-Morgan Chamber of Commerce

Information on Website

Information that could not fit in the printed version due to space limitation can be found on the following website.

http://www.daikin.com/csr/index.html

Printed version page	Content	Information on website
Pages 15–18	Environment	
	Low-Impact Products	Environmentally Conscious Design • Environmentally Conscious Design through Product Assessment • Improving Energy Efficiency of Air Conditioners
		Promoting the Use of Inverter Products
		Promoting the Use of Heat-Pump Type Space and Hot Water Heaters
		Products That Help Customers Save Energy
		Environmentally Conscious Fluorochemical Products • Reducing PFOA Emissions
		Low-Impact Refrigerants
		3R & Repair • Recycle, Reduce (Through Smaller and Lighter Products, and Less Packaging), Reuse, and Repair
	Low-Impact Production	Preventing Global Warming — Production, Transportation • Reducing Fluorocarbon Emissions • Reducing Energy-Induced CO_2 • Reducing CO_2 Emissions during Transportation • Green Heart Factories and Green Heart Offices • Saving Energy at Overseas Bases
		Recovering and Destroying Fluorocarbons from Customers' Air Conditioners
		Green Procurement • Compliance with Restrictions on Toxic Chemicals
		Compliance with J-Moss
		Management of Chemical Substances
		Reducing Waste and Water • Reducing Waste • Using Water Resources
	Environmental Management	Environmental Management System • Daikin Bases Certified for ISO 14001 • Global Environmental Meetings
		Environmental Audits
		Environmental Risk Management • Monitoring Environmental Standards • Measures for Soil and Groundwater Pollution • Storage and Treatment of PCBs
		Environmental Accounting
		Environmental Education
	Environmental Communication	Environmental Forums and Exhibits • Daikin Cooperates in Formation of Environmental Policy • Daikin Environmental Report • Environmental Ads
		Environmental Education and Awareness Activities
	Protecting Biodiversity	Protecting Biodiversity • Basic Policy of Protecting Biodiversity • Support for Environmental Protection in Shiretoko • Reforestation Project in Indonesia • Rejuvenation of community forests in Osaka Prefecture • Protection and Rejuvenation of Natural Forest on Coast near Daikin Global Training Center
		Biodiversity Awareness
	Other Environmental Reports	Overview of Environmental Impact
		Report by Business Site
		History of Environmental Activities
Pages 19–20	Quality and Customer Satisfaction	Product Quality and Safety • Product Quality Management Structure • Employee Education • Improving Quality During Development • Handling Product Accidents • Product Safety Voluntary Action Guidelines • Disclosing Product Information • Universal Design in Product Development
		Customer Satisfaction • Customer Response and Support System • Understanding and Reflecting Customer Needs • Using Customer Opinions • Employee Education • Support for Dealers • Training for Distributors
		Protecting Customer Information

Printed version page	Content	Information on website
Pages 21–22	Human Resources	Employee Evaluation and Treatment • Job Placement
		Workplace Diversity • Putting More Women into Management Positions • Hiring Women • Re-employment of Retired Employees • Employment of People with Disabilities • Promotion of Local Personnel at Overseas Bases • Diversity Education for Employees
		Work-Life Balance • Helping Employees Match Work Schedule with Lifestyle • Support for Childcare • Support for Family Care
		Labor Management Relations • Respecting the Rights of Workers • Dialogue with Employees
		Occupational Safety and Health • Occupational Safety and Health Management Structure • Employee Education and Training • Employee Health Management • Mental Health • Shortening Working Hours
		Fostering Human Resources • Education Systems • Passing on Skills • Spurring the Creation of Intellectual Property
Pages 23–24	Social Contribution	Promoting Art and Culture
		Promoting Sports
		Contributing to Education
		Environmental Contributions to Society
		A Good Corporate Citizen—Activities in Each Community • Helping Solve Social Issues • Building Trust with Communities • Interactions with Local Communities • Charitable Activities
—	CSR Management	CSR Promotion Activities • CSR Management Structure • CSR Promotion Plan
		Corporate Governance
		Compliance and Risk Management • Management Structure • Compliance and Risk Management Efforts • Education • Help-Line • Risk and Measures • Preparing for Earthquakes
		Free Competition and Fair Business Dealings
		Prohibiting Bribes
		Information Security
		Respect for Intellectual Property Rights
		Respect for Human Rights • Human Rights Education • Preventing Harassment
—	Responsibility to: Business Partners	Philosophy on Suppliers • Fair Dealings Management Structure
		Working Closely with Suppliers • Ensuring Legal Compliance in the Entire Supply Chain • Helping Suppliers Build Quality Management Systems • Raising Product Quality and Ensuring Safety Together with Suppliers • Business Partners Contribute to Plant Safety • Building a Relationship of Growth
		Green Procurement Guidelines
—	Responsibility to: Shareholders and Investors	For Shareholders • Maximizing Corporate Value • Distribution of Profit • Respect for Exercising Voting Rights
		Information Disclosure Policy • Disclosing Information in a Fair and Timely Manner

DAIKIN INDUSTRIES, LTD.

CSR & Global Environment Center

Umeda-Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka, 530-8323 Japan
PHONE: +81-6-6374-9304 FAX: +81-6-6373-4380

URL **http://www.daikin.com**

In all of us, a green heart

The Daikin Group Environmental Symbol

The symbol of the Earth in the shape of a green heart represents a determination on the part of each and every employee of Daikin to think green (think of the Earth and take care of the environment).

Symbol Showing Certification as a Company Supporting Employees' Childcare Efforts

Daikin Industries achieved the targets of its first action plan based on the Law for Measures to Support the Development of the Next Generation. For this, the company was certified by the Osaka Labour Bureau of the Ministry of Health, Labour and Welfare.

MIX
Paper from responsible sources
FSC™ C022784

VEGETABLE OIL INK

Published September 2013