Our Sustainability Report 2010

In May of this year, Panasonic Corporation announced its new midterm management plan. With this plan, we hope to take the lead in driving innovation inspired by everyday life, having the aim of realizing a sustainable, multipolar society.

With this commitment in mind, beginning this fiscal year we have changed the name of this report from the “Social and Environmental Report” to the “Sustainability Report.” In this report we describe the innovations Panasonic is working on hoping to contribute to sustainable growth. This report is a summary of the key elements of the e-Report, the e-version (PDF) of our Sustainability Report, which has more detailed information, and can be found on our CSR site.

Information about our business activities is provided in three reports, including this report, our ‘eco ideas’ Report, which gives details on our environmental activities, and our Annual Report, which provides financial information to our shareholders and investors.

The cover design, which is also used in our ‘eco ideas’ Report and our Annual Report, depicts our theme, “Growth Energy and Harmony,” and is meant to express the concept behind our approach in which we seek to integrate our environmental contribution and business growth.

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*This section contains information taken from ‘eco ideas’ Report 2010.
Living in harmony with the global environment is everyone’s responsibility. There is no place for a company that does not fully embrace this spirit.

Today, our world is facing a major turning point.

As global environmental problems become more serious, and as concerns about the depletion of resources and the rise of emerging countries increase, the shift to a sustainable, multipolar society has become a significant common issue worldwide, and people around the globe are taking specific action to make this a reality.

Under our midterm management plan, the “GP3 Plan,” covering fiscal years 2008 through 2010, we worked to accelerate our shift toward environmental sustainability management. Reducing the environmental impact of all of our business activities was a major theme of this plan, having the same priority as given to goals involving growth and earnings. Our commitment to society in our contribution to the environment was set out in our ‘eco ideas’ Declaration. This declaration divides our effort into three categories: ‘eco ideas’ for Products, producing energy-efficient products; ‘eco ideas’ for Manufacturing, dedicated to reducing CO₂ emissions across all manufacturing processes; and ‘eco ideas’ for Everybody, Everywhere, designed to spread environmental activities throughout the world. Our wide-ranging initiatives in these areas have enabled us to achieve a great many of our objectives. In particular, we promised to reduce global CO₂ emissions in production activities by 300,000 tons compared to fiscal 2007, and have managed to far exceed this midterm goal, achieving a reduction of 840,000 tons. We also held a “Panasonic Eco Relay,” in which employees, their families, and others in the community took part in environmental conservation activities in 39 countries and regions around the world. In two years, our initiatives have numbered over 1,000, indicating the steady progress we have made in our effort to live in harmony with the environment on a global scale.
We will spur innovation in society from within our day-to-day lives. By integrating our environmental contribution and business growth, we will realize a major paradigm shift.

When formulating our new management plan to begin in fiscal 2011, following the “GP3 Plan,” we thought that we had to build on our strengths to further evolve our environmental sustainability management. Panasonic’s business activities have always been carried out giving close attention to everyday life, and it has enabled us to build strong ties with our customers. These ties are our greatest asset. And, in working to expand our business globally, we have always sought to establish strong roots in the regions and countries in which we serve. In light of this, I believe that, moving forward, we must squarely address the task of realizing a sustainable society and take the lead in spurring innovation which takes hold in our daily lives to benefit the next generation of people around the world.

With this in mind, looking to the year 2018, the 100th anniversary of our founding, we have set our goal, which is to become the “No. 1 Green Innovation Company in the Electronics Industry.” To realize this vision, we will take a comprehensive approach to ensure that we make the environment central to all of our business activities, and allow for no exception.

Specifically, we will focus on two types of innovation. The ideas we provide through our “Green Life Innovation” will make possible a green lifestyle to enrich people’s lives, while our “Green Business Innovation” will focus on achieving a maximum reduction in the environmental impact of our own business activities, and we will offer this new way of doing business to society at large. We have also established new benchmarks to realize this vision. We will work to continually meet our “global excellence indexes,” including sales of at least 10 trillion yen and ROE of at least 10%. At the same time, we aim to become number one in the four “green indexes” taken as a whole. These green indexes include our contribution to reducing CO₂ emissions and our contribution to recycling resources.

As we worked out our 100th anniversary vision, we also completely renewed our ‘eco ideas’ Declaration, focusing on ‘eco ideas’ for Lifestyles, aiming to promote lifestyles with virtually zero CO₂ emissions all around the world, and ‘eco ideas’ for Business-styles, aiming to create and pursue a business-style which makes the best use of resources and energy. Making a new commitment to society, we will always implement and pursue these ideas.

In May of this year, we announced our new midterm management plan, “Green Transformation 2012” (GT12), which is the first step towards achieving this vision. With the addition of Sanyo Electric Co., Ltd., the new Panasonic Group is working to build a foundation to realize a major paradigm shift and become a Green Innovation Company.
In order to make a contribution closely tied to the everyday lives of the people in the various countries and regions, we will put to use the individual traits and abilities of our diverse workforce worldwide.

Organizational growth and business growth are nothing more than the sum of the growth of individuals. To contribute to the development of an increasingly multipolar global society, it is essential that we nurture a corporate culture where a greater diversity of people than in the past interact, appreciate one another’s values, compete with one another, and grow ever stronger. At Panasonic, this kind of diversity is actively being promoted, describing it as “irimajiru,” or “mixing together.” Panasonic has nearly 380,000 employees around the world, and they are people having unique individual personalities and abilities, people from a variety of backgrounds in terms of country, region, culture and history, people of many different nationalities, varying in age, men and women. Our hope is that as we all extend ourselves beyond the boundaries of our nation and organization, actively exchange ideas with each other, and renew ourselves, we will become a company capable of providing innovative products and services to customers around the world.

Based on our basic way of thinking regarding personnel development—“Develop people before making products”—we aim to continue to pursue diversity in our employees that is worthy of Panasonic.

As a “public entity of society,” we will continue working to contribute to sustainable growth in society through our manufacturing activities, which are our core activities.

Long before the word CSR was in wide use, Panasonic’s activities were already guided by our management philosophy which states that a company is a public entity of society. Our founder, Konosuke Matsushita, often said that, “Companies and society are not separable, but rather are a single entity.” Companies that think of themselves as acting separately from society, will take a passive attitude, and simply follow along with the laws, rules and other expectations of society. But if companies realize that they are also truly members of society, they will ask themselves what is really right for society, and how they should best behave. And they will begin to sincerely listen to society and learn from society, and will spontaneously take the initiative and act. We believe that this is what having a “corporate conscience” means. I hope that all employees at Panasonic will look into their own “corporate consciences,” and act in ways that contribute to sustainable growth in society. By always behaving with this kind of sincerity, the Panasonic Group aims to continue to contribute to society and be trusted by society.

Fumio Ohtsubo
President
Panasonic Corporation
Panasonic CSR Management

“Public Entity of Society”

We at Panasonic have always followed our unchanging management philosophy of “contributing to society through our business activities.” This philosophy serves as the basis of all our operations. And, as we aim to become the “No. 1 Green Innovation Company in the Electronics Industry” moving toward the 100th anniversary of our founding, we will make our utmost efforts to bring forth innovation. At our company, we also adhere to a fundamental management principle of “Start anew every day.” Konosuke Matsushita, our founder, once said, “Actual policies and measures adopted at a given time as we put our management philosophy into practice in light of existing business conditions... have to change with the times. In other words, we must “start anew every day.” All of our employees across the globe are working together embracing the spirit of innovation reflected in the philosophy of “Start anew every day,” a spirit which has been a part of us ever since the founding.

“Start Anew Every Day”

“A good management philosophy should basically be workable in any age. However, actual policies and measures adopted at a given time as we put our management philosophy into practice in light of existing business conditions, are not unchangeable. On the contrary, they have to change with the times. In other words, we must start anew every day. Our society is constantly changing and shifting, and in order to continue to develop in the midst of such change, companies must also adapt to changes in society, and even move one step ahead of the times.”

“My Management Philosophy” (Konosuke Matsushita) From the chapter, “Adapting to Changing Times”

Example #1: Innovation born of the desire to provide people with a more modern lifestyle—“Develop an electric iron that even a fledgling teacher can afford!”

It was in 1927. Along with the radio, the electric iron was becoming more popular as a leading-edge consumer product in an increasingly modern age. But irons were expensive, and affordable ones were usually of inferior quality. Our efforts to develop a better, less expensive iron started with the thought that even a fledgling teacher should be able to go to work in a neatly pressed shirt. First, we employed a more solidly built mechanism for the electric heating component which had often failed. We also designed this iron so that it could be easily repaired should it break. Mass production methods, still rare in Japan at that time, were used to reduce costs. After just three months in development, the Super Electric Iron went on sale. Irons at the time cost between 5 and 8 yen for domestically manufactured models, with imports costing as much as 15 yen. But selling at just 3.2 yen, the Super Electric Iron became a huge hit, acclaimed not only for its low price, but also for its superior quality. After numerous improvements based on customer feedback, in 1930, the iron was officially designated as a “product of excellence” by the Ministry of Commerce and Industry (Currently the Ministry of Economy, Trade and Industry).

Example #2: Innovation born of the desire to let everyone experience the convenience provided by a bicycle—“Even the elderly can ride an electric bicycle with ease.”

In his younger days, the founder of Panasonic worked as an apprentice in a bicycle shop, and there he developed a special attachment to bicycles. After rolling out his long wished-for, first bicycle in 1952, he continued to think about what the company could do as an electric manufacturer to contribute to the progress of bicycles, and in 1980, Japan’s first electric bicycle finally went on sale. Mr. Matsushita, who was already over eighty at that time, saw that there was a future for the electric bicycle, as it was easy to ride for even an elderly person like himself. Unlike today’s power-assisted bicycles, this first electric bicycle ran on electric power alone, and required a license to operate, limiting its potential demand. But research continued, and technology accumulated over the years finally came to fruition with the advent of the power-assisted bicycle. Today, over half of the power-assisted bicycles sold in Japan are made by Panasonic.
Panasonic is striving to bring forth two types of innovation as it works to realize its vision for the 100th anniversary of our founding. One is Green Life Innovation, which aims to make green lifestyles a reality to enrich people’s lives, made possible through ideas that we propose for better living. The second is Green Business Innovation, which seeks to implement and offer an optimum green business-style. Through these activities, we will work to contribute to the progress and development of society and enrich people’s lives.

**Aiming to Become the No. 1 Green Innovation Company in the Electronics Industry**

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**Public Entity of Society**

Contributing to the progress and development of society and enriching people’s lives through manufacturing

**Vision Looking to the 100th Anniversary of Our Founding**

No. 1 Green Innovation Company in the Electronics Industry

Make the ‘environment’ central to all of our business activities and bring forth innovation

**Green Life Innovation**

Realizing Green Lifestyles to Enrich People’s Lives

- Offer better living which is sustainable and which provides people around the world with a sense of security, comfort and joy
- Living with Virtually Zero CO2 Emissions for the Entire Home and the Entire Building
- Living Surrounded by Recycling-oriented Products
- Evolving and Expansion of Eco-cars
- Wider Use of Eco-conscious Products in Emerging Countries

**Green Business Innovation**

Implementing & Offering an Optimum Green Business-style

- Pursue Ideal Manufacturing Operations
- Zero Cost, Zero Time, Zero Inventory + Zero Emissions
- Minimizing CO2 Emissions in the Entire Business Process
- Recycling-oriented Manufacturing
- Pursue a Green Work-style
- Offering Environmental Solutions Which Make the Most of Our Own Expertise

Evolving and Expansion of Eco-cars

Living Surrounded by Recycling-oriented Products

Minimizing CO2 Emissions in the Entire Business Process

Pursue a Green Work-style

Offering Environmental Solutions Which Make the Most of Our Own Expertise

Living with Virtually Zero CO2 Emissions for the Entire Home and the Entire Building

Wider Use of Eco-conscious Products in Emerging Countries
Environmental Vision and Strategy

Management Policy for fiscal 2011 marks a major turning point

On January 8, 2010, President Ohitsubo put forth a clear statement of Panasonic’s new vision: To become the No. 1 Green Innovation Company in the Electronics Industry by 2018 (fiscal 2019), when Panasonic will celebrate the 100th anniversary of its founding. It was a very significant message from top management as Mr. Ohitsubo reviewed Panasonic’s activities over the last nine years and launched a new strategy toward 2018.

Vision Looking to the 100th Anniversary of Our Founding

In 2001, Panasonic formulated its Green Plan 2010, an environmental action plan for the creation of a sustainable social system and lifestyle. In creating this plan, we first set our aspirations for fiscal 2011 and then clearly defined specific targets with the backcasting method. The plan covered the full gamut of environmental activities, ranging from those to be taken at the stages of product development and manufacturing to other items related to communications with stakeholders. We have been systematically implementing the plan, while regularly reviewing it to set higher targets as required.

Review of the GP3 Plan (three-year plan to 2009) and accomplishment of Green Plan 2010

In October 2007 Panasonic marked a major turning point by deciding to incorporate the concept of environmental sustainability management into the entire company’s management plan and thereby further accelerate its environmental management already regarded important at that time. The “GP3 Plan” was a midterm management plan designed to put Panasonic in a position take on the challenge to achieve global excellence through steady growth with profitability. In this plan, we introduced the idea of achieving both business growth and the reduction of our environmental impact. Focusing on the prevention of global warming as an urgent issue, we crystallized initiatives centering on CO2 reduction into an ‘eco ideas’ Declaration consisting of three simple ‘eco ideas’, and incorporated the ideas into the Green Plan 2010.

Our ‘eco ideas’ for Products is based on our unrelenting efforts to improve energy efficiency, where we worked to increase the percentage of industry-leading energy-efficient products and to minimize the number of products with low energy efficiency. In April 2009, we opened our ‘eco ideas’ House, where we are proposing a lifestyle with virtually zero CO2 emissions throughout the entire house, which can be actually realized in three to five years into the future.

Our ‘eco ideas’ for Manufacturing is based on our commitment to reduce total CO2 emissions in production activities while increasing production. In fiscal 2007, the total CO2 emissions from all our global manufacturing sites came to 3.98 million tons and we set the target of reducing emissions by 300 thousand tons over three years. To this end, we reviewed all our related business activities and implemented reduction strategies proactively. Due to the steady reduction efforts made at our manufacturing sites, we were able to reduce CO2 emissions by 840 thousand tons, far exceeding the target, albeit the rapid economic downturn in 2008 played a partial role.

For our ‘eco ideas’ for Everybody, Everywhere, we promoted a Global Eco Project, in which each of our business entities across the world undertook various environmental projects, including the development of products tailored to regional needs. Based on our many initiatives, we were able to achieve the targets for fiscal 2010.

Through continuous implementation of a wide range of initiatives during the nine years since 2001, we have been able to achieve almost all the targets set forth in the Green Plan 2010 one year earlier than planned, thereby fulfilling the aim we set in the formulation of the Plan. Thanks to the group-wide concerted efforts, these last nine years have been most fruitful, positioning us for a further leap into a new phase.

Vision looking to the 100th anniversary of our founding and the “GT12” plan

We have established “green indexes” and “global excellence indexes” with specific targets to realize our vision for our 100th anniversary. We will work hard to always meet our “global excellence indexes,” numerical management targets, and at the same time we aim to become industry No.1 in “green indexes” as a whole, which consist of four items: “contribution to reducing CO2 emissions,” “contribution to recycling resources,” “increasing the size of the energy systems business,” and “achieving a higher sales percentage of No.1 eco-conscious products.”

- **Indexes of No. 1 Green Innovation Company in the Electronics industry**

  - **Be industry No.1 in green indexes**
    - Contribution to reducing CO2 emissions
    - Contribution to recycling resources
    - Size of energy systems business
    - Percentage of sales for No.1 eco-conscious products
  
  - **Always meet global excellence indexes**
    - Sales: 10 trillion yen or more
    - Operating profit ratio: 10% or more
    - ROE: 10% or more
    - Having multiple key products with a No.1 global market share

We have taken a step forward focusing on reducing CO2 emissions and have set broader targets including resource recycling and building an Energy Systems Business. Further, we have expanded again our anti-global warming measures:
We have extended the scope of our target from CO₂ emissions reduction in our production activities to contribution in reducing CO₂ emissions across all our business activities, including making our products more energy-efficient, which will in turn reduce emissions from their use by our customers.

The first step toward the achievement of the vision for our 100th anniversary is the “Green Transformation 2012” (GT12). In particular fiscal 2011 is the first year of the “GT12” plan and important for the achievement of the vision. Within fiscal 2011, we will newly formulate an environmental action plan to replace the Green Plan 2010 toward fiscal 2019. We will announce our new plan within fiscal 2011 and start to work on it.

**Contribution to reducing CO₂ emissions**
In accordance with an increase in demand in the markets of emerging economies, our global total CO₂ emissions will inevitably increase. Nonetheless, at the Hokkaido Toyako Summit, world leaders agreed to reduce global CO₂ emissions by half by 2050, necessitating an actual decrease. To contribute to this global goal, we will implement measures to bring about a CO₂ emissions peak both from our production activities and from the use of our products, and decrease our emissions thereafter. In order to measure progress, we set a new goal: "size of contribution in reducing CO₂ emissions," which is defined as the amount of CO₂ emissions reduced as a result of specific measures compared to the estimated amount of increased CO₂ emissions if no measures were taken. Through this initiative, we can show our continuous commitment to CO₂ emissions reduction in all our business activities and, by pursuing it as best we can, we will eventually be able to reduce total emissions from our entire operations, while further developing our business. By fiscal 2019 we aim to reduce our CO₂ emissions by half from the estimated amount assuming no measures were taken after fiscal 2006, a base year, or approximately 120 million tons. During the three-year period for the “GT12” plan, we will strive to increase the amount of contribution in reducing CO₂ emissions to 50 million tons.

**Contribution to recycling resources**
With the rapid growth in the emerging economies, resource recycling is increasingly attracting the attention of the public in addition to responding to global warming. Therefore we have added “contribution to recycling resources” through recycling-oriented manufacturing to our targets. Accordingly, we will implement comprehensive measures throughout all our manufacturing processes, from the procurement of materials to recycling. In the design and procurement stages, we will enhance the level of 3R design (Reduce, Reuse, and Recycle) and promote the use of recycled resources. In production and product disposal stages at our factories, we will accelerate the development of recycling technologies and work hard to pursue zero emissions.

Toward fiscal 2019, we will minimize the amount of total resources used, and maximize the use of recycled materials as well as the amount of resources recycled from waste products. In addition, we have established a target of decreasing waste from our production activities to zero. In the “GT12” plan, we aim to increase the ratio of recycled resources used to total resources used to more than 12% and to increase the recycling rate of waste at plants to 99% or higher.

### Contribution in recycling resources

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<tr>
<th>Total recycled resources used (A)</th>
<th>Make most of recycled resources usage</th>
<th>Pursue zero emissions at plants</th>
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<tr>
<td>Total resources used (B)</td>
<td>&gt; 12%</td>
<td>≥ 99%</td>
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<tr>
<td>Total resources used (C)</td>
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<td>Recycled materials</td>
<td>Develop 3R design &amp; recycling technologies</td>
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<td>Waste produced at plants</td>
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**Energy Systems Business**
To integrate environmental contribution into business growth, we have positioned the Energy Systems Business as a flagship business within our Group and intend to achieve a high annual growth rate of 16% for this business. We will actively engage in “energy creation” through photovoltaic power generation systems and fuel cells, “energy storage” using the lithium ion batteries, and energy management that connects products and systems designed for “energy saving,” “energy creation” and “energy storage” optimizing energy control. In addition, we will promote eco car-related businesses, and fully utilize the synergy created by SANYO Electric’s addition to our Group. In this way, we will work hard to provide energy solutions.

Toward the attainment of our 100th anniversary vision, we have renewed our ‘eco ideas’ Declaration to focus on ‘eco ideas’ for Lifestyles and ‘eco ideas’ for Business-styles. We will make the “environment” central to all of our business activities and spur innovation. As we pursue our new vision, we aspire to a management where the more our business grows, the greater we contribute to the environment, and the more we contribute to the environment, the more our business grows.

### New ‘eco ideas’ Declaration

**The Panasonic Group strives to be a Green Innovation Company with a global perspective**

**‘eco ideas’ for Lifestyles**
We will promote lifestyles with virtually zero CO₂ emissions all throughout the world

**‘eco ideas’ for Business-styles**
We will create and pursue a business-style which makes the best use of resources and energy
Panasonic has been globally manufacturing products in consideration of the environment from the following three viewpoints: prevention of global warming; effective use of resources; and management of chemical substances. Over the past three years, we have been committed to creating over 200 models to be classified as Superior GPs (products that have achieved the industry’s top-class environmental performance), and have actually developed 395 Superior GPs, nearly double the target. In the Japanese market, we worked to increase the ratio of industry-leading energy-efficient products to 30% while reducing the ratio of products with lower energy efficiency in reference to the Energy Conservation Performance Catalog.* As a result, the ratio of industry-leading energy-efficient products came to 23% and that of products with lower energy efficiency decreased to nearly zero. We will continue to make efforts in this regard.

* Published twice a year (summer and winter) by the Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry of Japan.

We will promote lifestyles with virtually zero CO₂ emissions all throughout the world.
Initiatives for Green Products

Green Product accreditation criteria and assessment system

Panasonic has been utilizing an environmental assessment system for its products, under which we assess an environmental impact of our products right from their planning and design stages. Based on the assessment results, we accredit products and services with higher environmental performance as Green Products (GPs). Furthermore, we accredit products that have achieved top environmental performance in the industry as Superior GPs and trend-setting products toward achieving a sustainable society as Super GPs.

Green Product Accreditation Criteria (Fiscal 2010)

- Super GPs (Products that made significant progress in environmental performance and set a new trend towards a sustainable society)
- Superior GPs (Products that have realized the industry’s top-class environmental performance)
- Green Products (GPs) (Products and services that satisfy at least one of the following four criteria items: prevention of global warming, effective utilization of resources, management of chemical substances, and environmental creativity)

Green Product assessment system

In the Green Product Accreditation System, we assess the environmental performance in terms of the prevention of global warming and the effective utilization of resources by making comparisons not only among our own products but also with the products of other companies. In addition, we are endeavoring to appropriately manage chemical substances that might adversely affect the environment.

In fiscal 2011, we will enhance Green Product Accreditation System to add more competitive edge to our products.

Life cycle assessment of environmental impacts

Panasonic’s Product Environmental Assessment implements the life cycle assessment (LCA) of environmental impacts that its products might give on the environment. Specifically, we analyze and evaluate the environmental impacts of our products such as CO2 emissions throughout their life cycles, from the procurement of materials, manufacturing, transportation, and use to disposal. In the LCA, we calculate the improvements (in CO2 equivalent) made through various energy conservation measures seeking improvement of global warming, and compare the evaluation data of the latest models of our major products with the data of the fiscal 2001 models (see pages 10 and 11). As shown in the following LCA example, CO2 emissions from products tend to be largest in the use stage (in operation and standby modes) and we can therefore maximize CO2 emissions reduction in the lifecycles of our products by implementing drastic energy conservation measures targeting their use. Moreover, we can also reduce CO2 emissions through the downsizing of materials used for the products and by increasing the energy efficiency of our factories during manufacturing. We thus use LCA not only to identify the improvement effects at each of the lifecycle stages but also to make further improvements.

For assessment methods for the use stage, we comply with the Act on the Rational Use of Energy of Japan and the industry standards as required.

Example of LCA (Tilted-drum washer/dryer)
Energy Conservation in Products

Initiatives for energy conservation

As measures to increase the energy efficiency of our products, we are endeavoring to improve their power efficiency in use and standby modes by reviewing their basic circuitry. In addition, we are adopting new technologies, such as heat pumps and LEDs, and improving the heat insulation performance of our products through the use of vacuum insulating materials.

In fiscal 2010, we developed ECO NAVI (eco-navigation) functionality to increase the energy efficiency of our products. Equipped with this function, air conditioners will optimally control the airflow volume and room temperature by identifying the positions of people, furniture, and the volume of sunshine for the most energy-efficient operation. Washer/dryers will conserve energy and water by discerning the amount of clothes and how soiled they are. Vacuum cleaners will control their suction power by discerning the amount of house dust to save power consumption. Lighting equipment will optimally control their luminance according to the brightness of the room for energy conservation. In addition, we produce TVs, refrigerators, rice cookers, dish washer/dryers, heated toilet seats with warm water sprays, A La Uno (self-cleaning toilet), and Eco Cute (water heater) equipped with this function. As of April 2010, a total of 11 product items are equipped in this way.

Plasma TV

By adopting the newly developed black panel with almost doubled luminous efficiency*, we have achieved an annual power consumption of 154 kWh.

* Compared with 2009 panel only.

[LCA on CO₂ emissions]

Entire life cycle: Reduced by 62%
  • Operation: Reduced by 69% due to a decrease in power consumption
  • Standby: Reduced by 96% due to a decrease in power consumption
  • Materials: Reduced by 41% due to weight reduction and more efficient manufacturing

Refrigerator

By developing a highly efficient compressor and cooling device and adopting a high-performance vacuum insulator ‘U-Vacua IV’, we have achieved an annual power consumption of 360 kWh.

[LCA on CO₂ emissions]

Entire life cycle: Reduced by 44%
  • Operation: Reduced by 47% due to a decrease in power consumption

Tilted-drum washer/dryer

By adopting the heat pump drying method that uses atmospheric heat, we have achieved power consumption of 860 Wh for drying in the standard cleaning mode.

[LCA on CO₂ emissions]

Entire life cycle: Reduced by 56% (Calculated with the washing/drying rating capacity of 6 kg)
  • Operation: Reduced by 70% due to a decrease in power consumption
  • Reduced by 21% due to water saving
  • Materials: Reduced by 14% due to weight reduction

Fiscal 2001 model: TH-42PM30
Fiscal 2011 model: TH-P42G2
Fiscal 2001 model: NA-SK600
Fiscal 2010 model: NA-VR5600
Fiscal 2001 model: NR-E46W2
Fiscal 2010 model: NR-F554T
Fiscal 2011 model: TH-P42G2z
Fiscal 2010 model: TH-P42G2
Fiscal 2001 model: NA-8K600
Fiscal 2010 model: NA-VR5600
By adopting our unique heat release technology, we have achieved the industry’s No. 1 luminance of 480 lm and the industry’s lightest weight of 40 g.*
* For small light bulb types (E17 cap) as of March 5, 2010.

**[LCA on CO₂ emissions]**
Entire life cycle: Reduced by 83% (comparison for same hours of use)
- Operation: Reduced by 83% due to a decrease in power consumption
- CO₂ emissions during operation account for 99.5% of the total (for fiscal 2011 model)

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**LED light bulb**

**Digital cordless phone**

By improving power efficiency by replacing the regulator-type power source with a DC/DC converter-type, we have achieved power consumption of 0.45W in standby mode.

**[LCA on CO₂ emissions]**
Entire life cycle: Reduced by 47%
- Operation: Reduced by 49% due to a decrease in power consumption
- Standby: Reduced by 49% due to a decrease in power consumption
- Materials: Reduced by 44% due to weight reduction

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**Air conditioner**

By adopting a unique hybrid heat exchanger and compressor, we have achieved the industry’s top-class seasonal power consumption of 1,272 kWh.*
* For 4.0 kW-class air conditioners for household use sold in Japan (as of October 8, 2009).

**[LCA on CO₂ emissions]**
Entire life cycle: Reduced by 24%
- Operation: Reduced by 24% due to a decrease in power consumption

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**Heated toilet seat with warm water sprays**

By adopting the “double sensor control function” and the unique “double instant heating” method, we have achieved the industry’s No. 1 energy conservation* (energy conservation achievement rate of 180% in the instant heating method).

**[LCA on CO₂ emissions]**
Entire life cycle: Reduced by 68%
- Operation: Reduced by 70% due to a decrease in power consumption
- Standby: Reduced by 75% due to a decrease in power consumption

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**Fiscal 2001 model: 40-watt mini krypton lamp (LDS100V36WWK)**
**Fiscal 2011 model: LED light bulb (LDA6D-E17)**
**Fiscal 2001 model: DL-ST30**
**Fiscal 2010 model: DL-WB60**
**Fiscal 2005 model: VE-SV01CL**
**Fiscal 2010 model: KX-TG5511**
**Energy Creation**

**Approach to energy creation**

As a challenge into a new area, Panasonic is proactively conducting energy creation business, taking one step forward from making its products more energy-efficient. Specifically, in addition to reducing energy use and CO₂ emissions, we are developing household fuel cells and solar power generation systems as means to create necessary energy by utilizing low-emission power generation methods.

**Energy-creating devices**

Fuel cells are highly energy-efficient and energy-saving because they generate electricity through a chemical reaction between hydrogen extracted from town gas and oxygen in the air, and heat water with the heat generated from the reaction at the same time. While CO₂ is emitted during operations because town gas is used, this system has a feature that can stably generate electricity regardless of the season, weather, or time.

In May 2009, we became the first company in the world to sell a household fuel cell cogeneration system (named ENE FARM) via a gas company and shipped 2,100 units by February 2010. The power generation efficiency is 35% HHV*1 (world’s top level*) at the maximum, and the total energy conversion efficiency, including that of hot water supply is 85% HHV. Compared with electricity supply from a thermal power station and heat supply from a water heater using town gas, a house can expect saving about 1.5 tons of CO₂ emissions per year*3 by using this system.

*1 Higher Heating Value: Efficiency calculation including the condensation heat of vapor and the latent heat of vaporization
*2 As of April 2009 (surveyed by Panasonic).
*3 Estimated by Panasonic by using the following CO₂ conversion factors:
Gas: 2.29 kg-CO₂/m³ and electricity: 0.69 kg-CO₂/kWh (by thermal power generation).

**Energy Storage**

**Approach to energy storage**

‘Energy-storing’ devices, in which we can store energy and use it when needed, enable stable energy supplies. These devices are indispensable for the efficient use of renewable energy, such as solar power generation and wind power generation in particular. Panasonic positions lithium ion batteries as a core product for its ‘energy storage’ business, and is working on products to have even higher capacities and developing lithium ion battery modules.

**Energy-storing devices**

With greater expectations for the use of renewable energy sources such as the use of household solar power generation systems and the practical use of electric vehicles, it is critical to develop energy storage systems. In particular, power storage systems using lithium ion batteries are greatly expected to be put into practical use because they are lighter and have higher capacity compared with products using other types of rechargeable batteries.

Panasonic has been developing and mass-producing 18650-size lithium ion batteries (18 mm diameter x 65 mm height) with the industry’s top-level capacity for its size,* which are generally used in notebook PCs. We have also developed a 1.5 kWh-type battery module utilizing 18650-size lithium ion batteries. Connected in series or parallel, the battery modules can be applied to the environmental energy field as various power sources including power storage systems for solar power generation and fuel cells, and electricity for electric vehicles.

* As of December 2009 (surveyed by Panasonic).
Virtually Zero CO₂ Emissions throughout the Entire House

Proposing a lifestyle with virtually zero CO₂ emissions through energy saving, creation, storage, and by linking devices

Following economic growth and increase in the number of households, it is feared that CO₂ emissions from the household sector will rise even more. Panasonic provides a range of products for homes, from various home appliances to the houses themselves. In order to effectively reduce CO₂ emissions from households, we believe it is important to implement comprehensive measures from individual devices to houses themselves, for which Panasonic can help consumers in a unique way that no other company can do. We call this unique way “throughout the entire house.”

We promote the reduction of CO₂ emissions throughout the entire house by energy saving, creation, and storage. As shown in the figure below, which is an estimation based on a model family, it is possible to reduce CO₂ emissions from a household by 65% relative to the 1990 level in three to five years from now by increasing the energy efficiency of devices and reducing power consumption from the entire house. For energy yet necessary even after saving (which is equivalent to the remaining 35% of CO₂ emissions), a combination of energy creation through fuel cells, solar power generation, and energy storage through household lithium ion accumulator batteries will be supplied to make the CO₂ emissions throughout the entire house virtually zero. We call this concept “virtually zero CO₂ emissions throughout the entire house.” To achieve this idea, we also propose to link the devices used in the house with a home energy management system (HEMS) for the more efficient use of devices, and by an in-house AC/DC hybrid wiring system for more efficient power use. Networking all the appliances and equipment in a house can help achieve virtually zero CO₂ emissions throughout the entire house.

Concept of virtually zero CO₂ emissions throughout the entire house

In-house AC/DC hybrid wiring system

In addition to the already commercialized HEMS, an in-house AC/DC hybrid wiring system which links devices within the home, is currently under development.

There are two types of electricity: one is AC electricity transmitted from power companies to households and used through electric outlets; the other is DC electricity produced by solar power generation facilities and fuel cells. AC electricity has benefits such as small loss during transmission and safety in the installation of necessary equipment, but because some devices such as TVs, PCs, and LED lighting are powered by DC electricity, there is a need to convert from AC to DC, which causes energy loss. We have focused on the fact that fuel cells, solar power generation, and accumulator batteries generate and store energy by DC, and are developing an in-house AC/DC hybrid wiring system which allows utilization of generated DC electricity without converting it to AC. We will achieve further energy conservation through supplying electricity from power companies to devices powered by AC electricity, and electricity from fuel cells, solar power generation facilities, and batteries to devices powered by DC electricity.
‘eco ideas’ for Business-styles

We will create and pursue a business-style which makes the best use of resources and energy.

Panasonic has been upholding the goal of reducing total CO₂ emissions from its production activities by 0.3 million tons on a global scale by implementing relevant measures under its three-year mid-term management plan. In fiscal 2010 we reduced the emissions by 0.33 million tons through drastic reduction measures and were thereby able to reduce the emissions by 0.84 million tons in total over the three years, far exceeding the target.

In and after fiscal 2011, we will expand our company-wide CO₂ emission reduction activities to our non-manufacturing divisions, such as research laboratories and offices and also to the logistics divisions. We will foster activities focusing not only on CO₂ reduction but also on the recycling of resources, in order to achieve a business style that will enable us to reduce environmental impacts in all our manufacturing processes—while at the same time achieving higher productivity.

Note: CO₂ emission factor (for electricity in Japan): 0.425 kg CO₂/kWh for fiscal 2007, and 0.410 kg CO₂/kWh for fiscal 2008 onwards, due to the time lag between the announcement of the values and the formulation of the plan by Panasonic. CO₂ emissions in fiscal 2007 would be 3.93 million tons if calculated based on the factor of 0.41 kg CO₂/kWh. Of the reduction achieved by the measures implemented in fiscal 2008 (0.29 million tons), the improvement in the emission factor accounted for 0.05 million tons. * Estimated value compared to that without measures, including reduction effect from integration/closure of manufacturing bases.
Initiatives for Green Factories

Vision for Green Factories (GFs)

Panasonic is committed to minimizing both its input and emissions, mainly by taking anti-global warming measures, reducing waste including revenue-generating waste and reducing the release and transfer of chemical substances. We are determined to make an environmental contribution and at the same time enhance our management structure, towards transforming all our factories into Green Factories.

GF Accreditation System

Panasonic introduced the GF Accreditation System to evaluate measures implemented by its factories and certify those that have earned certain scores as GFs. Specifically, the factories’ achievements are graded using numerical points in terms of the three mandatory performance targets (prevention of global warming, reduction of total waste generation, and reduction of the release and transfer of chemical substances), as well as in terms of a voluntary target of effective utilization of water.

Under this system, which was introduced in fiscal 2006, a total of 238 factories were accredited as GFs globally in fiscal 2010, with the GF accreditation rate reaching 94%, far exceeding the target of 82%. Also, we globally accredited factories that have implemented top-class environmental activities of our factories in the region by appreciating excellent GF activities and sharing relevant know-how and information.

We are determined to make an environmental contribution and at the same time enhance our management structure, towards transforming all our factories into Green Factories.

<table>
<thead>
<tr>
<th>Items</th>
<th>Indicators</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of global warming</td>
<td>Amount of CO₂ emissions</td>
<td>Amount of total CO₂ emissions</td>
</tr>
<tr>
<td>Reduction of total waste generation</td>
<td>Total waste reduction rate</td>
<td>Amount of waste generation reduced in current fiscal year</td>
</tr>
<tr>
<td></td>
<td>Amount of waste generation in previous fiscal year</td>
<td>Amount of resources recycled</td>
</tr>
<tr>
<td></td>
<td>Amount of resources recycled</td>
<td>Amount of final disposal</td>
</tr>
<tr>
<td>Reduction of chemical substances release/transfer</td>
<td>Reduction rate of release/transfer of Key Reduction-Target Substances</td>
<td>Amount of released/transfered amount of Key Reduction-Target Substances in current fiscal year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Amount of released/transfered amount of Key Reduction-Target Substances in a base year</td>
</tr>
<tr>
<td>Effective utilization of water</td>
<td>Reduction rate of water consumption</td>
<td>Amount of water consumption reduced in current financial year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount of water consumption in previous fiscal year</td>
</tr>
</tbody>
</table>

GF Assessment System

In fiscal 2011, in light of the fact that the target of “90% or higher GF accreditation rate” was achieved for two years in a row, we upgraded the GF Accreditation System to the GF Assessment System, aiming to further improve the standard of measures implemented at all our factories.

Under the system, the factories evaluate themselves with regards to 15 environmental activity items classified into five groups on a one-to-five scale, thereby identifying their own progress and comparing it with that of other factories. We will make efforts to score at least “four” on average across the entire Group by fiscal 2013.

<table>
<thead>
<tr>
<th>Indicators for GF assessment system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CO₂ emissions business plan achievement ratio</td>
</tr>
<tr>
<td>2. Chemical substances total reduction ratio</td>
</tr>
<tr>
<td>3. Recycling ratio</td>
</tr>
<tr>
<td>4. CO₂ emissions business plan achievement ratio per basic unit of production</td>
</tr>
<tr>
<td>5. Chemical substances improvement ratio per basic unit of production (impact on human health &amp; environment)</td>
</tr>
<tr>
<td>6. Improvement ratio of generated amount of waste &amp; revenue-generating valuables per basic unit of production</td>
</tr>
<tr>
<td>7. Water consumption improvement ratio per basic unit of production (living water consumption)</td>
</tr>
<tr>
<td>8. Chemical substances release &amp; transfer reduction ratio</td>
</tr>
<tr>
<td>9. Waste &amp; valuables generation reduction ratio</td>
</tr>
<tr>
<td>10. Water consumption reduction ratio</td>
</tr>
<tr>
<td>11. Appropriate management of chemical substances</td>
</tr>
<tr>
<td>12. Appropriate management of waste</td>
</tr>
<tr>
<td>13. Air &amp; water quality conservation</td>
</tr>
<tr>
<td>14. HR development</td>
</tr>
<tr>
<td>15. Promotion of environmental activities</td>
</tr>
</tbody>
</table>

GF competition in China

In China and Northeast Asia, we have been conducting an annual GF competition since fiscal 2008. This competition is designed to improve the average standards of the environmental measures of our factories in the region by appreciating excellent GF activities and sharing relevant information internally. In the four fields of CO₂, waste, chemical substances, and water, excellent activities are commended in the competition and are included in a collection of GF competition examples. Details are distributed to all our factories in China to help employees share relevant know-how and information.

<table>
<thead>
<tr>
<th>GF competitions held in China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of applications</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>CO₂</td>
</tr>
<tr>
<td>Waste</td>
</tr>
<tr>
<td>Chemical substances</td>
</tr>
<tr>
<td>Water</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

The examples are distributed to all factories in China.
Energy Conservation and Global Warming Prevention at Factories

Making a concerted effort for higher energy efficiency

In its medium-term management plan, Panasonic set out the target of reducing its global CO2 emissions by 300,000 tons (equivalent to about 7.5% of total) from the fiscal 2007 level in fiscal 2010 and has been striving to attain this target.

Specifically, we established the Corporate CO2 Emissions Reduction Promoting Committee, which manages progress toward the achievement of the target on a monthly basis. Through this committee, we are promoting the following measures: (1) visualization of energy consumption by promoting the METAGEJI* initiative; (2) energy conservation diagnoses by an expert team; (3) innovation of production processes; and (4) group-wide sharing of reduction examples.

We achieved the target one year earlier than planned in fiscal 2009, and in fiscal 2010 we set a higher target and accelerated the measures to further enhance our energy conservation system.

* Visualizing energy consumption and implementing measurable reduction initiatives by introducing measurement instruments such as meters and gauges

Establishment of the Corporate CO2 Emissions Reduction Promoting Committee

We established the Corporate CO2 Emissions Reduction Promoting Committee, which is chaired by the Director responsible for the environment, and comprises the Directors in charge of manufacturing at business domain companies. This committee checks the monthly progress made in the reduction of CO2 emissions, examines related problems, and ensures the implementation of necessary measures.

In addition, each business domain company has a similar committee to share information promptly among their factories across the world and implement the necessary measures. We also established the Energy Conservation Technical Support Team under the committee to support common issues in each factory. Moreover, in April 2010, we launched the Corporate CO2 Emissions Reduction Contribution Committee, which includes members also from product, non-manufacturing, and logistics departments. As for CO2 emissions reduction activities at our factories, the Working Group to Reduce CO2 Emissions from Manufacturing set under this committee will lead the activities.

Using CO2 emissions data as a core management indicator

Panasonic has been collecting environmental performance data from all of its global factories (274 bases) every month, which consists of 23 items including CO2 emissions. We have built and operated a system to tabulate and feed back the results of the data analysis on a monthly basis.

In fiscal 2009, we added “CO2 emissions” to our core management indicators, which include net sales, operating profit, and inventory. We incorporate the results in the in-house performance evaluation program, thereby further accelerating the measures.

| Global CO2 emissions and CO2 emissions per basic unit |
| (10,000 tons) | (compared with fiscal 2001 level)* |
| 2001 | 2006 | 2007 | 2008 | 2009 | 2010 |
| CO2 emissions | 361 | 400 | 398 | 397 | 347 | 314 |

*Basis for calculating Panasonic’s CO2 emissions:

- The factors related to fuels are based on the Guideline for Calculation of Greenhouse Gas Emissions (version 2.2) published by the Ministry of the Environment, Japan.
- The factors for electricity purchased in Japan (kg/MWh) are set at 0.376 for fiscal 2001, 0.425 for fiscal 2006 and 2007, and at 0.410 for fiscal 2008 onwards. The total CO2 emissions are 3.02 tons (fiscal 2007), 4.12 million tons (fiscal 2008), 3.34 million tons (fiscal 2009), and 3.02 tons (fiscal 2010) if the factors for electricity purchased in Japan are set at 0.410 (fiscal 2007), 0.453 (fiscal 2008), and 0.373 (fiscal 2009 and 2010) based on the actual results.
- The factors above are also used for electricity purchased by PPS (Power producer and supplier).
- The GHG protocol’s CO2 emissions factors for each country are used for electrical machinery and equipment.

| CO2 emissions per basic unit |
| (compared with fiscal 2001 level)* |
| 2001 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Japan | 189 | 173 | 169 | 165 | 162 |
| Americas | 22 | 16 | 14 | 13 | 12 |
| Europe | 66 | 63 | 53 | 49 | 49 |
| Asia/Oceania | 99 | 85 | 76 | 74 | 73 |
| Oceania | 53 | 49 | 53 | 49 | 49 |
| Northeast Asia | 66 | 63 | 53 | 49 | 49 |

CO2 emissions reduction measures

1. Promoting the METAGEJI initiative across all the manufacturing sites in the world

In order to ensure the reduction of CO2 emissions at factories, it is important to visualize the energy consumed by each facility and the effect of each reduction measure. We have introduced about 40,000 measurement systems to all of our global manufacturing sites, and built a management system as well as created a manual for the better use of meters and gauges based on the results of the measures implemented at a model factory. In the future, we will further identify the waste of energy and enhance measures to reduce such waste at our factories by utilizing these systems.
(2) Identifying necessary measures through energy conservation diagnoses

In order to help each of our manufacturing sites to identify the necessary energy conservation measures, we are promoting energy conservation diagnoses undertaken by internal experts. At our business domain companies, managers and skilled engineers who have expertise in manufacturing processes collaborate together to resolve problems. Further, we have an expert team to provide technical support to our factories and this team is conducting diagnosis activities to search for themes that can be applied group-wide. In fiscal 2010, the team made 350 proposals at 18 factories for the reduction of CO₂ emissions by a total of 20,000 tons, and the factories have then implemented measures to achieve the target.

(3) Accelerating CO₂ emissions reduction through production process innovation

To achieve the CO₂ reduction targets, we are aggressively pursuing energy conservation themes that were beyond the reach of conventional methodologies due to technology and quality assurance-related problems. Specifically, an in-house research division, Corporate Manufacturing Innovation Division, is developing energy conservation technologies making full use of simulation technology, to support business domain companies in production engineering aspects.

These efforts have resulted in a substantial reduction of CO₂ emissions in the clean rooms of our semiconductor factories and in the supply of dry air in secondary battery production processes, both of which consume a great amount of energy. We also hold Energy Conservation Production Engineering Study meetings to enable our factories to share their problems, and seek acceleration of corporate-wide initiatives including training engineers.

(4) Sharing CO₂ reduction examples and promotion of training experts

In September 2008, we created a free keyword research system on the intranet with a database of CO₂ reduction examples, known as the BA Chart.* A total of 1,139 examples are registered in the database (as of March 2010) and we are now promoting its use across the company.

Moreover, we summarized the energy conservation measures (33 items) to be taken by all factories in a checklist, on which they are now conducting overall review.

For the promotion of this initiative, it is critical to train engineers versed in energy conservation technologies. Accordingly Panasonic has held 18 training seminars on CO₂ reduction worldwide, as well as 12 technical briefings since fiscal 2008, developing a total of 340 experts.

*BA Chart: Chart that provides a comparison between before and after the implementation of CO₂ reduction measures.

Reducing the emissions of greenhouse gases other than CO₂ from energy use

In addition to CO₂, Panasonic emits PFCs, SF₆, and other greenhouse gases, which are mainly used as etching and cleaning gases at its semiconductor factories. In order to reduce the emissions of these gases, our semiconductor factories have been implementing measures including substituting such gases with those having lower environmental impact and installing greenhouse gas removal devices to recover the generated gases and render them harmless.

While the World Semiconductor Council aims to reduce greenhouse gas emissions by at least 10% from the 1995 level by 2010, Panasonic’s semiconductor department has achieved a 53% reduction from the fiscal 1995 level in fiscal 2010.

Composition of GHG emissions (tons-CO₂)

<table>
<thead>
<tr>
<th>Gas</th>
<th>Emissions (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide (CO₂) Japan</td>
<td>1.73 million</td>
</tr>
<tr>
<td>Carbon dioxide (CO₂) outside Japan</td>
<td>1.41 million</td>
</tr>
<tr>
<td>Sulfur hexafluoride (SF₆) etc.</td>
<td>0.04 million</td>
</tr>
<tr>
<td>Perfluorocarbons (PFCs)</td>
<td>0.07 million</td>
</tr>
<tr>
<td>Hydrofluorocarbons (HFCs)</td>
<td>0.06 million</td>
</tr>
<tr>
<td>Total</td>
<td>3.31 million</td>
</tr>
</tbody>
</table>

GWP tons-CO₂

Promoting factory energy conservation CDM*

Panasonic has been implementing an energy conservation project at its factories in Malaysia since fiscal 2005, which was approved as a CDM project by the United Nations in March 2007, becoming the first CDM project to be implemented by a Japanese company for energy conservation. We are now further promoting this project.

*Clean Development Mechanism: A method authorized by the Kyoto Protocol, whereby industrialized countries undertake initiatives to reduce GHG emissions through rendering financial and technical assistance to developing countries.
Used Product Recycling

Basic approach to product recycling

Aiming at the effective use of natural resources and prevention of environmental pollution, a growing number of recycling laws have been enacted in various countries throughout the world. Examples include the Home Appliances Recycling Law and the Law for the Promotion of Effective Resources in Japan, the WEEE Directive in the EU, and recycling laws in many states in the USA. In China as well, a similar law will take effect from January 2011. In addition to complying with recycling laws in each country, Panasonic attempts to go further: We endeavor to play an active role in creating the most efficient recycling system in each country in view of its local recycling infrastructure. Panasonic also strives to improve the sustainability of the global environment through resource recycling initiatives designed to use the earth’s limited resources more effectively.

Global promotion product recycling

● Japan

In response to the Home Appliances Recycling Law of 2001 which covers four specified kinds of home appliances, Panasonic developed a geographically dispersed recycling network through the effective use of existing recycling facilities nationwide. Ecology Net Co., Ltd., established through Panasonic’s leadership, manages all aspects of the recycling-related services for this network, including supervising 190 designated collection sites and 36 recycling facilities, on behalf of the “Group A” manufacturers (24 companies including Panasonic). Since April 2009, we have also been handling covered products newly added to the law (flat-screen TVs and clothes dryers). In fiscal 2010, Panasonic recycled about 104,000 tons for the four specified home appliances.*1

*1 Air conditioners, TVs, refrigerators/freezers, and washing machines/clothes dryers.

● Europe

Prior to the enforcement of the WEEE Directive in Europe in August 2005, we established a recycling management company, ENE EcologyNet Europe GmbH, in Germany in April of the same year. In cooperation with established recycling companies, we have built up a high-quality recycling system based in Germany. In 2009, we collected about 56,000 tons*2 of used products covered by the WEEE Directive.

*2 Calculated by multiplying sum of weight of collected products through the collection system by Panasonic market share (in collection system) of product weight put on the market.

● United States

Following the start-up of the state recycling law in Minnesota in July 2007, Panasonic established Electronic Manufacturers Recycling Management Company, LLC (MRM), jointly with Toshiba Corp. and Sharp Corp. in September of the same year, and began recycling TVs, PCs, and other products. Subsequently we also launched recycling operations in other states where similar laws were enacted, and in November 2008 began implementing voluntary recycling programs across the country through MRM.

In recognition of these activities, MRM was chosen as the winner of the 2009 TV Recycling Challenge Award by the US Environmental Protection Agency. Panasonic collected about 3,700 tons*3 of waste electronic devices in 2009.

*3 Total amount collected based on both state mandates and through voluntary efforts in other states.

● China

Looking toward the effective date of the recycling law in January 2011, Panasonic, as a member of the Executive Committee of Foreign Investment Companies, has been proactively cooperating with the Chinese government in establishing the necessary collection and recycling systems.

● India

In March 2010, Panasonic started a voluntary take-back program for TVs in Chennai. The program is scheduled to be expanded to wider geographical areas.

Technological development for recycling

Panasonic has undertaken a number of initiatives aimed at recycling-oriented manufacturing, which we believe is the basis for a more effective use of our limited resources.

Panasonic Eco Technology Center (PETEC), which recycles the four specified home appliances in Japan, is engaged in research to improve the recycling processes, achieving a more efficient recovery and increased supply of resources. For example, TV CRT recovery requires the separation of the tube into the front and rear glass parts. By using laser radiation, processing time was reduced to one third, compared with the conventional thermal strain–hot wire separation method. High-level, smooth separation was achieved by precise laser radiation based on an auto-detect function for CRT size. Moreover, PETEC has developed and introduced an integrated system to recover iron, aluminum, copper, and resin from shredded refrigerators, and is also undertaking technological development for sorting of the recovered resins and of volume reduction equipment for resins that cannot be further sorted. At the same time, Panasonic is proactively developing applications for recycled resources inside and outside the company. For example, we developed interlocking paving blocks containing used CRT glass jointly with a specialized manufacturer. Panasonic is using the product inside the company and will work to gradually spread its use in the marketplace.

Through these efforts, Panasonic will further contribute to the achievement of a sustainable society.
Initiatives to Conserve Biodiversity

Approach to Biodiversity

Our society benefits from a multitude of nature’s blessings grounded upon biodiversity, known as ‘ecosystem services.’ Sadly, however, over the last 50 years this biodiversity has been lost at an unprecedented pace, and corporations are required to take initiatives on biodiversity conservation and sustainable resource usage. With a full understanding of the importance of biodiversity and its critical situation, Panasonic is propelling its pro-biodiversity activities through the dual axes of business activities and social contribution.

Start of the Biodiversity Project

In order to promote the biodiversity initiatives in business activities, Panasonic established the Biodiversity Project in October 2009 and concrete measures have been implemented in three important areas: procurement, usage of land, and products.

(1) Initiatives in procurement

In February 2010, Panasonic created the Panasonic Group Green Procurement Guidelines for Wood to conserve biodiversity and sustainable resource usage after thorough consultations with the World Wide Fund for Nature (WWF) Japan. The Guidelines divides various wood and wooden materials that may be procured into three categories: Priority procurement (Category 1), Acceptable procurement (Category 2), and Avoiding procurement (Category 3). The survey concerning Green Procurement targeted for procurement in fiscal 2010 revealed the total amount of wood and wooden materials to be approximately 440,000 m³. Out of these, those in Category 1 accounted for 47%, Category 2 51%, and Category 3 2%. We will further increase the proportion of Categories 1 and 2, while decreasing Category 3.

Green Procurement Guidelines Details

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Wood and wooden materials subject to priority procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2</td>
<td>Wood and wooden materials for which a third party certified the non-destruction of forests that have environmentally high conservation values</td>
</tr>
<tr>
<td>Category 3</td>
<td>Wood and wooden materials for which compliance with the regulations concerning forestry in its country or geographical area of origin cannot be confirmed</td>
</tr>
</tbody>
</table>

(2) Initiatives in usage of land

There are 121 Panasonic sites that have a green area inside their premises (in Japan, as of the end of December 2009), and the total of such green areas reaches nearly 2 million m². Panasonic aims at contributing to the conservation of biodiversity in the areas where our business sites are located through reviewing the optimum conditions for these green areas and their management methods. A survey on Panasonic’s business sites across Japan is currently underway. Based on the results of this survey, green areas to be managed with priority will be selected to become model cases.

(3) Biodiversity initiatives for products

Focusing on products that may have a direct impact on biodiversity, Panasonic receives third party assessments concerning such products in terms of their effects and dependency on biodiversity, their risk, and business opportunity level.

Assessment of Mushi-Veil, an interior light with low insect-attracting features, by BirdLife Asia

Lighting equipment can disrupt the ecosystem of insects that are attracted to light, and this in turn will have an influence on other creatures that prey on such insects. Mushi-Veil attracts less insects (70% reduction compared to conventional lights) by blocking certain wavelengths, thus it can be valued as lighting equipment that contributes to biodiversity conservation.

Partnership with the World Wide Fund for Nature (WWF)

Since 2007, Panasonic has been promoting the Yellow Sea Ecoregion Support Project over seven years in collaboration with WWF Japan. During a three-year period from January 2010, the Project aims to implement the measures required for the sustainable usage and conservation of the environment, designating the coastal areas of the Yalu River estuary in Liaoning Province, China, and Muan County in South Korea’s South Jeolla Province as model areas.

Observation of coastal wetlands at Yalu River estuary, designated as a national nature reserve © WWF Japan

Also as one of the first corporate sponsors of the WWF International’s Arctic Project since 2008, Panasonic has been supporting the Project’s environmental surveys and analyses to maintain the arctic ecosystem, especially as represented by polar bears.

Panasonic presented this ice sculpture of a polar bear for a peripheral event of COP15
Globally, Panasonic procures parts, materials, and equipment from approximately 9,000 suppliers. To date, we have worked in collaboration with many of our suppliers to put our CSR policies into practice, including our Clean Procurement Declaration, which ensures rigorous compliance in our own procurement activities, our Supplier Evaluation System, which includes an assessment of supplier CSR initiatives, and our Green Procurement policy, which ensures that specific chemical substances are not used in the parts and materials we procure.

As concerns about resource depletion grow, Panasonic, in its quest to become a Green Innovation Company, is focused on two areas key to achieving recycling-oriented manufacturing: resource conservation and recycling. The departments involved in procurement, which are responsible for the flow of resources to manufacturing, are particularly focused on contributing in the area of recycling, and work to promote procurement of recyclable materials, paints, and reclaimed materials. In addition, our design and manufacturing departments work in close alliance with suppliers that have world-leading technical capabilities, developing processing technologies and new applications to make use of these materials. We also promote centralized purchasing by developing common components, which leads to further expansion of resource recycling, and enhanced competitiveness through rationalization of costs. Using these initiatives to share expertise with our suppliers, we hope to raise the level of technology on both sides, and spread recycling-oriented manufacturing throughout the entire supply chain. Going forward, we will focus first on the most basic resources among those that we use such as metals and resins, aiming to raise the ratio of recycled resources to total resources used to more than 12% by the year ending March 2013.

Another important initiative is the reduction of CO₂ in logistics. We are working with our partner companies to strengthen efforts in this area, including switching to lower-emission transport methods, promoting joint transport with other companies, and a variety of other measures. We are also expanding outside Japan our system and structure for managing the volume of CO₂ emissions, originally developed in Japan, working to reduce CO₂ emissions globally while also enhancing competitiveness.

By ensuring that these goals are met, and based on the concept of fair trade, we hope that our procurement activities can contribute significantly to the achievement of a sustainable society.
Since the fiscal year ended March 2010, Panasonic has been working with its suppliers on the ECO-VC (value creation) initiative. This program focuses on environmentally-conscious efforts in parts and materials procurement, including energy and resource conservation and use of recycled materials, which at the same time aims to rationalize costs. In the fiscal year ended March 2010, we received over 500 suggestions from our suppliers around the world, involving electric power conservation, development of smaller, lighter components, significant reductions in the number of parts used, and improvements in logistics. Examples of these advanced initiatives are shared with our suppliers and expanded across the supply chain through our Panasonic Excellent Partners Meeting, which is attended by both suppliers from inside and outside Japan.

Going forward, we will place even greater focus on recycling-oriented manufacturing, encourage even more of our suppliers to take an active part in our ECO-VC initiatives, and, based on the concept of fair trade, continue to play a proactive role in contributing to the global environment.

Breakdown of ECO-VC Activities Proposed by Suppliers (Year Ended March 2010)

- Electricity conservation (during use) (145)
- Electricity conservation (in manufacture) (114)
- Reduction in number of parts (63)
- Size/weight reductions (81)
- Logistics improvements (24)
- Resource conservation (42)
- Recycled materials (21)
- Alternative materials (12)
- Others (10)

512 proposals received

CO₂ emissions from Panasonic factories in the fiscal year ended March 2010 totaled 3.14 million tons, while logistics-related emissions totaled 780,000 tons, equal to about 20% of factory emissions. In order to reduce CO₂ emissions from logistics, Panasonic has worked to shift from trucks to rail transport (modal shift), use more eco cars and biodiesel fuels, and improve the loading ratio through joint transport with other companies.

In the fiscal year ended March 2010, we formed an alliance with The Asahi Shimbun Company, one of the leading Japanese newspaper companies, which has been active in working to reduce CO₂ emissions in the transport of newspapers. We have begun an initiative with Asahi in which trucks used for delivering newspapers can be used on their return trips for Panasonic logistics. Transport involves use of mid-size trucks powered by compressed natural gas (CNG), biodiesel fuel made from used cooking oil, and other alternative fuels.

Outside of Japan, we are working to switch from ocean-based shipping to railroad transport. In the fiscal year ended March 2010, transport from the Far East to Moscow, which would normally involve sea routes by way of India and Africa, was, with adjustments to transport methods, shifted to the Trans-Siberian railroad, resulting in a 38% reduction in CO₂ emissions. Transports from China to Kazakhstan, which until now had gone by sea to Europe, and then overland to Kazakhstan, were also shifted to rail transport using the same kind of adjustments to transport methods, achieving a 62% reduction in CO₂.

The Challenge of Reducing Global CO₂ Emissions in Logistics

Because most countries have yet to establish laws regarding the reduction of CO₂ in global logistics, for a long time little progress was made in this area. However, as part of its move to become a Green Innovation Company, Panasonic and its Corporate Global Logistics Division is leading the industry with the start of full-fledged initiatives beginning in the fiscal year ending March 2011. What we are particularly hoping to focus on is the use of an incentive program* for subsidiaries outside Japan, which are under no legal obligation to reduce CO₂ in this area. We will first work to establish success stories in the U.S. and Europe, before going on to expand the program into other regions.

* A system for granting incentives to companies who have successfully reduced logistics-related CO₂ emissions, including use of a special ecomark label on products, subsidies, etc.
Contributing to Society through our Main Business of Manufacturing from a Customer Perspective

Many countries in the world today are enjoying new economic development. At the same time, we are all faced with the challenge of global warming and other emerging environmental problems. Panasonic’s mission is to provide solutions to society and contribute to abundant lifestyles in every country where it operates through its manufacturing activities. Here we look at some examples of Panasonic’s initiatives in different regions of the world. These cases illustrate our commitment to supporting sustainable development through locally oriented lifestyle research and product development.

Most households in Indonesia boil water from a well or a public supply to make drinking water, which is stored in PET bottles. (See page 23 for more information on initiatives in Indonesia.)
The Water Situation in Indonesia

It is thought that over 1 billion people around the world lack access to safe drinking water, and that of the 2 million who die each year after drinking contaminated water, the majority are children under 5 years old. In Indonesia, 228 million people, the world’s fourth largest population, live spread over about 18,000 islands, and adequate water facilities have yet to be built in many areas. Many people here have to use so-called “shallow wells” less than 10 meters deep, from which they draw water for washing, bathing, and drinking. Drawing well-water is a task that frequently falls to women and children, for whom it means heavy daily labor despite the shallow nature of the wells.

Well-Water Pumps Support Daily Life

Panasonic began to address this situation in 1988 by producing well-water pumps. Another fact of life in Indonesia is that access to electricity is limited to 58% of the population, and for 90% of those people the supply is less than 900 watts. We accommodated these factors into a water pump of low power design and it has won broad customer support by providing reliable product quality. Today, it is estimated that nearly half of the homes that use well-water pumps use models produced by Panasonic.

Taking on the Challenge of a New Approach to Manufacturing

In many Indonesian households, well-water or water from public supply is sterilized by boiling and then stored for drinking. Refrigerating boiled water allows it to be stored for long periods. The problem is that when other electrical appliances are used at the same time as the refrigerator, insufficient power capacity can cause a power outage.

We set out to develop a refrigerator with an appropriate low power design adapted for these conditions, with the capacity to store sufficient drinking water, and tailored to suit local food culture and shopping habits. The first step in achieving this goal was a study to analyze lifestyles in seven cities throughout Indonesia. The result of the study revealed the following needs: 1) customers want to refrigerate sterilized drinking water in PET bottles; 2) customers want a large vegetable bin; and 3) customers want a place where they can store medicines and cosmetics.

A Bold Concept Shift to Meet Customers’ Needs

In order to meet these needs, we designed a refrigerator with a bold new layout. The bottom door pocket was discarded to make way for a large-volume vegetable bin, and a space was created above this to allow for horizontal storage of a large number of PET bottles. Finally, protruding sections inside the refrigerator were reduced to minimize dead space, leaving room to provide a space for storing medicines and cosmetics.

The hardest issue to tackle was realizing a low power design. By fitting a new compressor and other innovations we achieved an energy saving of about 30%. The development of this product was carried out in large part by local staff with an intimate knowledge of the living environment and needs of local people. They conducted lifestyle research and planned this unique product, working in a powerful partnership with Japanese engineers to achieve its creation. The resulting refrigerator has received wide support for its ease of operation and design. In December 2009, it received a Gold Award at the 2009 Indonesia Good Design Selection.

To realize abundant lifestyles for customers the Panasonic Group must cooperate across borders: “Think Globally, Act Locally”

From a personal standpoint, I am determined to act through my work to make living more comfortable for the people of Indonesia. The recently developed A1911 Series refrigerators embody that commitment, and are a huge achievement in that sense. I hope to continue in my role of working with everyone here to bring a brighter and more abundant lifestyle to people through our active involvement in developing products that please our customers.

Daniel Suhardiman
Group Manager, Creation Center,
PT Panasonic Manufacturing Indonesia (PMI)
Vietnam extends in an “S” shape from north to south, with a land area of 330,000 km² and a population of around 88 million people. Surrounded by sea and forest, Vietnam offers great variety in terms of climate, lifestyles and customs.

In our Discover Vietnam project, we aim to gain a deeper understanding of customers’ lifestyles and carry out product development activities that lead to solutions for customer issues, or propose new lifestyles to customers.

We visited 300 households in 64 provinces across Vietnam to conduct a survey to ascertain the types of appliances each household owned, their use and place of use. The survey also asked about the functions considered to be essential, and the reasons for purchasing each appliance.

One discovery was lifestyle-based trends, such as the strong need for large-capacity refrigerators among people in the suburbs, who tend to buy in bulk. Another fact we grasped was the growing number of consumers who are strongly interested in health, beauty and travel as well as consumption. We aim to incorporate such power-saving technologies into all of our products.

Coexisting with the Natural Environment

At Panasonic Technopark, our multi-purpose production site scheduled to open in 2012, we plan to achieve zero emissions through use of solar panels across the entire surface of the plant roof, and by devising recycling systems.

In September 2009, we ran Eco Caravan—a project for showcasing environmentally-conscious Panasonic products and initiatives. In March 2010, we started a program aimed at raising environmental awareness among our customers. Among other activities, it involves recycling TVs in cooperation with a government-certified recycling group.

Proposing Lifestyles A Step Ahead

Today Vietnamese people’s lifestyles are changing rapidly as they become more diversified and abundant. As a core member of the Discover Vietnam project, I want to contribute to customers’ changing needs through our products.

Ton Nu Cam Ha
Planning Team Manager
Marketing Division, Panasonic Sales Vietnam
Developing Microwave Cooking Tailored to Local Climate and Ingredients

Realizing a rich food culture is an essential part of enabling people to enjoy abundant lives. At Panasonic, we view the microwave oven as one cooking appliance that makes this abundance possible, and pursue product development with this in mind. Microwave ovens use microwaves, a type of electromagnetic energy with an extremely short wavelength, to excite water molecules to produce heat. The way that heating occurs, however, can differ slightly depending on the type of dish, the ingredients used, or even the moisture content in the air.

In Brazil, we are developing functions best suited to local cuisine, using actual recipes to determine the necessary electrical power and time needed for cooking. Two local female staff members who are experts on Brazilian cuisine are playing a central role in this development project. Panasonic’s microwave oven menus in Brazil are specially developed to allow users to easily prepare their preferred recipes or a complete meal. The ovens are adapted to suit the meat dishes, snacks and other simple, practical and quick cuisine which is found everyday in Brazilian homes.

The Pursuit of Perfect Popcorn

One food that presented a particular challenge to microwave cooking was popcorn. A popular snack for Brazilians of all ages, popcorn is commonly eaten with family members while watching football or movies. Supermarkets in Brazil offer a wide range of popcorn types, and we conducted extensive testing to develop a program capable of cooking delicious popcorn with every brand, flavor and package size.

As these efforts illustrate, Panasonic is active in every field essential to daily life—clothing, food, shelter and entertainment—pursuing product development that contributes to more comfortable lives for customers in Brazil.

For Customers throughout Brazil

Brazilian food encompasses a wide range of regional tastes and styles. We considered each area’s unique styles to develop a microwave oven that would truly satisfy the culinary needs of customers from every part of Brazil.

Alessandra Lopez Soales (Left) and Francine Hatagami (Right)
Cooking Center Instructors
Microwave Oven Engineering Department, Panasonic do Brasil Limitada

Promoting Digital Broadcasting for Better Lives and Safety in Brazil

Digitizing television broadcasts is critical to improving broadcast quality. It is also essential for providing information services to assist people’s lives and personal safety. Current analog open-air television coverage in Brazil is greater than 99% of the population and is thus considered the most suitable infrastructure for providing homes with entertainment and information services.

In light of this, Panasonic and four other electrical appliance manufacturers met with representatives from the Brazilian government to explain the merits of Japan’s open-air digital broadcasting format. The government accepted this proposal in June 2006, and commercial digital broadcasting commenced from December 2007.

Panasonic do Brasil Limitada participates in creating technical standards in an industry forum that determines specifications for digital TV in Brazil. We also support the product development team in Japan, and make other efforts to accelerate the local penetration of digitized television broadcasts.

A Detailed Response for Each Country

The specifications of our digital broadcasting technology have to be adapted to suit each country’s characteristics. These adjustments are not only essential for ensuring product quality, but are also fundamentally important for creating a safe and secure social infrastructure through our digital broadcasting technology. This is the essence of contributing to society through our operations.

Leveraging Our Technical Expertise to Expand Into Central and South American Countries

Following the introduction of digital TV in Brazil, the same Japanese format is being introduced in other countries in Central and South America with the encouragement of the Brazilian and Japanese governments. At present, digital broadcasts are under way in Argentina and Peru, while Chile, Venezuela and Ecuador have also decided to adopt the format.

In Brazil, a middleware called “Ginga” is under development that will enable providing information services such as e-commerce, e-banking, education, and others. Meanwhile, Chile and Peru are studying implementation of Emergency Warning System (EWS) into their countries, supported by Japanese government. EWS system is to broadcast information to warn people ahead of earthquakes or tsunamis.

Digital broadcasting is facilitating such new infrastructure throughout Central and South America. We are committed to contributing to the spread of digital broadcasting by widely providing our technical knowhow for product development that we have cultivated in Brazil.
A Diverse Workforce Aims to Create a Lively, Active Panasonic

“People are the foundation of business. Develop people before making products.” Throughout its history, Panasonic has consistently placed priority on human resource development based on this philosophy. The core element of our human resources policy is building win-win relationships between the company and employees through a variety of activities based on the principles of participative management, evaluations based on performance, and respect for employees. In essence, this approach means that we are simultaneously pursuing two objectives: sustaining growth in sales and earnings and allowing employees to achieve their goals through their work. This is how we go about making Panasonic a worker-friendly, more fulfilling environment.

*Participative Management*  
Autonomous individuals putting “Customer first” into practice

*Evaluations Based on Performance*  
Evaluation and treatment based on current ability and performance

*Respect for Employees*  
A win-win relationship between the company and its employees
Panasonic is accelerating initiatives towards achieving a global growth strategy. These include establishing a global policy which will enable its diverse employees to realize their full potential in contributing in the countries and regions where we do business.

**Global Diversity Policy**

“New Panasonic Group” is now one of the world’s leading business groups which offers a wide variety of products in electronic business areas related to our daily lives. With an aim to contribute to progress in society and to enrich people’s lives through manufacturing, every employee plays a leading role in their job and promoting business activities of Panasonic.

380,000 employees from all over the world are currently working for Panasonic. This shows that Panasonic is a group of people who have various regional, cultural and historical backgrounds. Although all people are different in nationality, age and gender, they all have their own individuality and abilities. Each person has various different ideas, and by sharing these ideas across countries and business areas, we can create more innovative values. Thus, Panasonic will continue to be a Group which always gathers wisdom and spurs innovation with the concerned efforts of all. We have a strong hope that through using our diverse mindsets and viewpoints we can deliver products and services like no other in the world to our customers.

In order to achieve this, it is important to give a chance for success to motivated people of all countries and regions, regardless of their gender, nationality or any other characteristics. From fiscal year 2010, we will expand our diversity activities to make the best of the individuality and abilities of each employee and to support their success on a group and global basis. We will keep challenging to be “No. 1 in Diversity Promoting Activities in each country and region”.

April 1st, 2010

Managing Director
Director, Corporate Diversity Promotion Division
Masatoshi Harada

**Panasonic Diversity Promotion Vision**

As a truly global company, we are aiming to create a corporate culture that respects different values and encourages diversity. All employees will freely demonstrate their individuality and creativity to enable both the company and themselves to continue to grow with the ultimate goal of becoming the No. 1 Green Innovation Company in the Electronics Industry.

Panasonic is enhancing its human resource development across a variety of fields, enabling its diverse employees to develop their skills while using their individual strengths, giving birth to new values and creativity, and putting “customer first” into practice. These efforts include our Panasonic Global Executive Development Program (P-EDP), designed to strengthen executive staff development inside and outside of Japan, our Global Marketing Seminars (GMS), which provide practical training in management philosophy, business policy and marketing to staff in our marketing companies outside Japan, and the Panasonic Management of Technology (P-MOT) program, which aims to develop technology leaders who can also contribute to business operations from a management viewpoint.

In addition, we have been working to create an organization that enables people from different countries, cultures, and languages to mix together and enrich one another. As part of this effort, since 2008 we have developed and established the Working in Japan program, which provides short- and long-term assignments and training opportunities in Japan, with the aim of enhancing the training of workplace leaders in product development, manufacturing, and sales, and facilitating the placement of personnel in management positions.

**Bringing Together Collective Wisdom Through the Manufacturing Innovation Forum**

To accelerate and raise the standards of our global initiatives, each year Panasonic holds its Manufacturing Innovation Forum, providing an opportunity for employees to learn from the collective achievements and expertise gained through its varied manufacturing activities worldwide, free of organizational and national boundaries.

At the session held on November 12, 2009, we focused on the manufacture of products for high-volume segments, a theme critical to our global growth, and used our HD Visual Communication System to link forum sites in Japan, Singapore, and Shanghai in real time. The 400 or so participants included Panasonic executive management and staff from various business segments, including front-line leaders from China, Indonesia, Singapore, and many other countries. A frank exchange of opinions covering current business issues and future strategy took place through a range of reports on activities and panel discussions.
A Variety of Programs to Encourage Personnel Rotation

At Panasonic, we actively work to encourage human resource development through staff interaction, and have built a number of programs to support individuals in their efforts regardless of age, gender, or nationality. In the three years of our previous mid-term plan (fiscal 2008 through fiscal 2010), a total of 11,700 staff participated in such rotation from three angles: between business segments, between different manufacturing processes, and between Japan and outside Japan.

Three Internal Recruiting Systems

Skills-Based Recruiting
An internal recruiting system in which business divisions requiring new staff send out postings clearly listing the skills and skill levels they are seeking, giving employees with those skills the opportunity to put them to use in new positions.

Direct Appeal System
A “free agent” system in which employees with specific skills can pursue new job opportunities by applying directly to the business divisions they are interested in joining.

Skills Development
Provides an opportunity for concentrated study and acquisition of new skills, either for employees who have taken up new positions, or for those hoping to move to new positions but who lack confidence in their existing skills. Enables employees to leave their current positions for a set period of time, during which they can focus on obtaining new skills through knowledge-building and practical experience.

Creating an Environment for Global Communications

Communication is critical to enabling our 380,000 global employees to make full use of their diversity in helping us to realize our goal of developing global network management. Our ongoing innovations in communication aim to create an environment in which employees worldwide can share information, and exchange knowledge and expertise on a daily basis, regardless of regional or national boundaries.

Three workplaces are designed to be comfortable for those with disabilities, and include placement of parts and materials, and adjustments to working surfaces, to suit the physical needs of individual wheelchair users. We also work with group homes and training institutes to provide vocational life guidance to encourage hiring of independent individuals with intellectual disabilities, and actively welcome participants in trainee programs and company tours. Going forward, Panasonic is committed to promoting the independence of those with disabilities, and their active participation in society.

Fiscal 2010 Awards and Certifications

Panasonic is also developing an environment for employees worldwide through the portal. Through the portal we have created an environment that enables employees anywhere in the world to read messages from management and share information on global company developments.

Panasonic Kibi Co., Ltd. and Panasonic Katano Co., Ltd.: Obtained “Excellence in Hiring the Disabled” certification from the Ministry of Health, Labour and Welfare

In fiscal 2010, individuals with disabilities accounted for 2.00% of the workforce in Japan of Panasonic and its key affiliates. This is higher than both the legally mandated level of 1.80%, and the average of 1.63% for all private-sector companies in Japan. In addition, for almost 30 years, in collaboration with communities and local governments, Panasonic also operates three subsidiaries (Panasonic Ecology Systems Kyoei Co., Ltd., Panasonic Kibi Co., Ltd., and Panasonic Katano Co., Ltd.) that are owned jointly with public-sector partners for the purpose of employing those with severe disabilities.

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Creating Comfortable Workplaces for Those with Disabilities

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Panasonic Sustainability Report 2010

Promoting Diverse Work Styles—e-Work Program

Panasonic is promoting the e-Work program, which uses information and communications technology to enable people to work from anywhere, with the full e-Work@Home system being introduced to around 30,000 employees in April 2007. In fiscal 2010, approximately 5,500 employees worked from home once a month to as often as once or twice a week, or had used the e-Work@Home system more than once during a trial period. More than 7,000 people per month also used our “spot offices”—places where employees can work when traveling on business—which are now at 16 locations nationwide. The spot offices have been shown to reduce travel time and speed up customer service, and we plan to continue our efforts to create a working environment that allows people to work even more efficiently. Panasonic will increase productivity and continue to improve the work-life balance for its employees by accelerating implementation of more diverse, flexible work styles.

Initiatives to Maintain a Good Work-Life Balance that Supports Diverse Working Styles

As part of Panasonic’s efforts to create an environment that enables diverse personnel to play an active role, we are implementing initiatives to support a good work-life balance for employees. In addition, Panasonic has created an environment that allows employees easy access to programs that support parents in managing both work and child-rearing. This includes measures complying with Japan’s Law for Measures to Support the Development of the Next Generation. Examples include sections on the company intranet that supply information to help men who are raising children, and provide useful information on maintaining the proper balance between job and household responsibilities.

Examples of Work-Life Balance Support Systems

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Care Leave</strong></td>
<td>A total of two years of leave is available until the end of April immediately after the child begins elementary school.</td>
</tr>
<tr>
<td><strong>Work and Life Support Duty</strong></td>
<td>A flexible work system for those raising children or caring for the elderly, which includes shortened work hours, half-days, alternate days, and other schedules.</td>
</tr>
<tr>
<td><strong>Family Support Leave</strong></td>
<td>A vacation system that can be used for a wide range of needs, including caring for a sick or elderly family member, or participating in a child’s school events.</td>
</tr>
<tr>
<td><strong>Child Plan Leave</strong></td>
<td>A system allowing leave for infertility treatment.</td>
</tr>
</tbody>
</table>

Supporting Working Care-Givers

- Flexible Leave and Work System
- Information and Communication
- Childcare and Nursing Care Support

Results of a survey of e-Work users: Effects of Working at Home (multiple-choice answers)

<table>
<thead>
<tr>
<th>Effects on Work</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped prepare me for working at home under the Business Continuity Plan</td>
<td>48%</td>
</tr>
<tr>
<td>Work efficiency improved</td>
<td>39%</td>
</tr>
<tr>
<td>Enabled me to reexamine how I work</td>
<td>28%</td>
</tr>
<tr>
<td>No commute means less fatigue</td>
<td>48%</td>
</tr>
<tr>
<td>Able to spend more time with/communicate with family</td>
<td>35%</td>
</tr>
<tr>
<td>Able to have time for child care/elder care</td>
<td>12%</td>
</tr>
</tbody>
</table>

Average Years of Employment by Gender (Fiscal 2010)

- Female employees: 21.6 years
- Male employees: 22.4 years

Utilization of various systems that support a good work-life balance has led to a drop in the number of female employees who resign to give birth, or for reasons related to child or elder care, and a shrinking of the gap in average years of employment between men and women.

*Total for Panasonic and its key domestic affiliates

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Giving Children a Brighter Future

As we work to achieve a sustainable, diverse society, Panasonic is undertaking corporate citizenship activities around the world, based on the philosophy of “education and coexistence,” and we are particularly focused on issues of the environment and of supporting the next generation. In particular, in our efforts to support the next generation, we make unstinting use of our strengths and resources, working with families, schools, communities, NPOs and NGOs, and governments to ensure that the children who will inherit our earth in the future grow up healthily and reach their full ability and potential.

Global Policy for the Panasonic Group’s Citizenship Activities

Positioning:
Social investment should be an integral element in business strategy, and top management must take the lead in making these investments.

Activities:
The highest priorities are the next generation and the environment.

Vision:
The Head Office will establish global strategies and oversee activities that are carried out across several regions. Regional companies will spearhead regional strategies and activities.
Examples of Efforts to Support the Education of the Next Generation

Panasonic works around the world to support the education of the next generation. Here are some examples of those activities.

More information about Panasonic’s efforts to support the education of the next generation can be found on our Web site under Corporate Citizenship Activities, at http://panasonic.net/citizenship/education/.

Kids School (Global)
Provides a wide range of sports, ecology, and other events to children worldwide. In fiscal 2010, 572 events were held in 16 countries, with around 63,000 children participating.

Expansion of Environmental Education (China)
Panasonic is aiming to provide environmental education to 1 million children in China by the year 2019. In fiscal 2010, classes were provided to over 24,000 children.

Educational Support Fund (Thailand)
This program supports school lunches in impoverished regions. It has supported 20 schools to date, and cafeterias have been built at some of those schools, enabling them to continue to provide nutritious meals.

Career Training for Students (UK)
Students are invited into the workplace, where they participate in career training classes. The program provides a look at different careers, and workshops covering legal, financial, marketing, and human resources jobs.

Kids’ Eco Club “I Kids” (Japan)
Operated by Biwako Ecoidea Club, an NPO started by employees to protect the water and ecosystem of Lake Biwa. Activities include rice growing, and studies of the water and living things.

Traveling Battery School (Global)
This program provides learning of the structure of batteries to teach about recycling and the environment. Expanded globally since 1996, over 100,000 people have participated to date.

Sports Events for the Disabled (Germany)
Panasonic provides support to programs offered by the German Association of Disabled Sports, whose aim is to help participants build strength through daily exercises, and lead more active lives.

Kid Witness News (KWN) (Global)
KWN supports elementary and junior high school education by providing Panasonic cameras and editing equipment to assist with video production activities. Over 130,000 children from countries around the world have participated so far.

Employees act as citizens of the Earth, working with their communities and the next generation to contribute to society

Based on our belief that it is people who must work to create a sustainable society, we are involved across the globe in a wide range of activities to support and nurture the next generation. With a particular focus on the environment, Panasonic provides a variety of places, opportunities, and tools to learn, including traveling classes, learning materials, access to facilities, hands-on learning outside the classroom, and information and communications equipment and the Internet, all to ensure that the children of the world develop the basic scholastic abilities and life skills they need to live in the 21st century.

Michiko Ogawa
Group Manager, Corporate Citizenship Group
Corporate Profile

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Panasonic Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office Location</td>
<td>1006, Oaza Kadoma, Kadoma-city, Osaka 571-8501, Japan</td>
</tr>
<tr>
<td>Tel.</td>
<td>81-6-6908-1121</td>
</tr>
<tr>
<td>President</td>
<td>Fumio Ohtsubo</td>
</tr>
<tr>
<td>Incorporation</td>
<td>December 15, 1935</td>
</tr>
<tr>
<td>Foundation</td>
<td>March 7, 1918</td>
</tr>
</tbody>
</table>

*The company that was to become Panasonic was started on March 7, 1918, when Konosuke Matsushita, our founder at the age of 23, along with his wife and a brother-in-law, started selling attachment plugs developed and manufactured by himself.*

<table>
<thead>
<tr>
<th>Business Segments</th>
<th>Panasonic manufactures, markets and services a wide range of products such as components and devices, home-use electronic products, home appliances, factory solutions, information and telecommunication equipment, and house-related equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>258.7 billion yen (As of March 31, 2010)</td>
</tr>
<tr>
<td>Consolidated Sales</td>
<td>7,418.0 billion yen (Year ended March 31, 2010)</td>
</tr>
<tr>
<td>Number of Employees (consolidated)</td>
<td>384,586 (As of March 31, 2010)</td>
</tr>
<tr>
<td>No. of Consolidated Companies (Parent and consolidated subsidiaries)</td>
<td>680 (As of March 31, 2010)</td>
</tr>
</tbody>
</table>

Reports Concerning Panasonic’s Business Activities

In addition to this report, Panasonic prepares an ‘eco ideas’ Report detailing its environmental activities, and an Annual Report of financial information for shareholders and other investors.

‘eco ideas’ Report (PDF)
Available on the Environmental Activities section of Panasonic’s website.

Annual Report (PDF)
Available on the IR Information section of Panasonic’s website.

Environmental Activities
http://panasonic.net/eco/

IR Information
http://panasonic.net/ir/
Global recognition for Panasonic’s CSR activities

Panasonic is also responding to the concerns of investors by providing them with information and actively engaging them in dialog. As a result, Panasonic has again been selected for two premier socially responsible investing indexes: the Dow Jones Sustainability Indexes (DJSE) and the FTSE4Good Indexes.

Scope of this report

Reporting period: The performance data are primarily from fiscal 2010 (April 1, 2009 to March 31, 2010). However, some activities from fiscal 2011 are included. The years shown in graphs are fiscal years.

Organization: Panasonic Corporation and its affiliated companies in Japan and other countries.

Data: The data are primarily from consolidated group companies; however, some part of data cover specific key group companies only, and reports concerning environmental activities cover all manufacturing sites that make up the environmental management system.

Inquiries

CSR Office,
Panasonic Corporation
1-1-2 Shiba Koen, Minato-ku, Tokyo 105-8581, Japan
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