

The OKI Group Environmental Vision 2020 for Future Generations

Enactment of the OKI Group Environmental Vision 2020

As the ongoing economic globalization and booming economies in emerging countries have led to increased greenhouse gas emissions and ecosystem deterioration, there is growing concern over environmental issues. In order to address environmental challenges, there have been a number of movements to set long-term targets and plans inside and outside Japan. For example, the Japan Business Federation (as known as Nippon Keidanren) published "Nippon Keidanren's Commitment to a Low Carbon Society" as a basic policy to address climate change. The World Summit on Sustainable Development held in Johannesburg set a target to minimize the impacts of chemical substances on human health and environment. At the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10), a new strategic plan for biodiversity called the Aichi Target was adopted. The latter two targets are intended to be met by 2020. Furthermore, increasing concern about the possible resource depletion in the future has also become an important issue to be addressed on the global level. Under these circumstances, it is very likely that the scope of responsibilities for business operators will be widened in the future.

The OKI Group has advanced environmental measures since the 1970's. Today we are globally committed to environmental protection through its products, services and business activities. In order to address environmental issues more proactively, we enacted the OKI Group Environmental Vision 2020 in April 2012. The vision outlines the basic directions of the group's environmental management and sets targets for 2020.

OKI Group Environmental Vision 2020

The OKI Group achieves a better global environment for the next generation and inherits the environment. Therefore, we promote the environmental management and set targets for 2020 in four fields of "Realization of a low-carbon society," "Prevention of pollution," "Resource circulation" and "Biodiversity conservation" and then actively work on the targets.

1. Realization of a low-carbon society:

Contribute to realize a low-carbon society by the maximization of energy efficiency, through the provision of environmentally conscious products and services, and business activities.

2. Prevention of pollution:

Minimize the use of chemical substances and emissions to the atmosphere and discharges to water which affect on human health and environment.

3. Resource circulation:

Minimize new input resources by the expansion of recycling process of used products and production wastes, and reduction of materials at the time of production.

4. Biodiversity conservation:

Establish a management system to work on the biodiversity conservation and sustainable use.

Steady Contribution to Global Environment from a Long-term Perspective

Hisao Suzuki
Executive Vice President



The Great East Japan Earthquake in 2011 has brought about significant changes to us. Since emerging energy problems and policies toward them, in particular, have a significant impact on business activities, firms are asked to take appropriate measures. Believing that a long-term perspective and forward-looking targets are necessary in order to respond quickly to such significant trends, we enacted the OKI Group Environmental Vision 2020. This vision focuses on four fields with mounting global concerns. Each new growth strategy of the OKI Group is developed in

accordance with the vision. Among such strategies are those about the realization of a low-carbon society by promoting a "smart society" based on IT as OKI's competitive advantage, and the prevention of hazardous substance pollutions by conforming with all relevant global regulations about environment conservation. We will help protect rich natural environment for future generations by enacting an annual plan to achieve the vision and implementing thereof.

Realizing a Low Carbon Society

Global warming and climate change are two of the most important global issues. As they have become increasingly aggravated and conspicuous, there have been active discussions about possible solutions to them on a global basis.

The mitigation of climate change and the realization of a low carbon society are important agendas also for the OKI Group. As a business group deeply involved in IT, we have actively promoted Green IT* for pursuing environment-friendliness in our products and services, and have made efforts to save energy in our business activities for fulfilling our corporate responsibility. In order to further promote such activities, we participated in the "Nippon Keidanren's Commitment to a Low Carbon Society" in March 2012.

* Green IT: Environmental efforts related to IT that are classified into two categories, "Green of IT" and "Green by IT."

Active Promotion of Green IT

In order to further facilitate "Green of IT," we expanded the range of OKI Eco Products Certification in fiscal 2011 by reflecting some global energy-saving regulations such as the Energy Star Program in its registration standards.

In September 2011, OKI announced that it had succeeded in

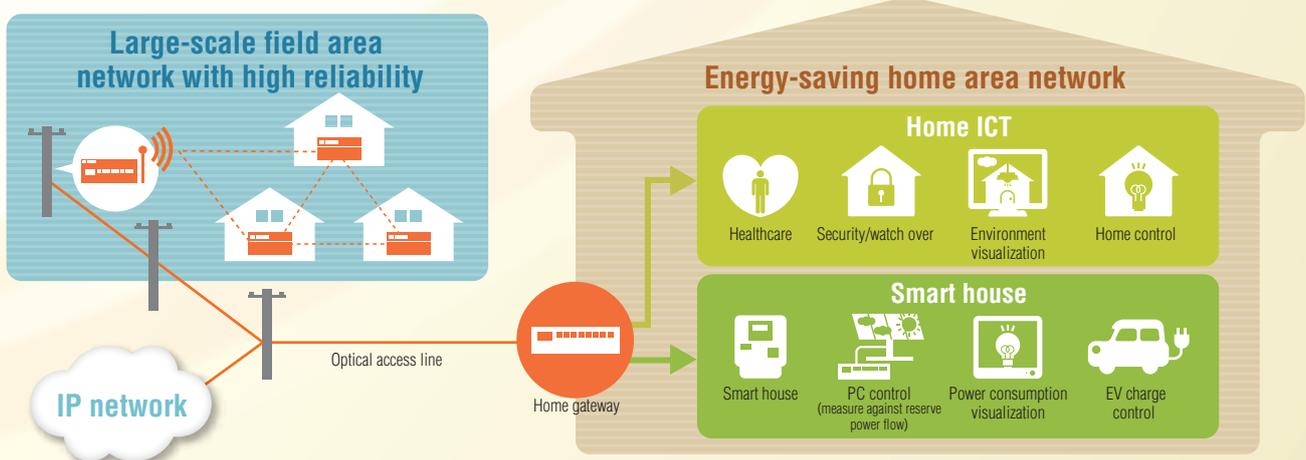
the development of Japan's first wireless multi-hop communication system*1 for the new 920MHz frequency band as an energy-saving effort by IT. Intended to be used in smart communities and smart houses*2, the system allows large-scale, reliable and energy-saving networks in which thousands of wireless devices can be connected to a single base station. The system also offers highly flexible route controls ensuring high network connectivity even in the event of base station faults and troubles in wireless devices. In addition, the system's router with a relay function enables battery-driven operation for several years, and thus greatly helps save energy for the entire network.

The 920MHz frequency band, which is scheduled to open in July 2012, offers high signal propagation, and is considered to be ideal for use in smart communities and houses. We will develop various products and services for this frequency band and thus contribute to the penetration of smart houses.

*1 Wireless multi-hop communication: Data transmission involving other wireless devices by a "bucket brigade" process. It allows data transmission in environments without communication infrastructure elements such as base stations

*2 Smart houses: A type of houses for the next generation in which electricity consumption are monitored and visualized using IT-driven distribution boards and smart taps. They help promote energy-saving efforts and control the power consumption of home electrical appliances during peak hours. Communities using the same system are called smart communities.

● Examples of the application of 920MHz wireless multi-hop technology allowing effective energy saving for the entire networks



Energy-saving Efforts in Business Activities

As proclaimed in the Environmental Vision 2020, the OKI Group has been committed to energy-saving activities because it believes the reduction of green house gases such as carbon dioxide (CO₂) emitted from its business activities is important for realizing a low-carbon society.

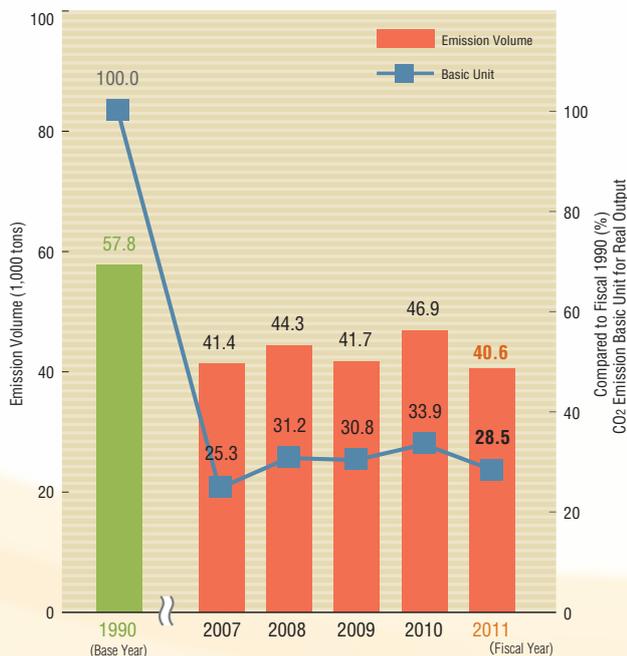
In fiscal 2011, we made several energy-saving measures to deal with power shortage during midsummer caused by the accident at the Fukushima Daiichi Nuclear Power Station. They included dispersing summer vacations, the reduction of the sizes of spaces used, the suspensions of servers, and air-conditioning controls. OKI Digital Imaging, a group company manufacturing LED print heads, reconsidered the operating conditions of the refrigerating equipment in its clean room for manufacturing semiconductors and achieved a 12% reduction of power consumption over the previous year even if clean rooms were exempted from the national power-saving edict. The company also reconsidered the operational procedure for externally-procured steam and achieved a year-on-year 51% reduction in purchase volume.

As a result of these efforts, the CO₂ emission from the OKI Group's major production sites during fiscal 2011 amounted to 40,600 tons, a 13% decrease over the previous year. It means that we have substantially exceeded a goal set in the Voluntary Action Plan on Measures to Fight Global Warming of the Japanese electric and electronics industry, "improving the basic unit for CO₂ emissions with respect to real output* in fiscal 2010 by 35% or more compared to 1990," by making a 71.5% improvement. (A final assessment is to be calculated as the average percentage during the five years from fiscal 2008 to 2012.)

The realization of a low carbon society is an important issue to be addressed in the long run. The OKI Group will continue to address these issues through its products and services as well as its business activities.

* Basic unit for CO₂ emission with respect to real output: CO₂ emission / real output (real output = nominal output / Bank of Japan's Domestic Corporate Goods Price Index for electrical machinery and equipment with fiscal 1990 as the base year)

● CO₂ Emissions(from Major Production Sites of the OKI Group)



Prevention of Pollution

Chemical substances bring people considerable convenience. Some of them containing harmful substances, however, need to be controlled strictly and relevant regulations must be tightened whenever necessary. In this context, regulations to control chemical substances contained in products, such as EU's RoHS directive and REACH regulation, have recently become increasingly demanding. Similar regulations have been enacted in other countries such as China and Korea.

The OKI Group makes utmost efforts to handle chemical substances appropriately, uses alternate substances with less impact on human health and environment, and try to reduce the use of such substances for both products and business activities.

Prompt Response to Regulations about Chemical Substances in Products

Recognizing the importance of the appropriate management of chemical substances in products from early on, the OKI Group established the Product Assessment System in 1998. The group was also a pioneer in the development and implementation of a system to manage and calculate chemical substances in products based on network technology, one of OKI's core technologies. The group has always made prompt responses to the enactment and the revision of relevant regulations. More specifically, it has enhanced its systems to manage chemical substances by revising the OKI Guidelines for Managing Chemical Substances in Products and the OKI Green Procurement Standards. Furthermore, the system to manage and calculate chemical substances in products was developed later into a more comprehensive system that ensures full conformity with regulations relevant to Green Procurement. Called COINServ-COSMOS-R/R, this new system is enhanced whenever necessary, and is currently sold to outsiders.

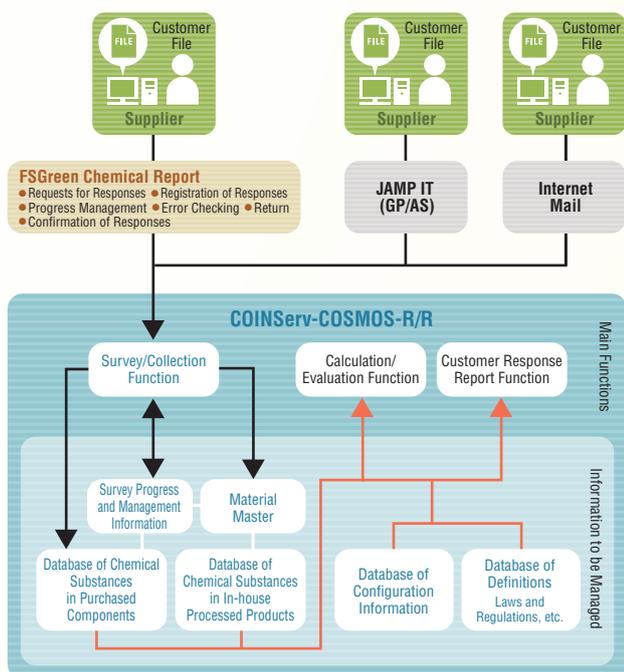
The number of chemical substances requiring strict management is expected to increase in the years to come. In order to further ensure conformity with relevant laws and regulations in this context, we established a procedure to evaluate the chemical substance management systems of suppliers, added it to the OKI Green Procurement Standards, and started the implementation thereof during fiscal 2011. The procedure allows the visualization of the strength and weakness of each supplier, and thus helps improve the quality of its management system.

● Check Sheet for Supplier's Management System of Chemical Substances in Products



During fiscal 2011, OKI formed a partnership with FUJISOFT INCORPORATED about the integration of FSGreen Chemical Report, FUJISOFT's system to help examine information on chemical substances, into COSMOS-R/R. The integration has allowed users of COSMOS-R/R to ask a group of suppliers to survey chemical substances in their products and components at one time. Before then, the system users had to ask each supplier to make a survey. The upgraded system also supports the management of survey status. In other words, COSMOS-R/R now offers a one-stop service that covers information gathering, data management, calculation and reporting to customers, and thus greatly improves the efficiency of each survey task.

● How to collect information on chemical substances in products



Management and Reduction of Chemical Substances in Business Activities

While chemical substances used in the OKI Group's production sites are managed appropriately in accordance with the levels of environmental impact, the group has made efforts to reduce the use of chemical substances as well as their emissions.

During fiscal 2011, the volume of emitted chemical substances was 9.6 tons, a 41% decrease over the previous year, thanks to the redesigning of the treatment process for substrates.

● Use and Emission of PRTR Chemical Substances

Until last fiscal year, our calculation covered only the substances used in large amounts. Under the revised PRTR system, we have widened the scope of substances to be calculated. The data was revised to reflect this change.



The OKI Group will continue to ensure the appropriate management of chemical substances in products in order to minimize their impact, and reduce the emissions thereof into the atmosphere and waters.

Resource Circulation

As resource consumption has continued to increase due to population increase and economic growth, resource depletion has become a significant problem.

In order to help build a resource circulation society, the OKI Group has promoted resource saving and recycling in its business activities. As part of its consideration to create environmentally-friendly products, the group has also tried to recycle as many used products as possible, utilizing the Cross-jurisdictional Waste Treatment Manufacturer Scheme.

We have also been active in saving resources for our products. During fiscal 2011, OKI Digital Imaging developed a new LED printhead using a smaller number of components (a 25% decrease compared to its predecessors). One of the most important requirements for a printhead is a function to prevent LED light from being out of focus by securing the levelness of the substrate on which LED chips are mounted with a high degree of accuracy. For the predecessors of the new printhead, such levelness is secured by combining several adjustment components. The structural design of the new printhead does not require such components. The printhead is planned to be mass-produced for different products during fiscal 2012.

Biodiversity Conservation

There has been a growing interest in biodiversity. OKI has already made various efforts for biodiversity. For example, OKI became a member of the "Declaration of Biodiversity by Nippon Keidanren" Promotion Partners, and also participated in the Japan Business and Biodiversity Partnership during fiscal 2010. OKI has also supported the Japan School Biotope Contest organized by the Ecosystem Conservation Society-Japan since fiscal 2001. For the 2011 contest, we helped broadcast a video of the event on its website, and offered a download service for posters produced by participating schools.

We will further promote our commitment to biodiversity conservation by continuing existing environmental activities such as forest improvement programs. We also plan to include "efforts for biodiversity" as an item to be checked in the OKI Green Procurement Standards.