

Responsibly Creating Shared Value 1

Sanden's Human Resources who Create Value

Based on the founding spirit of "Let Us Develop with Wisdom and Prosper in Harmony" (refer to P1), the Sanden Group continues efforts aimed at the realization of a sustainable society (refer to page 3), and it has set "people" and "environment" as its priority CSR areas. In fiscal 2016, Sanden defined its activity goals in greater detail, with the Group as a whole taking action.



Social Issues

Working Style Reforms

In Japan the population is declining, the birthrate is falling, and the population is aging; so it is estimated that the total population will be 49,590,000 people in the year 2100. For that reason, the Sanden Group has been working on a variety of "working style reforms" and has developed systems tailored to the needs of society against the background of that historical context, including childcare and nursing care support, promotion of the employment of the elderly, and restriction of total working hours. (Refer to the Chronological Table.)

In response to the setting of the material CSR item "people" in fiscal 2015, in fiscal 2016 Sanden organized the measures for "working style reforms" that had been taken so far into a Chronological Table to identify the outstanding issues.



Strategic Areas

Promotion of Work-life Balance

The Sanden Group has ensured workers get holidays, shortened daily working hours, and reduced overtime hours in order to promote "work-life balance." We introduced flex-time work, which was rare at the time, and non-core flex-time work, to put in place work structures that are easy for employees to work under.

As a result, the total working hours average per person*1 in 2016 was greatly reduced to 1,965 hours from 2,108 hours in 2005.

On the other hand, current issues are identified as encouraging employees to take paid holidays, and the realization of flexible employment taking into consideration the circumstances of the employees.

As for systems to encourage employees to take paid holidays, we have put in place consecutive annual paid holidays, memorial-day holidays, and recurrent holidays (five consecutive days*2), but it still cannot be said that progress has been made company-wide in encouraging employees to take paid holidays.

*1 Required working hours average + overtime working hours average - average hours of paid holidays taken

*2 Nine consecutive days with the Saturdays and Sundays before and after included

Case Studies

Initiatives for Health and Safety

In 2016, Sanden established the health and safety policy of "creating workplaces where each and every employee can work in safety and security through giving safety highest priority and having everyone participate in safety and healthy activities", additionally ensured thorough implementation of basic behaviors such as the KYT activities, etc., and implemented a "Risk Improvement Campaign." In order to lead to the improvement of workplaces, individual employees report risks such as tasks, equipment, etc. in their daily work where they were surprised, almost had an accident, or felt danger. A total of 2,126 people participated in these activities, and steps were taken to improve 3,265 unsafe situations.

Furthermore, regarding health, Sanden introduced a stress check system, and improvement to a workplace environment that is easier to work in has been implemented by using all stress checks of the employees to enable them to ascertain their own stress condition and evaluate the workplace environment.



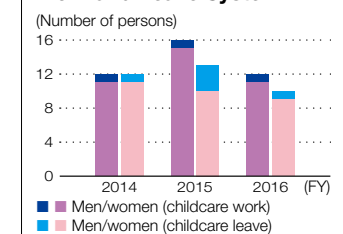
Danger prediction training (KYT) activities

Childcare and Nursing Care Leave System

The Sanden Group has put in place a system for childcare and nursing care so that both male and female employees can continue working without leaving their jobs during pregnancy, childbirth, childcare, and when nursing care of a family member is necessary. Cases of employees leaving their jobs due to childbirth have been almost eliminated, but we believe that in order to realize an environment in which employees can continue working with even more peace of mind, introduction of working arrangements that take into consideration the variety of circumstances of the employees is necessary. In fiscal 2016, the percentage of employees in the nursing care generation leaving their jobs tends to be increasing year by year, and the Sanden Group has currently 960 employees who are in the 45~55 years old nursing care generation; so we have made it easier to get systems related to nursing care and have expanded the period in which it can be used.

Currently, we are considering the further introduction of working arrangements that take into consideration the variety of circumstances of the employees.

Status of Use of the Childcare Work and Leave System



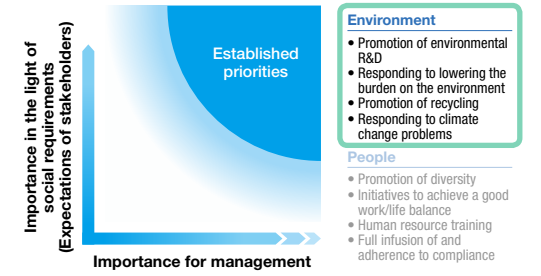
Sequence of Working Style Reforms (Introduction of Systems and Mechanisms) in Sanden

	~2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Employment System	<ul style="list-style-type: none"> Introduction of the non-core flex system Introduction of the planned annual paid holiday taking system (memorial-day holidays, consecutive holidays, recurrent holidays) Introduction of the volunteer holidays system Introduction of the return to work trial work system 	<ul style="list-style-type: none"> New establishment of public service holidays Increase in the number of congratulation or condolence holiday days Increase in the number of memorial-day holidays Introduction of the career comeback system 	<ul style="list-style-type: none"> Abolition of the compensatory leave system (encouraging employees to take holidays by using substitute holidays) 		<ul style="list-style-type: none"> Introduction of the by-the-hour annual paid holiday system 					<ul style="list-style-type: none"> Introduction of the career interview system 	
Childcare and Nursing Care Support	<ul style="list-style-type: none"> New establishment of nursing care holidays Revision of the reserved recuperation holidays (addition of nursing) New establishment of the overtime work detailed rules (Restrictions on overtime work in childcare and nursing care) 	<ul style="list-style-type: none"> Introduction of the childcare support services system 	<ul style="list-style-type: none"> Kurumin certification (Act on Advancement of Measures to Support Raising Next-Generation Children) 	<ul style="list-style-type: none"> New establishment of nursing holidays Nursing holidays: eligible people expanded Revision of the reserved recuperation holidays (addition of nursing care) Revision of the overtime work detailed rules (overtime work exemption in childcare) 						<ul style="list-style-type: none"> Revision of regulations related to childcare and nursing care (Extension of leave and short-hours work period, expansion of the scope of use) Gunma Iki-iki G Company (Gold) 	
Labor Management	<ul style="list-style-type: none"> Introduction of the attendance ID card system Introduction of the internal reporting system 		<ul style="list-style-type: none"> Implementation of the executive management survey 	<ul style="list-style-type: none"> Establishment of the harassment prevention committee 			<ul style="list-style-type: none"> Commencement of activities for the eradication of overwork Development of the time management guidelines 	<ul style="list-style-type: none"> Commencement of labor management education for managerial personnel 		<ul style="list-style-type: none"> Abolition of discretionary working system by field staff (proper ascertaining of working hours) 	<ul style="list-style-type: none"> Introduction of the new employment management system (proper ascertaining of working hours and stronger time management)
Health and Safety				<ul style="list-style-type: none"> Commencement of risk assessment activities 	<ul style="list-style-type: none"> Commencement of mental health education for managerial personnel Commencement of health checks and industrial physician interviews 	<ul style="list-style-type: none"> Declaration of the global introduction of occupational health and safety management systems (OHSAS) 	<ul style="list-style-type: none"> Commencement of mental health interviews by industrial physicians Commencement of mental health training for managerial personnel 	<ul style="list-style-type: none"> Development of the Risk Discovery Campaign Establishment of safety practice simulation spaces 		<ul style="list-style-type: none"> Introduction of the stress check system Development of the Risk Improvement Campaign Workplace environment improvement plan 	

Responsibly Creating Shared Value 2

Environmental Technologies to Launch a New Era

The Sanden Group considers preservation of the global environment to be the most important shared responsibility of people everywhere. Consistent with our Environmental Charter, as an industrial company grounded in technology development, and manufacturing, we are developing business initiatives that take into consideration environmental conservation in all aspects of our corporate activities.



Social Issues

Strategic Focus

Case Studies

Automotive Systems Business



Call for Automobiles with Lowered Environmental Impact

While automobiles are indispensable to society, drive system related engines, motors, and the like are diversifying due to heightened environmental regulations and consumer concern for the environment. Amid such environmental change, automobile manufacturers recognize global warming countermeasures as a critical undertaking and target automobiles with lowered environmental impact.



Car Air Conditioning and Compressors

The Sanden Group is promoting the development of car air-conditioning systems and compressors that deliver both a more comfortable interior environment and environmental conservation. To address global warming, in addition to pursuing "thermal management technology" to provide a comfortable interior environment as well as compact, lightweight, and energy saving technology to improve fuel economy, we are also developing compressors that utilize a natural refrigerant (CO₂).

CO₂ Refrigerant Compressors

Applying CO₂ refrigerant technology, cultivated through product development work spanning freezing and refrigerating showcases, and vending machines, to car air-conditioning systems, we developed compressors for automotive air conditioning applying CO₂ refrigerant. In what we believe is a world's first* in this field, we established a mass production system and launched full-fledged market entry. As CO₂ refrigerant has an operating pressure approximately five times that of HFC-134a, an advanced level of technological capability is necessary to achieve high degrees of pressure resistance and airtightness. At the same time, as CO₂ refrigerant contributes to additional energy savings when combined with our heat pump system, we will continue to promote technological development and thereby proactively contribute to the development of the automobile industry and to protection of the global natural environment.

* Sanden survey



Sanden Automotive Components Corporation developed a new model compressor for car air conditioning that uses CO₂ refrigerant, and, effective from May 2017, commenced full-scale supply to German-based Daimler AG for use in mass-produced vehicles.

Comment by Dr. Ralf Theurer Project Leader at Daimler AG

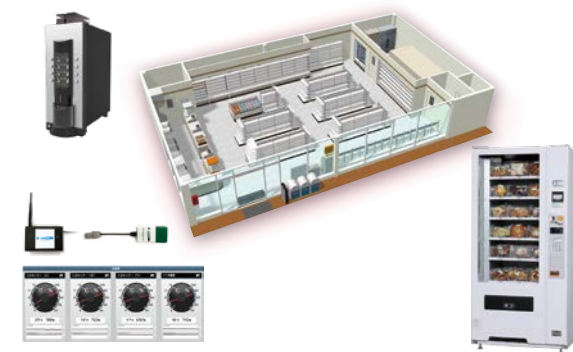
"Daimler chose Sanden for the development of the R744 compressor because of their extensive experience with this refrigerant and pioneering spirit towards new technologies. It has been quite a challenging project also for Daimler to get the R744 AC system launched in such short period. Therefore, the strategic partnership with Sanden has been very important and we are pleased about this successful launch."

Commercial Store Systems Business



Demand for Food Safety and Environmental Measures

In the distribution industry, both products and services are diversifying in light of changing customer needs and societal issues such as declining birthrates and aging. In line with supporting economic revitalization and maintenance of local communities, there is strong demand for quality control measures ensuring food safety and security as well as environmental management to minimize food waste.

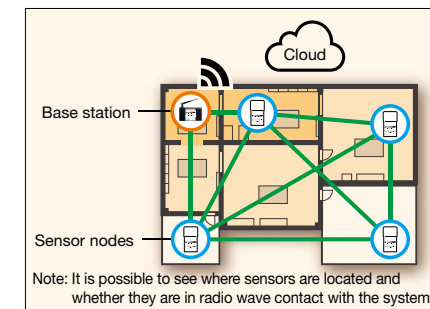


Natural Refrigerant (CO₂) Showcases and Temperature-Humidity Monitoring Service

The Sanden Group has introduced freezing and refrigerating showcases and vending machines combining heat pump technology using a natural refrigerant (CO₂) to lessen ozone layer depletion and potential global warming impact. In addition, we are developing products, systems, and services that address environmental concerns and food safety and security through integration with a comprehensive temperature and humidity management system for the entire food distribution chain that was launched in fiscal 2016.

Cloud-based Temperature and Humidity Monitor Service "e-mesh moderno"

As interest in safety and security increases in every field, including food and medical care, Sanden offers "e-mesh moderno", a cloud-based temperature and humidity monitoring service using IoT (Internet of Things) technology. This service can more meticulously manage temperature and humidity in each location, strongly supporting customers' quality control requirements. For example, in the field of food, consistent temperature and humidity management can be implemented from producers to food factories, logistics warehouses, shops, and consumers – from production to consumption points. In addition, temperature and humidity measurement data are transmitted to a cloud server, enabling customers to monitor conditions in real time even in remote locations, thereby enabling dramatic improvements in operating efficiency.



Sanden Retail Systems Corporation has been collaborating with Time Machine KK to provide the temperature and humidity monitor service "e-mesh moderno" since June 2016.

Comment by Kazuyoshi Nagai Nagano Prefecture Rengo Seika Co., Ltd., Senior Director and Manager of the Ueda Branch



"Our need for a cold-chain that can consistently maintain the freshness of food from the production region until it is delivered to our customers is growing year by year. With our introduction of "e-mesh moderno", we can easily monitor changes in temperature and humidity inside the warehouse and achieve meticulous temperature and humidity management. Going forward, by accumulating data we will be able to carry out verifications targeting optimal freshness management tailored for each type of food."