

*Fighting Disease with Electronics*  
 NIHON KOHDEN



# CSR Report 2016

Improving Healthcare with Advanced Technology

# Contents

Contents and Editorial Policy .....	2
Management Philosophy .....	3
Message from Top Management .....	4
Overview of Nihon Kohden	
Nihon Kohden in the Hospital and Community .....	6
Company Profile/Financial Highlights .....	8
Overview by Product Category .....	9
Nihon Kohden's Expanding Global Network .....	10
Nihon Kohden's CSR	
Nihon Kohden's CSR Policy .....	12
Nihon Kohden's Value Creation Process .....	14
Nihon Kohden's Priority Issues (Materiality) .....	16
Special Feature	
Solving Healthcare Issues through Business .....	18
<b>Governance</b>	
Corporate Governance	
<b>Enhancing Corporate Governance</b> .....	22
Compliance	
<b>Promoting and Practicing Compliance</b> .....	24
Risk Management	
<b>Strengthening Risk Management</b> .....	26
<b>Healthcare</b>	
Relationship with Customers	
<b>Improving Safety and Security</b> .....	28
<b>Improving Quality, Accessibility and Efficiency of Healthcare</b> .....	31
<b>Environment</b>	
Relationship with the Environment	
<b>Environmental Philosophy and Policy</b> .....	34
<b>International Initiatives</b> .....	37
<b>Environmentally Friendly Products</b> .....	38
<b>Site Report</b> .....	40
<b>Society</b>	
Relationship with Business Partners	
<b>Ensuring Fair Trade Practices</b> .....	42
Relationship with Shareholders and Investors	
<b>Enhancing Information Disclosure and Shareholder Returns</b> .....	44
Relationship with Employees	
<b>Achieving a Fulfilling Workplace</b> .....	46
Relationship with Local Community	
<b>Nihon Kohden's Contributions to the Community</b> .....	49
Third-party Feedback .....	51

## Editorial Policy

Nihon Kohden issues a CSR report in order to communicate to stakeholders in an easy to understand format the Company's approach to CSR (corporate social responsibility) and its actions that contribute toward a sustainable society. The report will include the following.

- The full CSR Report 2016 describes the Company's CSR activities. A digest version of the CSR Report summarizes important items and details of these activities.

Full report:

<http://www.nihonkohden.com/company/pdf/CSRreport2016E.pdf>

Digest:

[http://www.nihonkohden.com/company/pdf/CSRreport2016E\\_digest.pdf](http://www.nihonkohden.com/company/pdf/CSRreport2016E_digest.pdf)

- Detailed explanation of Nihon Kohden's CSR activities in relation to the Company's management philosophy, The CHANGE 2020 long-term vision, Strong Growth 2017 mid-term business plan, and Sustainable Growth 2017 mid-term CSR plan
- A special feature about Nihon Kohden's cap-ONE CO<sub>2</sub> sensor as an example of how the Company contributes to social issues through its business activities in the field of healthcare
- Summary of the Company's initiatives in fiscal year 2015 in relation to governance, healthcare, the environment, and society

## Reference Guidelines

- Environmental Reporting Guidelines, 2012 (Japan Ministry of the Environment)
- G4 Sustainability Reporting Guidelines (GRI)

## Scope of Report

41 companies of the Nihon Kohden Group:  
Nihon Kohden Corporation and 40 consolidated subsidiaries (as of March 31, 2016)

Period: April 1, 2015 to March 31, 2016\*

\*Including some information from before and after this period

## Disclaimer

This report is not a statement of past or present facts; it contains forward-looking statements including plans and forecasts made as of the time of publication. Forward-looking statements are suppositions or determinations based on available information at the time the statements were made. Due to changes in conditions, the results of future business activities and events may differ from these predictions.

## Publication Date

October 2016 (next publication: September 2017)

## Published by

Corporate Planning Group, Corporate Strategy Department, Nihon Kohden Corporation

## Management Philosophy

We contribute to the world by fighting disease and improving health with advanced technology, and create a fulfilling life for our employees.



The twelve members at the founding of Nihon Kohden

## ME as the Intersection of Medicine and Engineering

Before the existence of the ME acronym (Medical Electronics, or Medical Engineering), founders of Nihon Kohden began working in medical electronics (around 1944 near the end of World War II).

The founding of Nihon Kohden was inspired by the neuromuscular movement of the wing of a small bird.

At that time, Nihon Kohden founder Yoshio Ogino was an electronics researcher. One day, he happened to see an electric stimulation experiment involving the neuromuscular movement of the wing of a small bird. This led him to marvel at the wonder of living things. He saw that one part of a living organism is several hundred times smaller than the instruments developed by the leading electronics researchers in Japan, but the living organism has a sensitivity that is double digit greater.

Ogino wanted to examine if the subtlety of living organisms could be applied to a higher order of engineering. In particular, human beings are the most complex living creatures and he believed it might be possible to save lives by studying the human body and researching the connection between engineering and medicine.

Driven by this strong desire, he went back to medical school for four years and later founded Nihon Kohden in August 1951.

## An Unwavering Philosophy

"Curing disease is something that transcends politics and national borders, and we will never have any regret putting all our energy into this goal."

Based on this unshakable conviction, Nihon Kohden has produced many state-of-the-art medical electronic instruments.

As medicine evolved, Nihon Kohden's products have branched out into many areas, but the founding philosophy has not changed and it still inspires the Company's engineers.

Nihon Kohden will continue growing as a company that contributes to the world by fighting disease and improving health with advanced technology.



Yoshio Ogino, founder of Nihon Kohden

**Fumio Suzuki**  
Chairman and CEO



**Hirokazu Ogino**  
President and COO




Long-Term Vision

# The CHANGE 2020

— The Global Leader of Medical Solutions —

With synergy between business activities and CSR, Nihon Kohden will continue to create social value.

## Contribution through Our Business

Since 1951, Nihon Kohden has strived to contribute to the world by fighting disease and improving health with advanced technology, as well as create a fulfilling life for employees. This has led to revolutionary technologies and high quality medical devices. Nihon Kohden was founded with just twelve members, but today employs almost 5,000 staff as it continues to tackle healthcare challenges around the world. The products developed by Nihon Kohden have been exported to more than 120 countries around the world, where they have been used in various healthcare settings to save the lives of countless patients.

To save the lives of as many patients as possible, Nihon Kohden has continually pursued technological innovation and strived to create higher quality products. The Company's mission as a medical device manufacturer is to provide clinical value as well as value to patients. Nihon Kohden's strengths lie in its ability to create value for society, primarily through 1) the capacity to develop technologies rooted in medical practice; 2) a broad clientele base inside and outside Japan; 3) high-quality products and services, and the development, production, sales and service systems to support them; and 4) the strength of a brand cultivated over many years.

## FY2015 Highlights

For the Japan domestic market in FY2015, while the first half of the year saw a trend of constraint in the budgets of university, public and national hospitals, demand rebounded in the second half. For the

year as a whole, this resulted in sales that were largely on par with the previous term. In international markets, all regions experienced steady results based on strengthening of local sales and service structures, among other measures. As a result, sales and operating income marked an improvement over the previous year.

To bolster its global development structure, in April 2015 Nihon Kohden established OrangeMed Inc. in the United States as a development base for ventilators. This marks progress in the Company's efforts to develop a structure to expand its treatment equipment business. To reinforce the Company's production system, the Tomioka Production Center MIRAI commenced operation in May 2015. This facility not only expanded production capacity but also represented a step forward in efforts to further streamline production and reduce costs. As a boost to the Company's sales structure, sales subsidiaries were established in Germany and Mexico, in October 2015 and January 2016, respectively, in an effort to strengthen international sales.

In June 2015, Nihon Kohden employee Dr. Takuo Aoyagi received the 2015 IEEE Medal for Innovations in Healthcare Technology from the Institute of Electrical and Electronic Engineers (IEEE). Dr. Aoyagi was selected for his pioneering contributions to pulse oximetry, which has had a profound impact on improved quality of healthcare. Dr. Aoyagi was also the first Japanese to receive the award.

In terms of CSR activities, in July 2015 Nihon Kohden signed the United Nations Global Compact. By supporting the ten principles of the Global Compact on human rights, labor, environment and anti-corruption, Nihon Kohden has reaffirmed its commitment to the development of a sustainable society.

## Aspiring toward Sustainable Growth

In recent years, the global situation which surrounds Nihon Kohden has reached a significant turning point. With deepening environmental issues such as climate change, the declining birthrate and aging population in developed countries, and intensifying global competition, various issues need to be addressed. Nihon Kohden created "The CHANGE 2020" as its long-term vision for the future with the aim of attaining sustainable growth even in such a rapidly changing time. To achieve this, the Company is promoting its Strong Growth 2017 four-year mid-term business plan up to FY2017 along with the Sustainable Growth 2017 mid-term CSR plan.

Under its Sustainable Growth 2017 mid-term CSR plan, Nihon Kohden set healthcare, the environment and corporate activities as the three priority areas to set initiatives. In healthcare, the Company will help fight disease and improve health through its products and

services. For the environment, the Company is working to promote energy conservation and waste reduction. In its corporate activities, Nihon Kohden is strengthening corporate governance, compliance, respecting human rights, promoting fair labor practices and contributing to local communities.

These initiatives will improve the quality of healthcare and create value in the form of patient health while responding to the expectations and hopes of society. In a time of rapid change, Nihon Kohden believes this will translate into sustainable growth for the Group. Moving forward, Nihon Kohden will continue to practice the concept of "contributing to the world by fighting disease and improving health with advanced technology."

## The CHANGE 2020

— The Global Leader of Medical Solutions —

### Envisioned corporate status for 2020

- Lead the world in the development of revolutionary breakthrough technology
- Achieve the highest level of quality in the world
- Attain the top share in applicable global markets

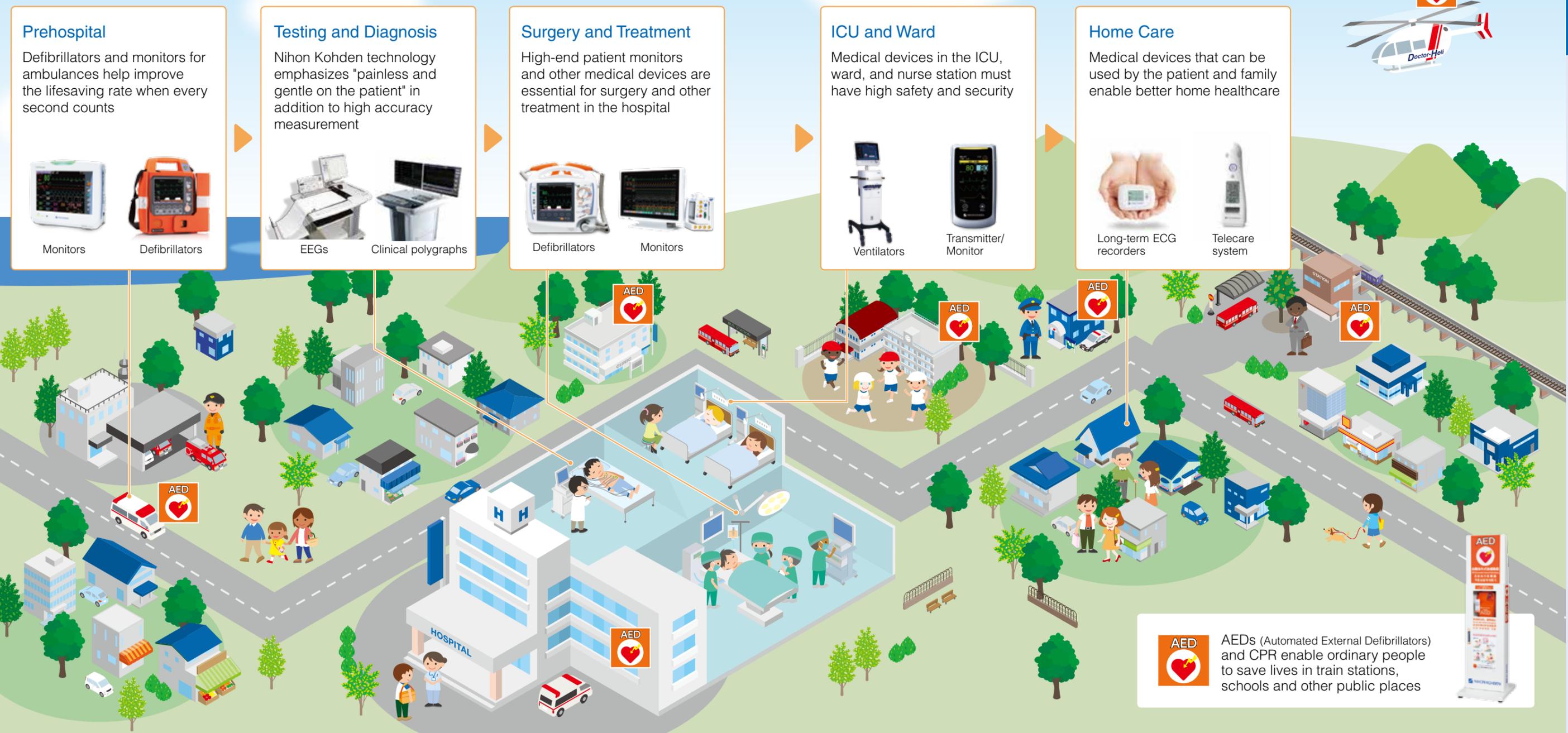
### Targets for FY2020

- Consolidated sales **200 billion yen**
- Consolidated operating income **25 billion yen**
- Overseas sales ratio **35%**



# Nihon Kohden in the Hospital and Community

Nihon Kohden products can be found in the hospital as well as emergency services, home health care, and AEDs in public places, serving the medical needs of hospitals and communities.



## Physiological Measuring Equipment

Sensors are one of Nihon Kohden's core technologies. High quality sensors can accurately detect the faint biological signals from the body. Nihon Kohden sensor technology is included in our products such as EEGs, ECGs, EMG and evoked potential devices. Nihon Kohden EEGs boast a large worldwide market share.



## Patient Monitors

Patient monitors continually monitor the patient's vital signs such as ECG, temperature, SpO<sub>2</sub> (blood oxygen saturation) and NIBP (noninvasive blood pressure). Nihon Kohden provides different monitors for different areas of the hospital, from the sophisticated multiparameter demands of the ICU, CCU, and OR to lower intensity telemetry monitoring in the ward.



## Treatment Equipment

Nihon Kohden makes defibrillators for the hospital and emergency services, and AEDs for public locations. These devices can deliver an electrical shock to restore normal rhythm to the heart. Nihon Kohden also imports the world's best cardiac pacemakers, ventilators, cochlear implants, and other medical equipment into Japan.



## Other Medical Equipment

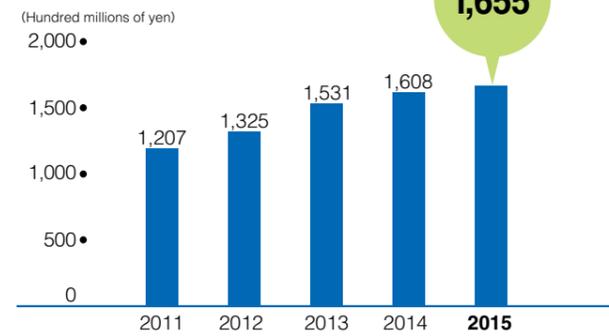
Nihon Kohden makes high precision hematology analyzers and reagents for laboratory blood testing, as well as instruments for clinical chemical analysis of hemoglobin A1c and C-reactive protein which are used in diagnosing diabetes. Nihon Kohden also develops laboratory products used for basic medical research.

## Company Profile

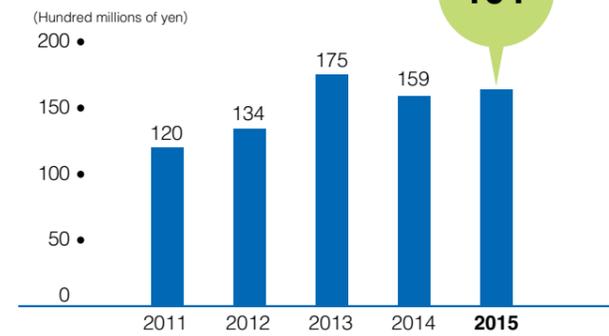
Common Name	Nihon Kohden	Incorporated	August 7, 1951
Official Name	Nihon Kohden Corporation	Capital Stock	7,544 million yen (as of March 31, 2016)
Representative Directors	Fumio Suzuki, Chairman and CEO Hirokazu Ogino, President and COO	Number of Employees (consolidated)	4,776 (as of March 31, 2016)
		Stock Listing	Tokyo Stock Exchange First Section under the name "Nihon Kohden" Stock Code: 6849

## Financial Highlights

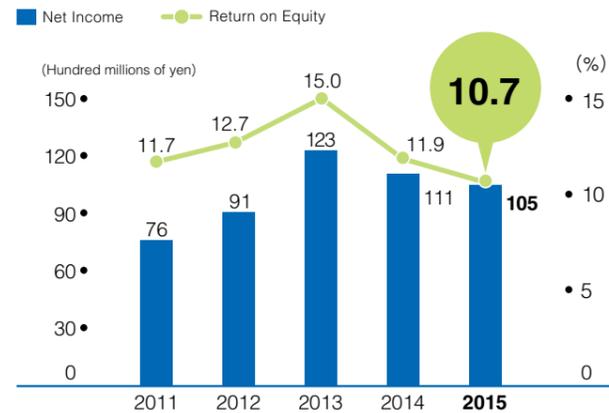
### Sales



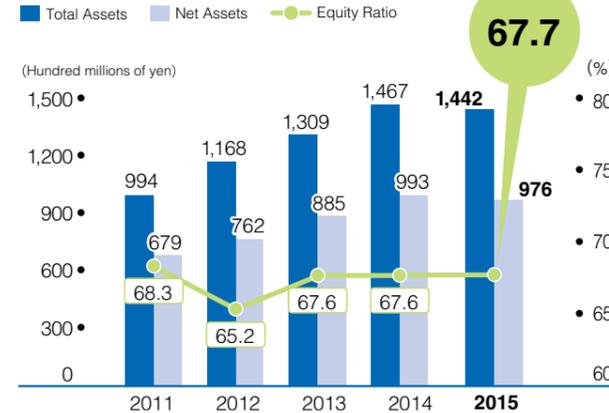
### Operating Income



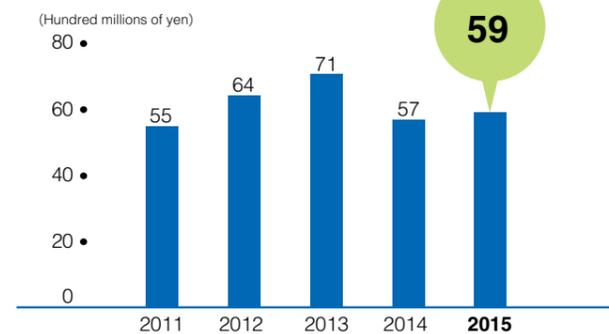
### Return on Equity



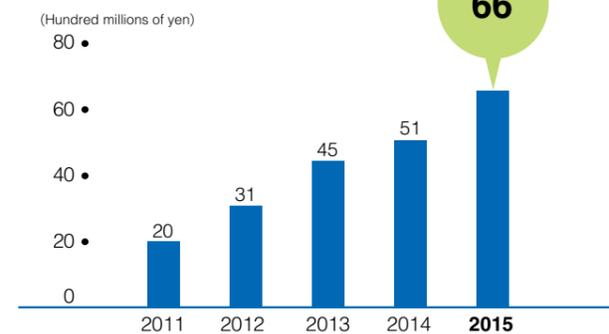
### Equity Ratio



### Research and Development Expenses



### Capital Investment



## Overview by Product Category

### Physiological Measuring Equipment

- Japan** Sales of polygraphs for cath lab and diagnostic information systems increased, while sales of EEGs and ECGs decreased.
- International** Sales of ECGs increased in Europe and Asia. Sales of EEGs decreased due to the reclassification of locally installed products in the U.S. and increased steadily in Americas and Asia on a comparable basis.

Overall, sales increased 5.5% over the previous fiscal year to 39.2 billion yen.

### Patient Monitors

- Japan** Sales of bedside monitors decreased, although consumable sales such as sensors and sales of clinical information systems increased favorably.
- International** Sales in the Americas and Asia showed strong growth, while sales in Europe were weak.

Overall, sales increased 3.3% over the previous fiscal year to 54.8 billion yen.



### Treatment Equipment

- Japan** Sales of defibrillators were weak and sales of cochlear implants also decreased due to change of supplier. AED sales increased supported by a new product launch.
- International** Sales of defibrillator increased favorably in the Americas and Europe. Sales of AEDs showed strong growth in all areas.

Overall, sales increased 4.1% over the previous fiscal year to 30.6 billion yen.

### Other

- Japan** Sales of locally purchased products decreased in accordance with the Company's selling policy with a focus on its own products and consumables. Sales of hematology instruments increased.
- International** Sales of hematology analyzers increased in Asia and Other.

Overall, sales decreased 0.7% over the previous fiscal year to 40.8 billion yen.

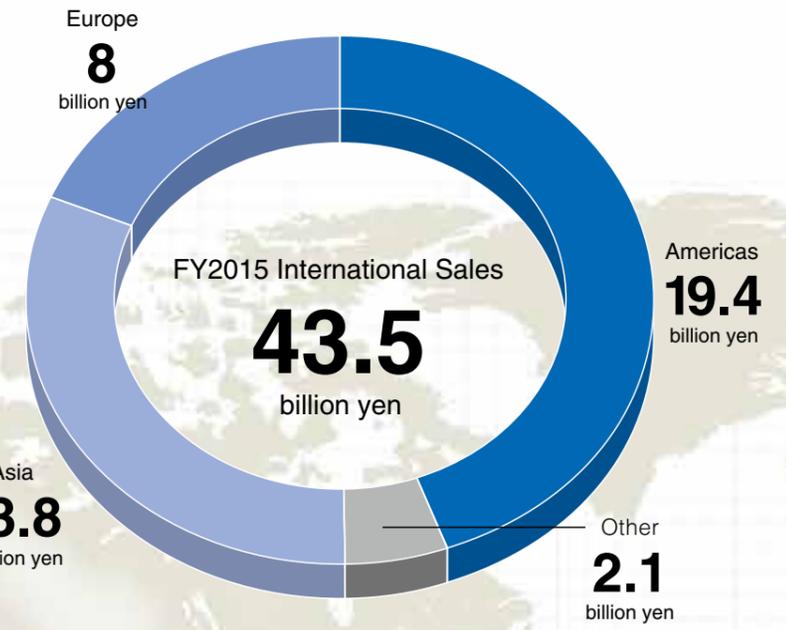
# Nihon Kohden's Expanding Global Network

Many people around the world suffer from disease. Medicine has no borders. To save the lives of as many people as possible through cutting-edge ME technologies, Nihon Kohden is expanding its global network every year. Since establishing Nihon Kohden America in 1979 as the Company's first international sales office, Nihon Kohden has opened sales offices in 16 countries, including Mexico, Colombia, Brazil, Germany, France, Spain, Italy, the UK, China, Singapore, Thailand, Malaysia, India, UAE and Korea. In other countries that

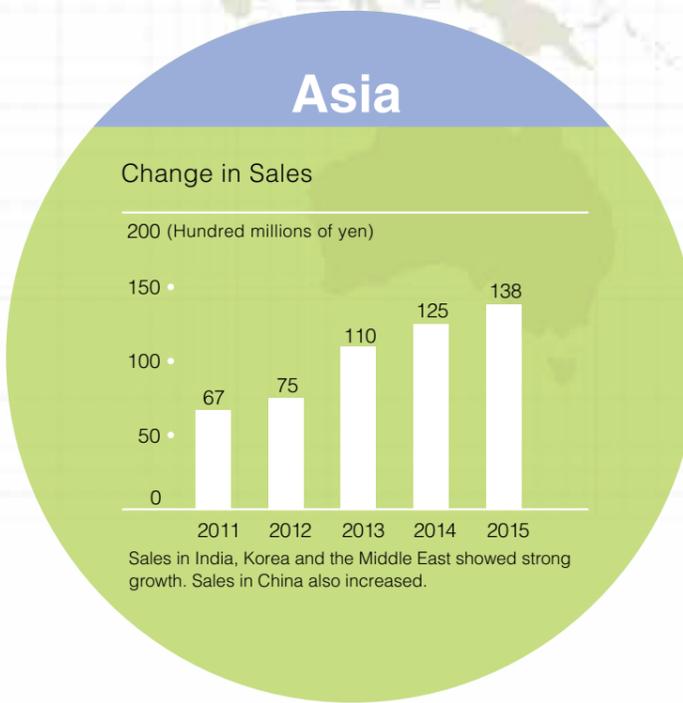
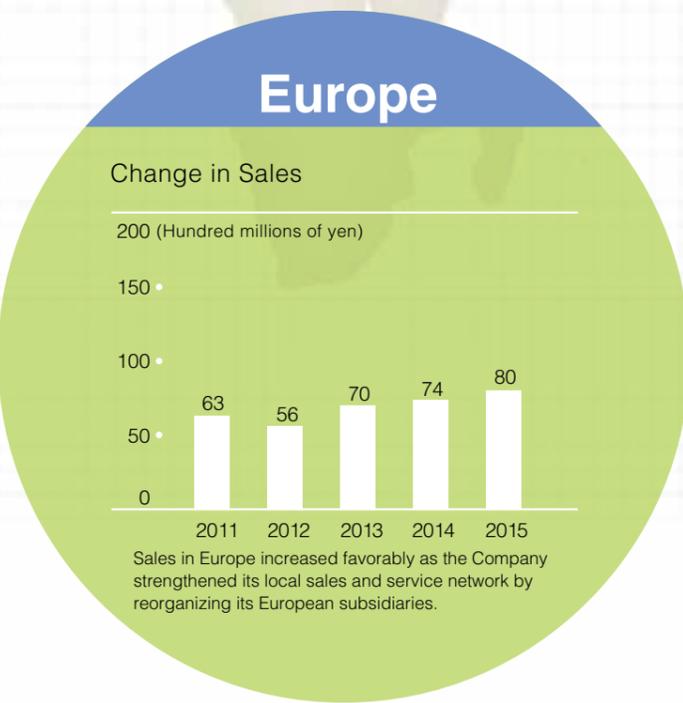
do not have a sales office, Nihon Kohden established a distributor network through which its products are exported around the world. Through six international development centers and five international production sites, Nihon Kohden is also striving to build a business structure that can handle the expanding world market.

Among the many products it exports, Nihon Kohden enjoys high market share in EEGs. The Company also exports EMG/EP measuring systems, ECGs, patient monitors, defibrillators, AEDs and

hematology analyzers to more than 120 countries. Nihon Kohden products are used in healthcare settings around the world. Moving forward, Nihon Kohden will continue to pursue business strategies that reflect a careful consideration of these medical needs and regional characteristics as it strives to attain a leading global share.



Overview of FY2015 by International Region



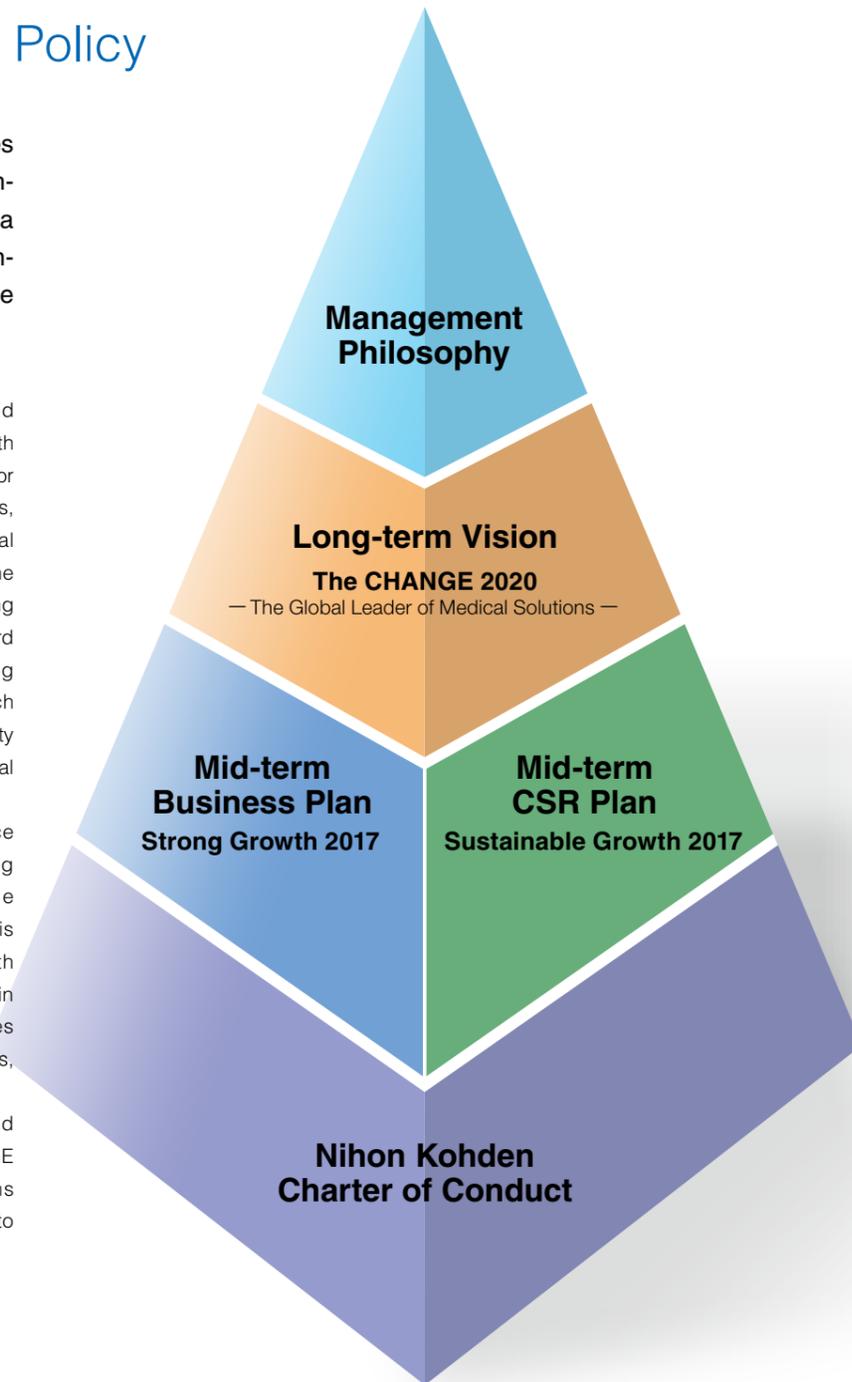
# Nihon Kohden's CSR Policy

Nihon Kohden is working on social issues by fighting disease and improving healthcare through its business activities as a medical device manufacturer and by contributing to the realization of a sustainable society.

To realize its mission of contributing to the world by fighting disease and improving healthcare with advanced technology, and to create a fulfilling life for its employees, Nihon Kohden is working in all areas, including products, services, technology, financial standing and quality of its employees, to earn the trust of customers and all stakeholders including shareholders, business partners and society. Toward this end, Nihon Kohden has prepared its Strong Growth 2017 mid-term business plan, under which the Company aims to provide the world's best quality medical devices and become a leader in the global medical device industry with global expansion.

The Company also recognizes the importance of its business activities in not only enhancing corporate value but also contributing to the development of a sustainable society. Toward this end, the Company made its Sustainable Growth 2017 mid-term CSR plan which identifies issues in healthcare, environment and corporate activities which the Company needs to address, sets targets, and outlines specific activities.

With synergy between business activities and CSR, Nihon Kohden aims to realize The CHANGE 2020 long-term vision through daily operations that enhance corporate value and provide value to society.



In July 2015, Nihon Kohden signed on to the United Nations Global Compact. By engaging in corporate activities that adhere to the Ten Principles of the United Nations Global Compact in the areas of human rights, labor, environment and anti-corruption, Nihon Kohden seeks the trust of society and to contribute to a sustainable society.



### Ten Principles of the United Nations Global Compact

Human Rights	Principle 1: Support and respect the protection of human rights Principle 2: Avoid being complicit in human rights abuses
Labor	Principle 3: Freedom of association and effective recognition of the right to collective bargaining Principle 4: Eliminate forced and compulsory labor Principle 5: Effective abolition of child labor Principle 6: Elimination of discrimination in respect of employment and occupation
Environment	Principle 7: Support a precautionary approach to environmental challenges Principle 8: Undertake initiatives to promote environmental responsibility Principle 9: Encourage the development and diffusion of environmentally friendly technologies
Anti-corruption	Principle 10: Work against corruption in all its forms, including extortion and bribery

## Management Philosophy

We contribute to the world by fighting disease and improving health with advanced technology, and create a fulfilling life for our employees

## Long-term Vision

**The CHANGE 2020**  
— The Global Leader of Medical Solutions —

Lead the world in the development of revolutionary breakthrough technology

Achieve the highest level of quality in the world

Attain top share in applicable global markets

## Mid-term Business Plan Strong Growth 2017

- 1 Pursue the highest level of quality in the world
- 2 Strengthen technological development capabilities
- 3 Strengthen business expansion by region
- 4 Achieve further growth in core businesses
- 5 Develop new businesses
- 6 Consolidate corporate fundamentals

### Basic Principles

Each and every employee will act autonomously and implement the following principles aimed at realizing the Company's long-term vision:

1. **User Oriented**  
Take all necessary actions for the customer
2. **Relationships**  
Strengthen relationships with customers and partners both inside and outside the Company
3. **Global**  
Enhance global communication skills as well as think and act with a global perspective
4. **Speed**  
Strive to do everything with greater speed

## Mid-term CSR Plan Sustainable Growth 2017

Healthcare	Environment	Corporate Activities
<p><b>Policy 1</b></p> <p>Fighting disease and contributing to the advancement of healthcare through products and services</p> <p>Priority Issues</p> <ul style="list-style-type: none"> <li>Improve efficacy and accessibility of diagnosis and treatment</li> <li>Improve quality of care throughout the care cycle</li> <li>Improve safety and security of patients and users</li> <li>Improve efficiency of users</li> </ul>	<p><b>Policy 2</b></p> <p>Conserve the global environment and make improvements through all corporate activities</p> <p>Priority Issues</p> <ul style="list-style-type: none"> <li>Provide environmentally friendly products</li> <li>Promote energy conservation and waste reduction</li> </ul>	<p><b>Policy 3</b></p> <p>Strengthen the foundation of CSR activities in all areas of corporate activities</p> <p>Priority Issues</p> <ul style="list-style-type: none"> <li>Improve corporate governance</li> <li>Respect human rights and promote appropriate work practices</li> <li>Promote fair business practices</li> <li>Community involvement</li> </ul>

## Nihon Kohden Charter of Conduct

- 1 We fight disease and improve healthcare with advanced technology, and contribute to medical care around the world by providing high quality products and services with consideration of the environment and safety, and earn the trust of customers and patients.
- 2 We comply with applicable laws, regulations, restrictions and company internal and external rules as well as social norms, and conduct fair and legitimate business activities.
- 3 While maintaining a sound relationship with politics and government, we engage in fair, transparent and free competition and appropriate transactions.
- 4 We take a firm stand against anti-social forces, such as organized crime groups, that threaten the order and safety of civil society, and have no relationship with them.
- 5 In all aspects of our business activities, we respect the human rights of all people and we do not commit unreasonable discrimination or any act which infringes on the personality and dignity of an individual.
- 6 We communicate with the public extensively as well as shareholders, and disclose corporate information properly and fairly, and carry out highly transparent management.
- 7 We are aware of our responsibility as a corporate citizen in the international community, and respect the culture and customs of each country and region, and actively carry out social contribution activities.
- 8 We are mindful of environmental issues as a global citizen, and address those issues voluntarily and proactively to leave for our posterity a healthy global environment.
- 9 We ensure a safe and comfortable working environment and create a fulfilling life for our employees.

CSR Slogan

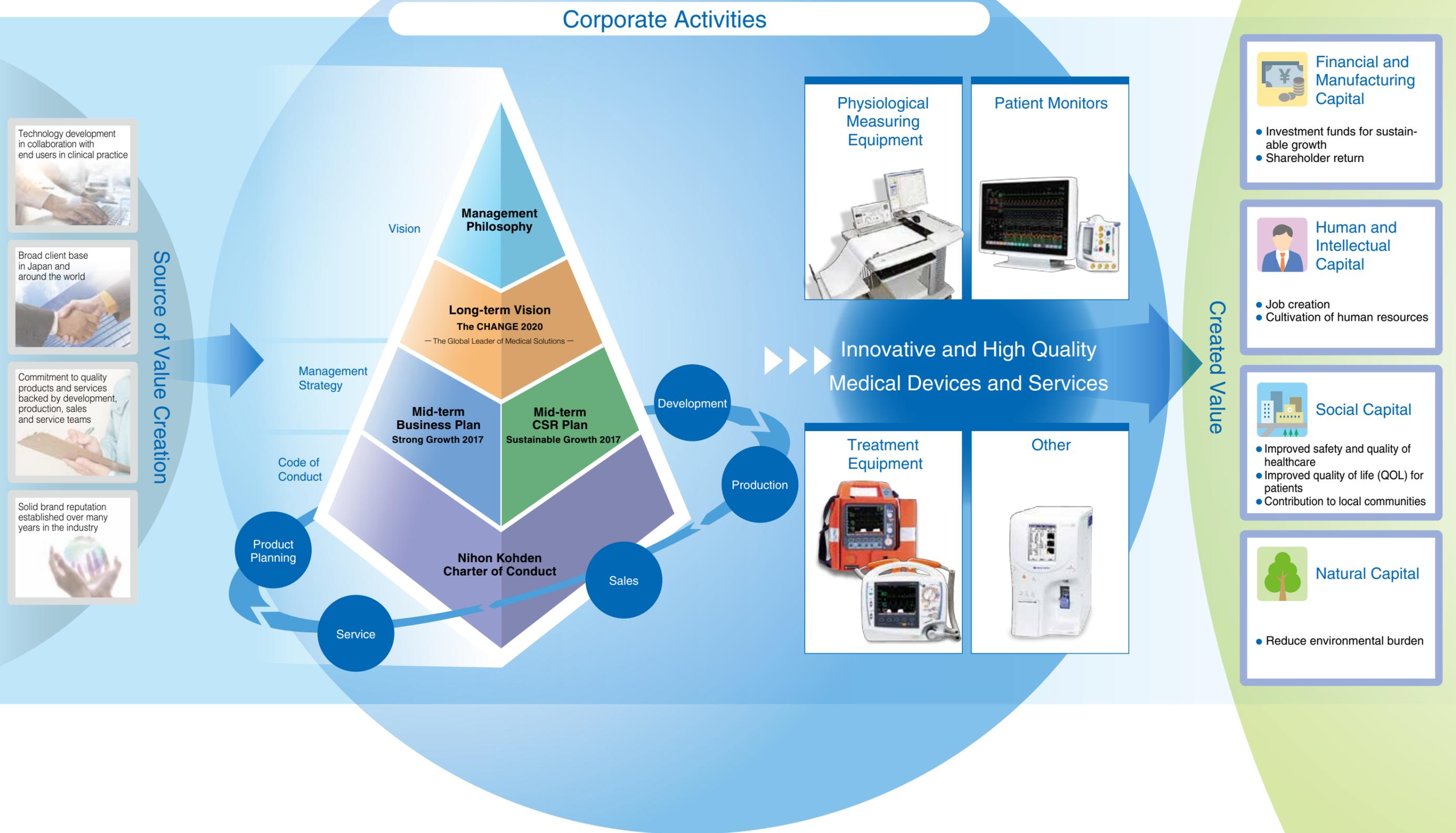
**NIHON KOHDEN – for precious life –**

This slogan articulates Nihon Kohden's desire as a medical device manufacturer to contribute not only to human life but to all forms of life on earth through its business and CSR activities.



# Nihon Kohden's Value Creation Process

To implement its management philosophy, Nihon Kohden strives to create value to society as well as improve its corporate value on a sustainable basis according to its long-term vision "The CHANGE 2020 – The Global Leader of Medical Solutions" and to execute this vision through its Strong Growth 2017 mid-term business plan and Sustainable Growth 2017 mid-term CSR plan.

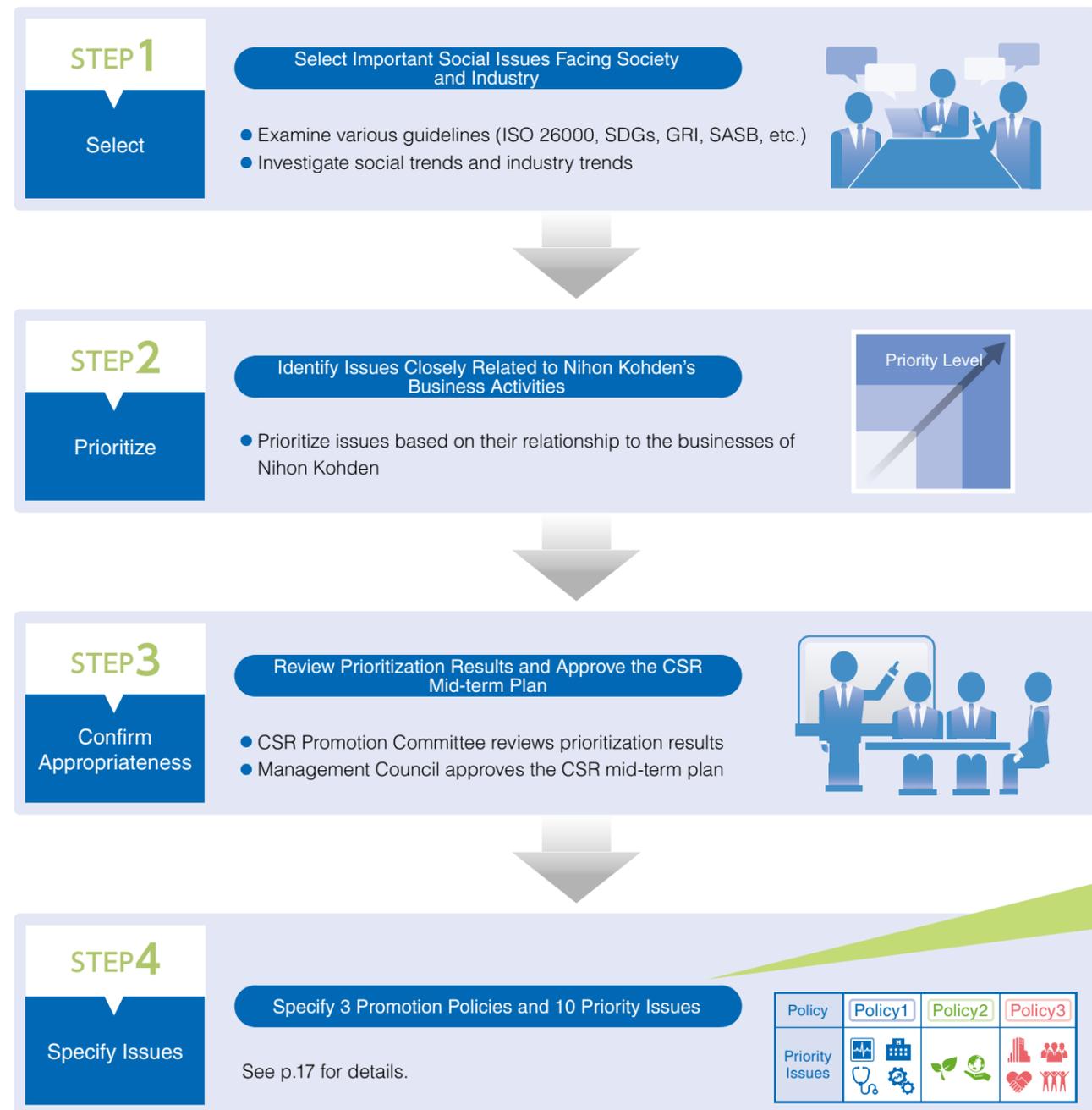


# Nihon Kohden's Priority Issues (Materiality)

In formulating its Sustainable Growth 2017 mid-term CSR plan, Nihon Kohden identified priority issues. To incorporate the expectations and requests of stakeholders during this process, we examined various guidelines and social trends. Through initiatives to address the priority issues, Nihon Kohden is working to respond to the requests and expectations of stakeholders and contribute to solving social issues.



## Four Steps in Identifying Priority Issues



## Boundaries and Scope of Priority Issues

The priority issues in Nihon Kohden's Sustainable Growth 2017 mid-term CSR plan were organized in the table below based on their relationship to the categories presented in the G4 Sustainability Reporting (GRI) Guidelines. The boundaries and scope of impact of each

priority issue was also presented. Nihon Kohden pursues initiatives to ensure that CSR-aware corporate activities are carried out through the entire supply chain and value chain.

Categories	Mid-term CSR Plan		GRI G4 Aspects	Boundaries						
	Policies	Priority Issues (Materiality)		The Company	Employees	Business Partners	Customers	Local Community	Investors and Shareholders	
Healthcare	<b>Policy 1</b> Fighting disease and contributing to the advancement of healthcare through products and services	Improve efficacy and accessibility of diagnosis and treatment	Product Responsibility	● Customer health and safety ● Marketing communications	✓					
		Improve quality of care throughout the care cycle								
		Improve safety and security of patients and users								
		Improve efficiency of users								
Environment	<b>Policy 2</b> Conserve the global environment and make improvements through all corporate activities	Provide environmentally friendly products	Environmental	● Materials ● Energy ● Emissions ● Effluents and waste ● Products and services	✓	✓	✓	✓	✓	✓
		Promote energy conservation and waste reduction								
Corporate Activities	<b>Policy 3</b> Strengthen the foundation of CSR activities in all areas of corporate activities	Improve corporate governance	Product Responsibility	Customer privacy	✓			✓		
		Respect human rights and promote appropriate work practices	Environmental, Society, Product Responsibility	Compliance	✓	✓	✓	✓	✓	✓
			Labor Practices and Decent Work	● Occupational health and safety ● Training and education ● Diversity and equal opportunity	✓	✓				
			Society	Anti-corruption	✓		✓	✓		
			Environmental, Labor Practices and Decent Work, Human Rights and Society	Supplier assessment	✓		✓			
		Society	Local communities	✓				✓		
		Community involvement								
			Economic	Economic performance	✓	✓				✓



# Solving Healthcare Issues through Business

## Developing *cap-ONE* for safer respiratory management

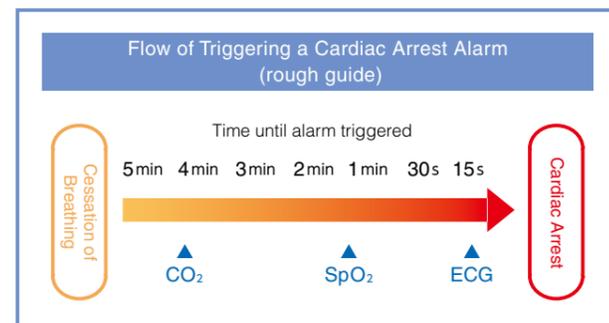
While focusing on safer respiratory management for patients, Nihon Kohden developed the *cap-ONE* CO<sub>2</sub> sensor that weighs only 4g. In this special feature, we explore the background that led to *cap-ONE*, the medical challenges, and Nihon Kohden's unique product technology and development approaches.



### The Need for a Respiratory Management System that Treats Patient Safety as the First Priority

Expired CO<sub>2</sub> measurement involves measuring and monitoring the CO<sub>2</sub> concentration in the exhaled air to ascertain the respiratory condition of a patient following surgery and other situations. While there are multiple alarms which are triggered after the stopping of breathing and before cardiac arrest, CO<sub>2</sub> measurement is effective because it quickly catches a change in the patient condition and enables countermeasures at an early stage. Accordingly, the utility of CO<sub>2</sub> measurement as an effective respiratory management technique is well known (see the figure below).

However, conventional CO<sub>2</sub> sensors are large and heavy. They may need to be fixed in place to avoid excessive burden on the ventilator circuit, and these sensors may not be used with infants. As a result, these CO<sub>2</sub> sensors have issues in regard to efficiency of clinical operations and ensuring patient safety.



### Original Technologies from Nihon Kohden Built into *cap-ONE*

Nihon Kohden developed the ultra-compact and lightweight *cap-ONE* CO<sub>2</sub> sensor to solve those issues. *cap-ONE* provides improvements in the clinical issues of size, weight, and impact resistance. The *cap-ONE* CO<sub>2</sub> sensor is easier to handle and realizes safer respiratory management. The following Nihon Kohden original technologies made this possible.

Comparison with Conventional Sensors (Nihon Kohden products)	Conventional CO <sub>2</sub> Sensor	<i>cap-ONE</i> Sensor
<b>1</b> Weight	20g	4g
<b>2</b> Impact Resistance	Weak	Strong
<b>3</b> CO <sub>2</sub> Measurement Capacity	Normal	High
<b>4</b> Use Together with an Oxygen Mask	No	Yes

## Ultra-compact, Lightweight, Impact Resistance, and Superior Measurement Capacity

QR Code Access  
View a video about this product.



### 1 Weight



#### Ultra-compact and lightweight

The size of the sensor part was reduced about 90% and the weight was reduced to about 4g to realize an ultra-compact lightweight sensor that reduces patient burden and enables stability of the breathing circuit. This ultra-compact size and lighter weight was achieved by sophisticated production techniques and seasoned production staff using a microscope for all bonding of miniature components. Printed circuit boards receive work by hand to individually fold them in the sensor component. Nihon Kohden's advanced production technologies supported the miniaturization of *cap-ONE*.

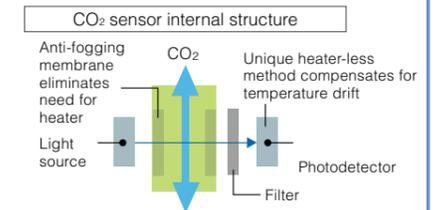


### 2 Impact Resistance



#### Robust impact resistance

Innovative sensor components and sensor structure have realized impact resistance and peace of mind even if the sensor is dropped. The sensor has passed the MIL standard (US Department of Defense Standard) impact test. This is an assessment standard for products used in harsh environments such as outdoors. The sensor also passed drop tests based on in-house standards that are higher than those used for our previous products.



### 3 CO<sub>2</sub> Measurement Capacity



#### Superior CO<sub>2</sub> measurement can be used on smaller size newborns

The smaller sensor needs a lower volume of exhaled gas than conventional sensors. This allows CO<sub>2</sub> measurement of smaller newborn infants who have lower exhalation volume.

	Conventional CO <sub>2</sub> Sensor	<i>cap-ONE</i> Sensor
Applicable patient weight	3kg~	2kg~

### 4 Use Together with an Oxygen Mask



#### By using with a *cap-ONE* mask, CO<sub>2</sub> can be measured during oxygen administration

In addition to the *cap-ONE* CO<sub>2</sub> sensor, Nihon Kohden also developed the *cap-ONE* mask which is an oxygen mask that allows simultaneous CO<sub>2</sub> measurement. The following features expand the possibilities for CO<sub>2</sub> measurement.



#### Safe CO<sub>2</sub> measurement without the need for a tracheal tube

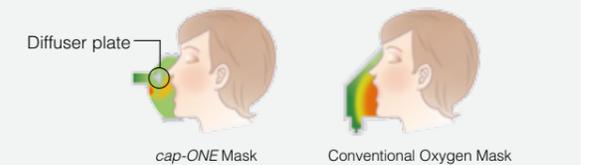
The combination of this mask with CO<sub>2</sub> sensor enables the world's first measurement of CO<sub>2</sub> while administering oxygen through an open-type oxygen mask without the use of a tracheal tube. Using equipment such as a patient monitor allows quick response monitoring of exhaled CO<sub>2</sub> values and waveforms as well as changes in breathing and circulation.

#### Stable supply of oxygen

Thanks to a structure that disperses oxygen on a diffuser plate, this mask has less variation in oxygen concentration than a conventional oxygen mask and gives a stable supply of oxygen.

#### Face-fitting structure

A cup for collecting the exhaled air slides on flexibly to conform to the shape of the patient's face. The excellent fitting characteristics make the mask more gentle on the patient and less prone to slippage, thus improving measurement accuracy.





*cap-ONE* includes a host of unique technologies.

The *cap-ONE* CO<sub>2</sub> sensor includes a number of unique technologies from Nihon Kohden developed through numerous innovations, a battery of tests, and a process of trial and error.

With *cap-ONE*, Nihon Kohden has continued to pursue reduced size. Products that are compact with complex structures are increasingly difficult to assemble. In that sense, *cap-ONE* could be described as the product of Japanese people's dexterous fingers. Medical professionals have offered high praise of the product, remarking that "with something this small, there is minimal burden on the patient so it won't bother them." Moreover, while it is hard to automate or mass produce this kind of product, Nihon Kohden carried out repeated assembly tests on its production line and worked to boost productivity while incorporating feedback from its production staff.



*cap-ONE* is not only compact, but also impact-resistant to hold up in the harsh environment of medical practice. At the scene of emergency care where every second counts, equipment and devices are often treated roughly. *cap-ONE* underwent various prototyping and has been shown not to break even when dropped

Hidetoshi Dainobu  
Assistant Manager  
Engineering Department Section 1  
Ventilation & Anesthesia Device  
Business Operations



from a height of 1.22 meters in 26 orientations. This passes the MIL standard (US Department of Defense Standard) for impact resistance.

The components and structure of *cap-ONE* also incorporate various innovations in durability. Usually, sensor-based CO<sub>2</sub> measurement employs infrared light. Infrared light passes between the light source in the sensor and a photodetector and is absorbed by the CO<sub>2</sub>. The measurement calculation is based on the reduction in transmitted light volume. However, in general, the filaments used in such light sources can easily disconnect when jolted. To overcome this problem, Nihon Kohden worked with a lamp manufacturer and engaged in a repeated process of trial and error to develop a highly durable light source for *cap-ONE*.

In addition, *cap-ONE* uses an anti-fogging membrane that enables accurate CO<sub>2</sub> measurement. The sensor takes in exhaled air which has a lot of moisture. As a result, fine water droplets can adhere to and cloud the window that passes the infrared light. This causes the infrared light to scatter. However, when an anti-fogging membrane with hydrophilic coating is used on the window, the water droplets adhering to the window spread out thinly and evenly. This allows accurate measurements because the infrared light arrives in a straight line not refracted by droplets. In comparison to competing products that incorporate a window heater to prevent fogging, the use of an anti-fogging membrane helps make the product smaller and consume less electricity. The anti-fogging membrane is also one of the unique technologies of *cap-ONE*.



*cap-ONE* mask for adults

Through *cap-ONE*, I want the culture of CO<sub>2</sub> measurement to take root around the world.

In 2012, Nihon Kohden developed the world's first mainstream\* method CO<sub>2</sub> measurement oxygen mask as an open-type oxygen mask for use with infants and small children. In pediatric care settings, issues with cessation of breathing can occur in patients due to the side effects of sedatives and anesthetics. To resolve this issue, a product was needed that could measure CO<sub>2</sub>, a parameter that can immediately detect breathing abnormalities, and administer oxygen at the same time, even during examination.

In developing the product, it was necessary to make a breakthrough with respect to the issue of whether CO<sub>2</sub> in exhaled air can be measured to a high degree of precision within a strong flow of oxygen. Great pains were also taken with regard to the shape of the mask. Our department embraces the motto of "developing products that you would use with peace of mind on your own family," and true to this motto, during the development stages we had our family members try out the masks. With the assistance of two children who were one and four years old at the time, we conducted a battery of tests to determine whether a patient can "comfortably sleep with the mask still attached" and "whether the mask touches the tip of the nose and causes pain." The results of the tests led to commercialization of the product.



Our future goal is to have the *cap-ONE* mask used by an even

broader range of patients. In 2015, we released a mask for adults and received a great response. There is an increasing desire to perform CO<sub>2</sub> measurement in a variety of settings to manage safety to a higher level. Next we hope to move beyond oxygen masks and pursue the development of devices that respond to these needs.

In addition, we aim to make the products easily available to patients around the world in addition to Japanese patients. Depending on the person's race, the shape of the face can be completely different. For that reason, I collected 3D scanning data of the faces of people of various races while I was stationed in the United States, and conducted tests on mask shapes.

In medical settings, the use of CO<sub>2</sub> measurement as a means of respiratory management is not yet mainstream. By having all kinds of patients regardless of age or race use the *cap-ONE* mask in the future, I want the culture of CO<sub>2</sub> measurement to take root around the world.

\* Mainstream method: Sensor is embedded in the respirator circuit



Fumihiko Takatori  
Leader  
Engineering Department Section 1  
Ventilation & Anesthesia Device  
Business Operations

Voices from the Clinical Site

Nihon Kohden's CO<sub>2</sub> sensor uses the mainstream method. Compared with the sidestream method\*\*, it offers peace of mind because it doesn't experience trouble such as sampling tube blockage or bending. Also, the new sensor components have no heater or motor. By simplifying the structure, there are fewer factors that can cause malfunction, and since it also offers excellent impact and water resistance, it is no longer limited to certain usage environments.

Physician / Clinical Engineering  
Laboratory Technician  
Anesthesiology Department, a hospital  
in Shizuoka Prefecture



\*\* Sidestream method: Sensor is built into the CO<sub>2</sub> measurement equipment and exhaled air is collected through sampling tubes

Looking at reports of medical incidents related to respiratory management, many incidents occur due to separation between a tracheal tube or tracheostomy tube and the respiratory circuit. CO<sub>2</sub> measurement of exhaled air enables the swift detection and handling of these types of abnormal situations, and serves as the key to preventing accidents. In order to appropriately manage tracheal tubes, the hospital continually measures CO<sub>2</sub> levels in the exhaled air of all patients attached to respirators. We have placed at least one bedside monitor capable of connecting to a Nihon Kohden CO<sub>2</sub> sensor kit in each of the hospital's general wards and transmit information to nurse station central monitors. This allows us to remotely monitor for respirator trouble.

Technician  
Clinical Engineering Laboratory, a  
hospital in Yokohama, Kanagawa  
Prefecture



In our hospital's PACU\*\*\*, we began using *cap-ONE* masks this year and we use around 150 of the masks each month. Since the masks can perform more accurate CO<sub>2</sub> measurement than sensors that use the sidestream method, I feel it is wonderful that we can enhance the safety of patients while being able to efficiently administer oxygen at the same time. Moreover, since we can measure the patient condition more accurately than before, there are less cases where a monitoring alarm is mistakenly triggered for a patient who is in good condition. Patients who have undergone surgery go through the PACU before being relocated to a general ward thereafter, but for patients who also need to be administered oxygen in a hospital ward, we instruct that the *cap-ONE* mask be used continually for three days.

Physician  
Anesthesiology Department,  
a university hospital in Korea



\*\*\* PACU (Post-anesthesia Care Unit): Care of patients recovering from general and local anesthetic

Our hospital uses *cap-ONE* for sleep studies of all patients up to 18 years of age, including newborn infants. We carry out around 700 such tests per year and the results have been very stable. Medical devices and technologies from Nihon Kohden are trustworthy and adequately provide the functions needed by the hospital. *cap-ONE* features high measurement precision and even compared with the CO<sub>2</sub> monitor we were using previously, there is a high correlation in the measurement results of both devices. When taking CO<sub>2</sub> measurements from newborn infants, even the reduced size of the *cap-ONE* still feels a little large, so we look forward to the development of an improved interface for newborn infants.

Sleep Study Technician  
a university hospital in Illinois,  
United States



# Enhancing Corporate Governance

Nihon Kohden strives to strengthen its corporate governance with the aim of continually enhancing its corporate value.



### Sustainable Growth 2017 Priority Tasks

Improve corporate governance

### Sustainable Growth 2017 Targets

- Initiatives such as strengthening governance, ensuring thorough compliance and strengthening risk management

## Basic Approach to Corporate Governance

As a maker of medical electronic equipment, Nihon Kohden embraces the management philosophy of "contributing to the world by fighting disease and improving health with advanced technology, and creating a fulfilling life for our employees." To implement this philosophy, Nihon Kohden's basic approach to management is to grow as a company that is accepted by customers, shareholders, business partners and society in every aspect including products, sales, services, technology, financial standing and human resources, and to earn the trust of those stakeholders.

To implement this basic approach to management and enhance the medium-to-long term corporate value of the Nihon Kohden Group, our important management issues are enhancing corporate governance by building a corporate governance structure focused on sound management, transparency and improved efficiency.

## Corporate Governance Framework

The head office of Nihon Kohden has adopted the structure of a company with an Audit & Supervisory Committee to achieve the following: enhancement of supervisory functions through possession of voting rights at the meeting of the Board by Audit & Supervisory Committee members, improvement of the soundness and transparency of management by raising the proportion of outside directors, and speeding up management decision making by having options to delegate the authorities for business execution. Nihon Kohden has also implemented various

initiatives such as appointing highly independent outside directors, introducing an operating officer system, and pursuing mutual coordination between the Audit & Supervisory Committee, Internal Auditing Department and accounting auditors. In this way, Nihon Kohden believes it has adequately ensured supervisory functions in its management.

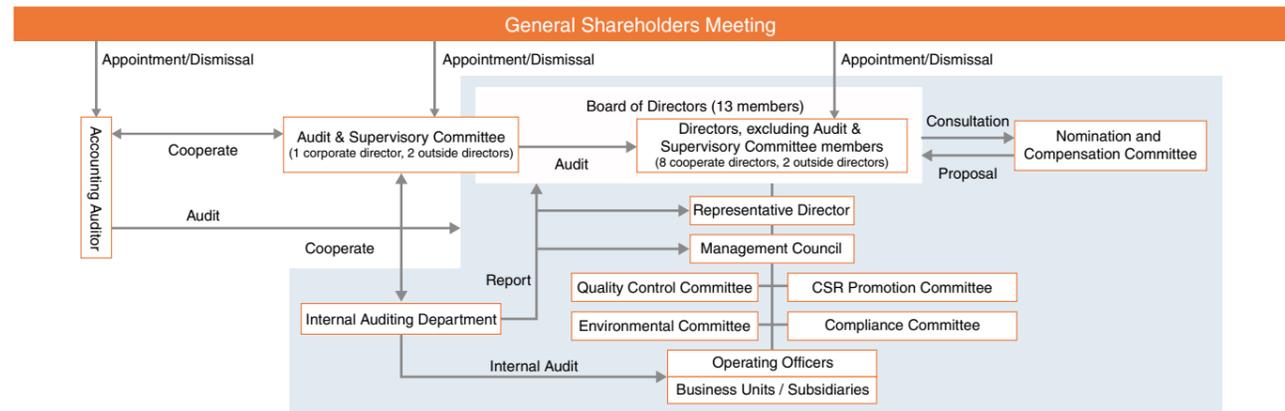
### ● Board of Directors

The Board consists of 10 directors excluding Audit & Supervisory Committee members (including 2 outside directors) and 3 Audit & Supervisory Committee members (including 2 outside directors). In principle the Board convenes once a month, and is responsible for determining matters stipulated by Companies Act as well as important matters concerning the management of the Nihon Kohden Group, and supervising the execution of duties on the part of the directors.

### ● Audit & Supervisory Committee

The Audit & Supervisory Committee consists of 3 directors, including 2 outside directors and 1 full-time member. Each Audit & Supervisory Committee member attends meetings of the Board and Management Council. Each Audit & Supervisory Committee member audits the performance of the directors' duties through the investigation of business execution and assets of the Company and its subsidiaries. Those activities shall be in accordance with auditing plan for the term which is formulated by the Audit & Supervisory Committee. The Audit & Supervisory Committee also maintains close coordination with accounting auditors and Internal Auditing Department. Also note that the full-time member of the Audit & Supervisory Committee has many years of experience in finance and accounting departments and possesses a considerable degree of knowledge about finance and accounting.

### Corporate Organization and Internal Control System



### ● Management Council

Management Council, which consists of all directors and operating officers, holds meetings three times a month in order to undertake the management activities based on the policy approved by the Board as well as aiming at prompt decision making and flexible business operation. As part of the Company's commitment to better corporate governance, the company has introduced an operating officer system that provides a clear segregation between managerial decision making and supervisory functions on the one hand and the execution of operations on the other.

### ● Nomination and Compensation Committee

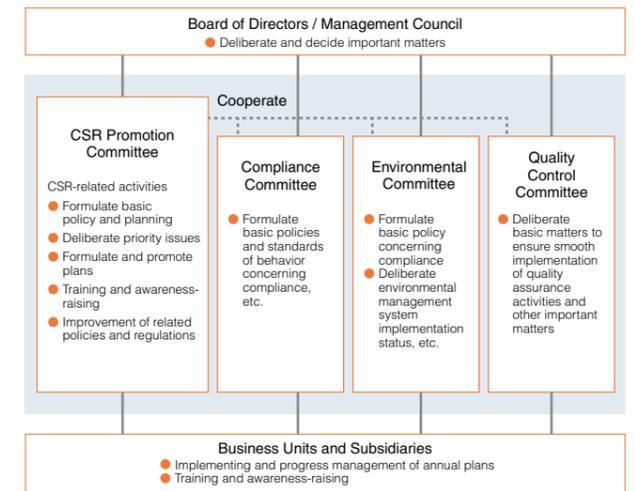
The Company has established a Nomination and Remuneration Committee which is a voluntary advisory committee under the Board, to ensure transparency and objectivity of the management. The majority of the committee members and the committee chair are appointed from outside directors.

## CSR Promotion Structure

To promote CSR, we established a CSR Promotion Committee as a board committee involved in Nihon Kohden's overall CSR activities such as planning, promoting, organizing, educating, and other activities. This committee is composed of representatives of the

Compliance Committee, Quality Control Committee, Environmental Committee and representatives of other operation divisions. This committee sets the CSR annual activity plan to practice CSR through daily operation.

### CSR Promotion Structure



## Making Diligent Efforts to Help Further Enhance Corporate Value

Outside directors not only engage in decision-making within the company's internal structure, but also need to ensure that differing views and objectivity based on an independent stance are reflected in corporate governance. In doing so, outside directors are expected to contribute to sound and transparent management that does not deviate from appropriate standards. I focus on using my experience in handling various cases as an attorney to continually monitor the company based on

conventional wisdom with the eyes of an outsider while giving adequate consideration to the viewpoint of shareholders.

The Nihon Kohden Group has achieved strong business results to date. Moving forward, I will make the best of my abilities and make diligent efforts to help further enhance the corporate value of the Nihon Kohden Group by faithfully executing the aforementioned role.



Masaya Yamauchi  
Outside Director

## Contributing to Further Sustainable Growth with a Sense of Responsibility as an Outside Director

We have entered the second year since adopting the Corporate Governance Code that stipulates the stance of the company and its investors, and the extremely important role of outside directors in this framework has been recognized. We have now entered a phase of further ensuring the functioning of this governance framework and pursuing its viability.

For lively and constructive argument based on the diverse wisdom, experience and specialties of each individual. I am impressed by the history, will and sense of purpose of Nihon Kohden as a leading company in the medical device industry that continually moves forward, as well as its ability to continually provide high-quality medical devices and services to healthcare-related customers. As an outside director, I will embrace a strong sense of responsibility and employ ceaseless efforts and constructive dialogue to fulfill my supervisory function and actively contribute to the sustainable growth of the company.



Minoru Obara  
Outside Director

### Activities in FY2015

- Evaluation **Good**
- Promoted response based on the Corporate Governance Code
  - Convened CSR Promotion Committee meetings

### FY2016 Action Plan

- Transition to company with an Audit & Supervisory Committee
- Implement Board of Directors effectiveness evaluation

## Promoting and Practicing Compliance

We practice fair and legitimate business activities with high ethics.



### Sustainable Growth 2017 Priority Tasks

Improve corporate governance

### Sustainable Growth 2017 Targets

- Initiatives such as strengthening governance, ensuring thorough compliance and strengthening risk management

### Basic Approach to Compliance

Item 2 of the Nihon Kohden Charter of Conduct states that "we comply with applicable laws, regulations, restrictions and company internal and external rules as well as social norms, and conduct fair and legitimate business activities."

To put this into practice, Nihon Kohden has established regulations related to compliance and conducts employee training to ensure that these rules take root and are thoroughly observed.

### Nihon Kohden Code of Ethics and Conduct

To ensure that Nihon Kohden employees embrace the spirit of the Management Philosophy and Nihon Kohden Charter of Conduct, the behavior to be observed from the perspective of compliance is set forth in the Nihon Kohden Code of Ethics and Conduct.

### Compliance Promotion Framework

Nihon Kohden has established Compliance Promotion Rules pertaining to mechanisms and the basic matters of operational methods for the promotion of compliance. The Compliance Committee has been established as an organization for promoting compliance based on the Compliance Promotion Rules. The committee establishes rules and systems and provides operational support to ensure that compliance is observed in business activities. Its functions include complying with laws and regulations, providing compliance education and training to employees and monitoring the state of compliance.

In addition, the heads of each Group company and business division work with and report to the Compliance Committee in their roles as Compliance Administrators.

### Compliance Promotion Framework



### Compliance Training

Nihon Kohden has produced a Compliance Handbook that contains the rules, approaches, conduct standards and other information that employees need in order to understand and ensure daily compliance. The handbook is distributed to all employees as part of ongoing efforts to enhance awareness and knowledge regarding compliance.

Workplace-level compliance workshops are also conducted at each Group company and business division on a yearly basis. To prevent compliance violations on the part of employees, all employees are given ongoing instruction on related laws and regulations. To ensure that a compliance culture takes root, employees are required to self-study or read through designated learning



The Compliance Handbook is distributed to all employees.

### Internal Reporting System

Nihon Kohden has established a compliance hotline as a point of contact for consultation and reporting on compliance matters. By using the Compliance Hotline when it is difficult to resolve a compliance-related matter in the workplace, employees can anonymously consult or report on matters to the Compliance Committee. By making the process anonymous, persons who consult or make reports through the hotline are protected from any unfavorable treatment arising from their consultation or report.

#### Compliance Hotline



### Preventing Corruption

The Nihon Kohden Code of Ethics and Conduct prohibits bribery of Japanese and foreign public officials through conduct that is in violation of laws and regulations. Nihon Kohden works to disseminate related rules through a Compliance Handbook that contains the rules, approaches, conduct standards and other information that employees need to understand to ensure daily compliance.

To ensure compliance with the laws and regulations preventing corruption in every region in which Nihon Kohden engages in business, including bribery and corruption-related legislation in Japan, the Foreign Corrupt Practices Act (FCPA) in the United States and the Bribery Act in the United Kingdom, Nihon Kohden works to disseminate information and ensure thorough compliance through the distribution of a Compliance Handbook and holding compliance workshops.

### We work to enhance workshops and systems to raise awareness of compliance

A medical device manufacturer must follow laws and regulations in every aspect of operations from product development to trade. One person's violation can harm the credibility of the Company as well as patients' lives. As the

person in charge of compliance training, I want employees to get usable knowledge and raise awareness of compliance through a compliance workshop, violation reporting systems and contact points for consultation.



#### Activities in FY2015

Evaluation

Good

- Held ongoing compliance workshops

#### FY2016 Action Plan

- Examine and implement measures to strengthen compliance, including a fundamental revision of regulations and systems related to compliance

## Strengthening Risk Management

Nihon Kohden strives to make improvements to risk management to ensure it can respond appropriately to various business risks.



### Sustainable Growth 2017 Priority Tasks

 Improve corporate governance

### Sustainable Growth 2017 Targets

- Initiatives such as strengthening governance, ensuring thorough compliance and strengthening risk management

## Approach to Risk Management

To ensure the sound and smooth operation of business, Nihon Kohden has established a management framework to prevent risks in overall business operations and prescribed methods for dealing with risks when they occur.

## Risk Management Framework

The Management Council is responsible for establishing basic policies concerning risk management in overall Group business operations, and ascertaining the improvement and promotion status of the Group-wide risk management framework. The Risk Management Supervisory Division is tasked with improving and promoting the overall risk management system of the Nihon Kohden Group, and reporting to the Management Council on the improvement and promotion status of the risk management system.

The risks present in the execution of business activities have been classified into eight types and Risk Management Divisions and Risk-Related Committees have been assigned to each risk type. Risk Management Divisions provide training and support to operating units with regard to their assigned risk types, and report the system improvement and promotion status to the Risk Management Supervisory Division. The Risk-Related Committees report to the Management Council on matters including assessments of management system appropriateness, validity and effectiveness for related risk types.

In addition, risks discovered during audits conducted by the Internal Auditing Department are reported to the president.

### Risk Management Framework



## Risk Types

The Risk Management Regulations, which set forth the basic policies for risk management, classify risks into eight types: Strategic Risks, Compliance Risks, Financial and Accounting Risks, Quality Control Risks, Environmental Risks, Disaster and Accident Risks, System Risks, and Information Disclosure Risks.

### Risk Types

Risk	Description	Management Division
Strategic Risks	Risks related to management strategy	Board of Directors, Management Council
Compliance Risks	Risks involving losses due to failure to comply with laws and regulations, etc.	Compliance Committee
Financial and Accounting Risks	Risks of losses due to fluctuating values of held assets or inappropriate accounting practices	Accounting Division
Quality Control Risks	Risks of losses due to the safety of products and services or reliability issues	Quality Control Committee
Environmental Risks	Risks of losses when efforts to reduce the impact on the environment or activities to prevent environmental pollution are inadequate and environmental pollution, etc. occurs	Environmental Committee
Disaster and Accident Risks	Risks of losses when the execution of business is impeded due to a disaster or accident	Disaster Prevention Management Committee
System Risks	Risks of losses due to computer system malfunction, incorrect operation, unauthorized use, etc.	IT Committee
Information Disclosure Risks	Risk of losses due to the inaccurate or inappropriate disclosure of information	Information Disclosure Committee

## Risk Assessments

Nihon Kohden subsidiaries and the departments in head office conduct self-assessment of risk management using check sheets and divisional inspection sheets. The Risk Management Supervisory Division verifies the progress of risk management system implementation and future responses, and reports the results of self-assessments to the Management Council.

## Response in the Event of a Risk

Regulations have been established for each risk type. Regulations related to each risk type governing the response to be taken when a risk occurs have also been set forth.

## Disaster Risk Management

### ● Basic Approach

Medical devices on which people's lives depend need to be supplied continually and smoothly in the event of a major disaster. As a medical device manufacturer, we take measures to ensure the safety of employees and their families in a disaster and respond to disaster risks to ensure the unbroken support of products and services.

### ● Business Continuity Plan (BCP)

In March 2015, Nihon Kohden devised a business continuity plan to ensure that even if the company suffers damages and losses due to a major earthquake, the provision of products and services can continue or be quickly restored. The BCP sets forth organizational charts, initial response manuals in the event of a disaster, subsequent restoration plans following an initial response, operational procedures and disaster mitigation measures to be taken under normal conditions for each business site.

### ● Business Continuity Management (BCM)

To ensure that the business continuity plan functions effectively during a disaster, we have established a BCP Operation and Management Committee tasked with operating and managing the BCP. The committee conducts regular company-wide education and training to ensure the effectiveness of the BCP during a disaster. In addition, the BCP is periodically reviewed in order to make ongoing improvements.

### Nihon Kohden's Basic BCP Policy

- 1 Protect employment while placing a priority on the lives and health of employees and their families
- 2 Fulfill our responsibility to supply products and deliver services to customers, and endeavor to maintain a healthcare structure
- 3 Support customers and contribute to local communities
- 4 Maintain close coordination with affiliate companies and minimize the impact on the management of other parties

## Information Risk Management

### ● Basic Policy

Information-related technologies and environments are continually changing. New ways of using information along with new risks emerge on a daily basis. While we promote the utilization of highly convenient information technology and work to improve business efficiency, we also undertake various measures in response to changing conditions to safeguard confidential company information and personal information from leaks.

### ● Initiatives to Ensure Information Security

To protect the personal information and important confidential information of all stakeholders including customers, patients, business partners and employees, we have established regulations concerning personal information and IT utilization.

An IT Committee prescribes these rules concerning IT utilization. We have also deployed members of the Network Utilization Promotion Committee in operating divisions and subsidiaries to disseminate rules to employees, as well as to provide guidance and support.

### ● Employee Education

Nihon Kohden conducts periodic training for employees to disseminate information on rules concerning IT utilization and ensure that compliance with the Act on the Protection of Personal Information and internal rules is widely known and taken root.

### ● Obtaining Third-party Certification

To further enhance information security, Nihon Kohden has also obtained outside certification. We obtained PrivacyMark certification in July 2005, and obtained Information Security Management System (ISMS) JIS Q 27001 (ISO / IEC 27001) certification in January 2015; the scope includes management and operation of remote service facilities for Nihon Kohden Group system products.



### Activities in FY2015

- Evaluation **Good**
- Convened BCP Operational and Management Committee meetings
  - Implemented BCP simulated training

### FY2016 Action Plan

- Review BCP and expand scope of development
- Develop more sophisticated BCP simulation training and expand scope of applicability

## Improving Safety and Security

As a maker of medical devices which affect lives, we aim to provide products and services that give the customer safety and security.



### Sustainable Growth 2017 Priority Tasks

- Improve safety and security of patients and users

### Sustainable Growth 2017 Targets

- Provide high quality products and service that deliver medical safety and security
- Develop new technologies that contribute to medical safety and security

## Quality Policy and Quality Management

Medical devices used in advanced medical care require the highest level of quality and safety. Nihon Kohden's quality policy is "To have the customers feel continuous satisfaction with their purchase of Nihon Kohden products."

Our long-term vision for 2020 includes the goal of "achieving the highest level of quality in the world." In pursuit of product and service quality, we set three targets for daily quality improvement activities.

- "Risk Zero" design and production
- Achieve a high utilization rate by users
- Achieve excellent usability

To achieve this quality policy and long-term vision, Nihon Kohden set Group quality targets and continually strives to ensure customer satisfaction and quality in all processes from development to production, sales and after-sales service. Nihon Kohden complies with the medical device regulations of each country and was one

of the first in the industry to ensure that its management systems conform to global standards. This ensures the ability to develop and manufacture medical devices with high quality and safety. Nihon Kohden has received ISO 9001 quality management system certification and ISO 13485 certification for the medical devices sector. Our Reliability Center, which carries out product evaluation, has received ISO 17025 for testing and calibration labs.

## Support Systems to Ensure Safety

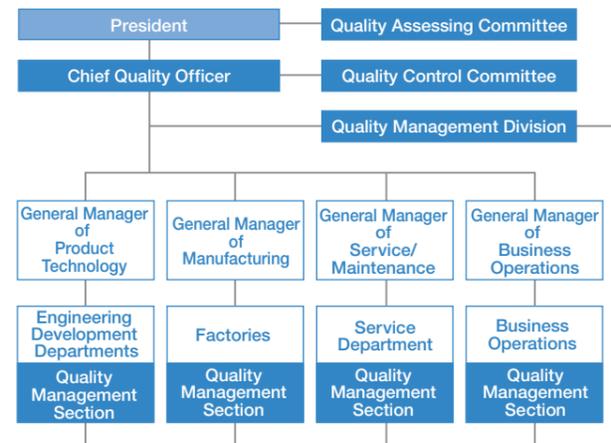
Nihon Kohden not only strives to improve the quality and safety of its products, but also supports customers in safety management and promotes medical technology to help ensure safety after delivery of the product.

In Japan, Nihon Kohden deploys specialized personnel who have accreditations such as Medical Device Information Communicators (MDIC)\*. We also organize safety workshops for users to ensure that they use our products correctly. We held 1,751 workshops in FY2015.

### ISO 9001 Certificate, ISO 13485 Certificate



### Quality Management System



\*MDIC is an accreditation program established by the Japan Society of Medical Instrumentation (JSMI) to cultivate personnel who can contribute to patient safety and the improvement of healthcare quality.

## Obtaining ISO 9001 Certification for Service Divisions

Although ISO 9001 Quality Management System certification was previously obtained in the bench service divisions, Nihon Kohden has also moved forward to obtain ISO 9001 certification in area service divisions in Japan to provide services of even higher quality to customers. Certification has been obtained for more divisions since FY2013, and we expect to complete certification at all area service divisions in 11 locations throughout Japan in FY2016.

## Obtaining ISO Certification for Overseas Production Sites

Nihon Kohden is strengthening its business development overseas. Targeting markets in developing nations where growth is expected due to factors such as improved healthcare infrastructure in connection with economic growth, products are exported from Nihon Kohden's Tomioka Production Center in Tomioka, Gunma Prefecture, and local production is also underway at overseas plants. Similarly, reagents for hematology testing equipment are also exported from the Tomioka plant and produced locally at overseas plants.

In 2015, Nihon Kohden Malaysia obtained a manufacturing permit as well as ISO 13485 certification, and commenced production of patient monitors. Nihon Kohden Firenze, which produces reagents for hematology testing equipment in Italy, renewed its certifications for ISO 13485 and ISO 9001.



ISO 13485 certification Nihon Kohden Malaysia



ISO 13485, ISO 9001 certification Nihon Kohden Firenze

## Commissioning of the Tomioka Production Center

The Tomioka factory in Gunma Prefecture, which manufactured Nihon Kohden medical devices, was relocated to the new Tomioka Production Center in May 2015. Previously, manufacturing of printed circuit boards and medical devices was split between the two factories, but by consolidating these functions in the new production center, we aim to achieve further improvements in production efficiency and quality.

In terms of production efficiency, we made use of a wide 100 m<sup>2</sup> floor area and revised distribution traffic lines to streamline operations while reducing in-process inventory.

On the quality front, we implemented thorough dust control measures with air conditioning that maintains positive pressure in the production area using clean air that passes through semi-HEPA filters, and we controlled the generation of electrostatic discharge that leads to malfunctions in semiconductor components with humidity management based on high-performance humidifier equipment. These measures allow us to develop an environment for manufacturing high-quality medical devices.

In addition, a work-life balance team comprised mainly of female staff has planned facilities and workstyles that take diversity into account and develop comfortable work environments for employees while seeking to achieve high manufacturing quality as well as improve and reform production activities.



MIRAI Tomioka Production Center



Stagnation-free production line arranged in a straight line

## Production Activities that Lead to Safety and Security for Customers and Patients

I am tasked with managing the production lines for AEDs and defibrillators, and I strive to improve the productivity and quality of our products through equipment management and human resource development. Since AEDs and defibrillators are treatment devices used on patients during an emergency, we make a point of working and communicating carefully with the understanding that each task we perform can help save a precious life.

The production division coordinates with the development division to produce high-quality products. For example, when we developed a new product, we identify issues in manufacturing processes that take mass production into account from the early stages and we pro-

vide feedback to the development division so that stable manufacturing quality can be maintained. In addition, by setting up opportunities for production division workers to learn new things on a systematic basis, we aim to develop human resources who are able to notice when something is "off," and explain the importance of each individual task.

AEDs and defibrillators are not products used on a daily basis; they are only used in emergencies. When an emergency situation occurs, they must operate without fail. When we hear about an AED actually being used to save a life, it fills us with delight and gives us the sense that we have made a contribution.



Naomi Sakurai  
Manager, Production Section 2,  
Production Department 1  
Nihon Kohden Tomioka Corporation

## Relationship with Customers

### Communication with Customers

Communication with customers after their purchase is an important part of Nihon Kohden's quality policy. We have a call center to respond to customer inquiries 24 hours a day, 365 days a year whenever there is a question or issue with a Nihon Kohden product, system or service. There are telephone hotlines for each product line and operators are trained in each product to resolve any issue the customer may have.

To incorporate the feedback from customers into product development and improve services, Nihon Kohden also conducts customer satisfaction surveys in Japan and abroad. The results of a survey conducted on call center handling of product malfunctions for customers in Japan showed that we achieved a satisfaction rate of 87% in FY2015.

### Top Rating in Customer Satisfaction Surveys for 9 Consecutive Years in the US

In a patient monitor customer satisfaction survey conducted in April 2016 (Q1) by US-based market research firm MD Buyline, Nihon Kohden America earned the top rank for the ninth year running. In the survey, the performance, prompt service and product training for Nihon Kohden's patient monitor system received particularly high praise.

To further enhance its customer support, Nihon Kohden America opened the East Coast Operation Center in February 2016. This is a new support call center in Allentown, Pennsylvania. With the opening of the support center, we have developed a structure that allows us to provide faster support to customers on the east coast of the United States.



Opening of the East Coast Operation Center

### Workshops and Seminars

Providing healthcare professionals with appropriate information is important for supporting improvement in the safety of healthcare. Nihon Kohden organizes and co-sponsors workshops and seminars to disseminate academic information and clinical knowledge leading to medical safety and appropriate use of medical devices. Nihon Kohden reaches nurses and medical interns by Japan domestic and international academic seminars on ECG, cardiology and other subjects, by vital sign seminars that teach physiological

knowledge such as blood pressure, pulse and temperature, and by ME workshops that teach about medical devices to ensure their safe use.

Nihon Kohden also offers service training on periodic product maintenance and check procedures for clinical engineers and other personnel responsible for the maintenance of medical devices.

In developing countries, workshops on the use of Nihon Kohden products are held for doctors and laboratory technicians. These workshops provide the opportunity to learn techniques for attaching electrodes and sensors to measure accurate data, techniques for eliminating noise, and actual device usage.

Through these initiatives, we aim to provide the information required to handle medical devices appropriately, contribute to safe and secure healthcare, and enhance customer satisfaction with Nihon Kohden products and services.

#### Major Workshops and Seminars in FY2015

	Events (Attendees)	Topics	Region
Academic seminars	7 (1,019)	Clinical ECG seminar / Circulatory system advanced seminar / other	Japan
Vital signs seminars	3 (915)	Future of vital signs / Team healthcare in the perioperative period / other	Japan
ME workshops	450 (approx. 15,000)	Monitors, cardiac catheters testing, ventilators, EEGs, Neuropack, polysomnogram workshops / other	Japan
International seminars	7 (407)	Hemodynamic monitoring including esCCO with Japanese know-how, techniques, introduction of medical devices and pharmaceuticals, and promotion of medical cooperation other	Asia / Americas
International workshops	16 (299)	EMG diagnosis basics / aEEG reading basics / CPR+AED workshops / other	Asia, Europe, Americas, Africa



Seminar in the United States



Sri Lanka

## Improving Quality, Accessibility and Efficiency of Healthcare

We aim for higher quality, accessibility and efficiency of healthcare by innovative technology and product development.



#### Sustainable Growth 2017 Priority Tasks

- Improve efficacy and accessibility of diagnosis and treatment
- Improve quality of care throughout the care cycle
- Improve efficiency of users

#### Sustainable Growth 2017 Targets

- More access to healthcare in developing countries, PAD\* market, etc.
- Provide solutions that improve work efficiency in medical facilities

### Improving Quality of Care throughout the Care Cycle

Many developed countries face an aging population and the health care system must respond. The aging population in Japan is advancing at a rate not seen in many other countries, and the Ministry of Health, Labour and Welfare is developing a comprehensive regional care system and strengthening coordination between nursing care, medical care and prevention to allow the elderly to live in familiar surroundings, targeting 2025 for completion.

Nihon Kohden provides solutions that span the entire care cycle from prevention to testing, diagnosis, treatment and rehabilitation.

With this focus on prevention of adult-onset diseases, the NAS-1000 blood pressure gauge was developed with the aim of developing early screening tests. Using the same method as regular blood pressure measurement, the NAS-1000 places minimal strain on the patient and can display the new API / AVI blood vessel indices.

In addition, testing reports can be provided to patients and doctors for better diagnosis. Moving forward, Nihon Kohden will continue to provide medical devices that help prevent adult-onset diseases.

### Improving Quality of Life (QOL) for Patients

Nihon Kohden has released the SUKOYAKA® monitoring telecare system as a monitoring service to advance the health and manage the pre-symptoms of elderly persons living alone.

The system detects changes in lifestyle rhythms, activity levels and environment (temperature, humidity, light) using a home station installed inside the home and provides email-based notifications.

Moreover, based on the results of an epidemiologic study on the improvement of health of elderly people in Nakanojo in Gunma Prefecture, evidence-based information on what kinds of exercises should be carried out and to what degree are provided to support health development.



SUKOYAKA® monitoring telecare system

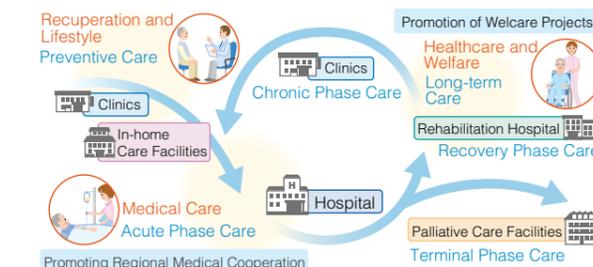
### Improving Healthcare Efficiency

Nihon Kohden released the FCM-2200 Celltac Peak High DNA Content Measuring Flow Cytometer which can swiftly measure cellular DNA content extracted during neurosurgery. A glioma\*\* is a malignant tumor that accounts for roughly 30 percent of all brain tumors. As it is invasive and its barrier with the normal cell area is unclear, a pathologist carries out rapid intraoperative pathology\*\*\* to accurately identify the extent of the tumor during surgery in order to remove it. This form of diagnosis usually takes around 20 minutes, but this new product can quickly, easily and quantitatively measure DNA content that increases during cell growth within 10 minutes. It is expected to remove some of the burden from the operator, pathologist and patient, and lead to more standardized testing.



FCM-2200 Celltac Peak High DNA Content Measuring Flow Cytometer

#### Providing Solutions throughout the Entire Care Cycle



\* Public Access Defibrillation (PAD) is defibrillation performed by an ordinary citizen using an AED. The PAD market includes public facilities, schools and private companies.

\*\* A glioma is a malignant tumor that accounts for roughly 30 percent of all brain tumors. It is typically invasive, making the barrier between the tumor and normal cells unclear and hampering complete removal.

\*\*\* Rapid intraoperative pathology is a form of histopathological investigation performed in a limited time during surgery to determine whether a lesion is a tumor, whether the tumor is benign or malignant, whether cancer has spread, and whether any parts of the lesion remain.

#### Activities in FY2015

- Evaluation **Good**
- Continued initiatives to improve quality based on the Group quality plan

#### FY2016 Action Plan

- Continue initiatives to improve quality based on the Group quality plan

## Relationship with Customers

### Unique Sensor Technology

Utilizing its technological capabilities, Nihon Kohden strives to solve the issues faced by medical staff and patients and develop unique parameters that lead to better quality and more efficient healthcare.

#### ● synECi18

This technology uses the normally measured 12-lead ECG to derive the 6 additional right side and back leads which are not normally measured because of the cumbersome procedure but which are helpful in identifying right side and posterior infarction. synECi18 provides useful 18-lead screening to reveal more information about the heart condition.



#### ● iNIBP

This technology detects the pulse during instead of after arm cuff inflation. This allows quicker and more gentle noninvasive blood pressure measurement with lower cuff pressure.



#### ● cap-ONE

cap-ONE is an ultra-compact and lightweight mainstream-type CO<sub>2</sub> sensor with unprecedented impact resistance and light weight thanks to a unique heater-less and motor-less structure developed by Nihon Kohden. When used together with a cap-ONE mask, wide range of patients such as non-intubated patients, patients receiving oxygen, etc. can get safe respiratory management through CO<sub>2</sub> monitoring.



#### ● esCCO

This technology provides continuous estimated measurement of cardiac output based on the pulse waves obtained from the ECG and pulse oximetry. Previously, cardiac output could only be measured by inserting a catheter into the pulmonary artery. esCCO is pain-free and stress-free. Sales started in Europe in 2011 and clinical studies are continuing.



### Creating Innovation

#### ● Establishment of the Nihon Kohden Innovation Center

To reinforce its research and development structure in the United States, where cutting-edge technologies come together in one of the world's largest medical device industries, Nihon Kohden established the Nihon Kohden Innovation Center as an R&D site in Boston in September 2014.

Nihon Kohden will make use of the center to pursue cutting-edge research in cooperation with US universities.

Nihon Kohden Innovation Center has an Advisory Board as an organization for accepting advice from outside experts on research and development matters. US-based doctors and experts in electrical engineering have been brought on as advisors, and the board pursues research and development while receiving advice and recommendations based on their respective expert standings.

#### ● Innovation Forum

Nihon Kohden regularly holds an Innovation Forum designed to introduce and share information on the latest technologies internally and encourage further technological innovation through presentations of results by engineers.

In FY2015 we held forums on patient monitor analysis technologies and fundamental research.

### Initiatives to Disseminate Medical Care

#### ● Activities to Disseminate CPR and AEDs

When a person who may have gone into cardiac arrest is discovered, initiating CPR more quickly and delivering electric shocks using an AED could save their lives. To ensure that as many people as possible can use an AED in the event it is needed, Nihon Kohden provides support for AED installation and operation and conducts workshops on AED usage and CPR techniques inside and outside Japan to help develop an environment in which ordinary people can do CPR.

In Japan, 5,891 people attended the workshops in FY2015. We also supported safety and security by loaning out AEDs and dispatching personnel and instructors for various events including the 10th Tokyo Marathon in 2015. We also conducted on-site workshops for customers who have AEDs, provided support for customers to act as instructors to conduct in-house workshops, and offered public workshops at our training center.

Overseas, since AEDs have not yet achieved widespread adoption in some regions outside Europe and the United States, we are engaged in activities to create environments in which ordinary people can immediately use AEDs when needed. Dedicated AED personnel have been assigned to Nihon Kohden's international sales subsidiaries where they conduct CPR and AED workshops and lend increasing support at marathons and other events.



Hands-on experience with CPR and AEDs (Japan)

Promotional activities in Mexico

#### ■ AED Workshops and Participation in the Past Five Years (Japan)

	Workshops	Participants
FY2011	289	5,780
FY2012	349	6,238
FY2013	334	5,261
FY2014	390	6,953
FY2015	338	5,891
Total	1,700	30,123

#### ● Providing Medical Devices for Developing Countries

Developing countries still face shortages of medical equipment and devices in medical care settings. With the aim of improving and enhancing these healthcare environments, Nihon Kohden developed the SVM-7500 series of bedside monitors for developing countries at its Shanghai site. The products are low-cost, high-quality bedside monitors with features including comfortable touch-panel operation, viewing of cumulative data from the past 120 hours, and interbed function that allows information from other patient monitors to be viewed.

Shanghai Kohden Medical Electronic Instrument Corp. and Nihon Kohden Malaysia are handling production. As Malaysia has many high-quality engineers in the electronics industry and offers easy access to Southeast Asian countries, we have achieved high-quality and efficient production combined with flexible distribution by establishing production sites in the country.

Moving forward, Nihon Kohden has plans to expand the endeavor beyond Asia into the Mexico region. By continuing to provide low-cost, high-quality products to medical settings in developing countries, Nihon Kohden will strive to improve the provision of medical care.



SVM-7500 series monitors are achieving success in developing countries.



SVM-7500 series bedside monitors for developing countries

### International Activities to Promote the Spread of AEDs

In China, many provinces still limit the use of AED to medical practitioners. Accordingly, the devices are not well recognized and suffer from a low adoption rate. In terms of awareness-raising activities, in addition to workshops, in 2015 we supported around 30% of the 200 marathon events together with medical teams. Following

the saving of a life with an AED during a marathon in Wuxi in 2014, in 2015 the lives of three people were saved in similar fashion. I take pride in our mission of spreading the adoption of AEDs as devices that relate directly to human lives.



Zhu Lu  
AED Specialist  
Shanghai Kohden Medical  
Electronic Instrument Corp.

### Topics

#### Nihon Kohden's DCS-5000 series of Long-term ECG Analysis Devices Win 2015 Good Design Award

This product analyzes heart function, blood pressure and sleep apnea testing data under daily lifestyle conditions. Collecting biological information (ECG, breathing, blood pressure) over an extended period and using the product to analyze the data can lead to the discovery of intermittent high mortality arrhythmia, or detect conditions during a post-treatment observation.

The product includes a function that takes an

enormous volume of data and consolidates the important information into a single screen. It also has a feature to share data over a network. This reduces time spent and reduces the load on both patients and medical staff. In the latest award, the product was highly regarded for its "superb system design equipped with a user interface allowing experts' knowledge to be fully utilized."



DCS-5000 series long-term ECG analysis device

#### Activities in FY2015

- Evaluation **Good**
- Launched SUKOYAKA® monitoring telecare system
  - DCS-5000 series long-term ECG analysis device won 2015 Good Design Award

#### FY2016 Action Plan

- Promote widespread adoption of unique sensor technologies
- Continue to hold AED workshops in Japan and overseas

## Environmental Philosophy and Policy

We strive to realize our environmental philosophy through our business activities and the actions of our employees.



### Environmental Philosophy

In its business activities and the actions of its employees, Nihon Kohden works towards the conservation and qualitative improvement of the earth priceless environment so that all people can enjoy a healthy environment.

Established: November 4, 2008\*

### Environmental Policy

Based on its management and environmental philosophy, Nihon Kohden shall carry out this environmental policy.

#### 1 Provide environmentally friendly products

In carrying out development, manufacturing, marketing, after sales service, and support for electronic medical devices, we provide environmentally friendly products which conserve energy and resources, and do not use hazardous substances

#### 2 Promote energy conservation and reduction of waste

In all of our business activities, we continue to introduce low-carbon and high-efficiency technologies, and strive to promote energy conservation, reduce waste through the 3 R's of Reduce/Reuse/Recycle, reduce CO<sub>2</sub> emissions, and prevent environmental pollution.

#### 3 Comply with laws and regulations

In all business activities, we comply with all laws, regulations, ordinances, and agreements that concern the environment in Japan and overseas, and carry out our responsibilities to stakeholders as a global company.

#### 4 Promote environmental education

In regard to environmental issues, Nihon Kohden provides appropriate education and awareness-raising activities. We also promote education aimed at including environmental improvement activities into our everyday work.

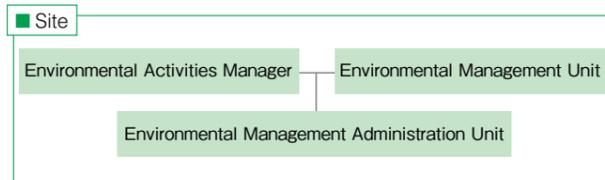
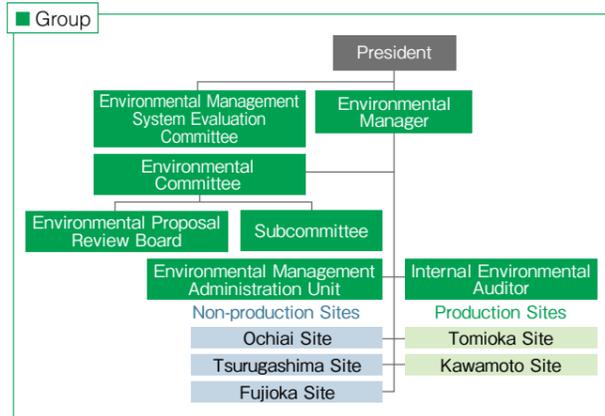
Established: March 28, 2013\*

In 2016, the MIRAI Tomioka Production Center underwent an expansion inspection and completed registration. Our activities currently span five sites. Ochiai Site: head office and development department; Tsurugashima Site: sales and shipping of ME consumables; Kawamoto Site: development of ME consumables and safety/reliability testing of ME devices; Fujioka Site: repair and maintenance; Tomioka Site: manufacturing and shipping.



#### • The United Nations Global Compact

In July 2015, based on the principles of the United Nations Global Compact to which the CEO of Nihon Kohden signed on to, the COO is driving activities to incorporate elements into its environmental targets, including preventative approaches to environmental issues, leadership in taking responsibility for the environment, as well as the development and widespread adoption of sustainable technologies.



### Certifications and Signed Commitments

#### • ISO 14001

The Tomioka Factory obtained ISO 14001:1996 certification in October 2001, and underwent a transitional review for ISO 14001:2004 in October 2005. Our head office and production department were integrated and registered for joint certification in January 2007. Certification renewal inspections were completed in January 2010, January 2013 and January 2016.

\* Because of changes to senior management, on September 1, 2015, the environmental philosophy and policies of the CEO were re-approved by the COO.

### Green Procurement

As part of our efforts to provide eco-conscious products to the market, we promote procurement of parts, materials and finished products which have a low environmental impact according to the following policy (green procurement).

- 1 Prioritize purchasing from suppliers conducting ambitious environmental conservation activities while also excelling in areas that include quality, pricing, delivery times, and services.
- 2 Prioritize the purchase of toxic substance-free products.

#### • Requests to our suppliers

To uphold our green procurement policy, the Nihon Kohden Group asks its suppliers to practice environmental conservation in their business activities and supply products, parts and materials that have a low environmental impact. We also ask them to provide a RoHS Declaration of Conformity and participate in various surveys.

#### • Supplier-side environmental conservation

We ask all our suppliers to take measures for effective environmental conservation such as establishing an environmental policy, maintaining systems, and implementing education.

#### • Supplying low environmental impact products, parts, and materials

To manage the chemicals that are used in our procured products, we request the following.

1. Create a quality control system for chemicals used in products
2. Implement green procurement of parts and materials that reduce toxic substances and have low environmental impact

#### • Chemical substance content inspection

To evaluate the chemical substances in procured goods, we request all our suppliers respond to investigations of chemical substances in the goods. We require suppliers to provide certificates of compliance for materials used in RoHS compliant products.

### Goals, Targets and Results of the Environmental Management Program

Environmental Goals	FY2015 Target	Result
1. Reduce environmental impact and prevent pollution in business activities	<ul style="list-style-type: none"> <li>Implement business improvements to raise business efficiency</li> <li>Promote development and sale of sustainable products, and reduce environmental impact by an average of 5% compared with previous products for all newly developed products</li> <li>Reduce first month defect rate by 5% compared with FY2014</li> <li>Keep the repair failure rate for repaired goods to 0.20% or less</li> </ul>	<b>Attainment Rate: ✓✓</b> Activities were implemented in a largely smooth fashion at each site, and we managed to maintain reductions in environmental impact.
2. Ongoing energy use reduction to reduce carbon footprint	<ul style="list-style-type: none"> <li>1% improvement over FY2014 per unit of energy consumed</li> </ul>	<b>Attainment Rate: ✓</b> Although the target was not attained according to assessment of the energy consumption rate, the target was met in terms of amount of consumption.
3. Contribute to a recycling-oriented society	<ul style="list-style-type: none"> <li>Promote Reduce/Reuse/Recycle, and reduce waste for landfill and incineration per unit by an average of 0.3% over FY2014</li> </ul>	<b>Attainment Rate: ✓✓✓</b> We promoted recycling and met the target emissions per unit.

Attainment Rates  
 ✓✓✓ 100% attainment  
 ✓✓ At least 75% attainment  
 ✓ Less than 75% attainment

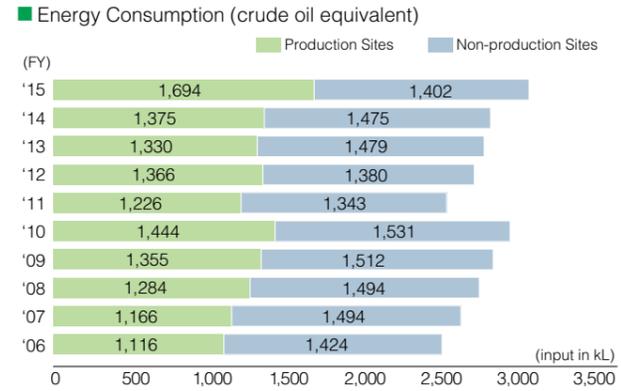
### In-House Environmental Awareness Training Program

<b>Introductory Training</b>	All employees undergo this training when joining the company. Employees become familiar with and deepen their understanding of general environmental issues, regulatory and legal compliance, ISO 14001 mechanisms and the initiatives pursued by Nihon Kohden, our environmental philosophy and policies, understanding of environmental goals and targets, specific examples, and the need for full participation.
<b>Training in Even-numbered Years</b>	Training is conducted for all employees every other year (in even-numbered years). Employees learn about environmental policies, goals and targets, including changes to the situation around them, and gain an understanding of the activities underway in each division.
<b>Awareness Raising Activities</b>	In FY2016, we established an annual Environment Day on which we make known to all employees the need for environmental activities.

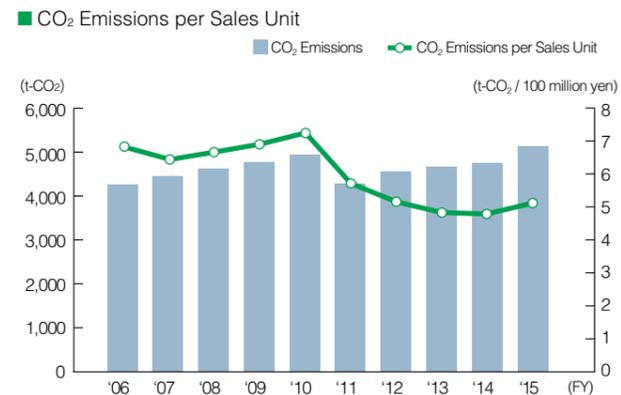
## Input and Output

In FY2015, there was an increase in energy consumption at the Tomioka Site in connection with the commissioning of the Tomioka Production Center.

At other sites, efforts were made to streamline business operations by promoting Work Style Reform. Energy consumption has decreased as a result.

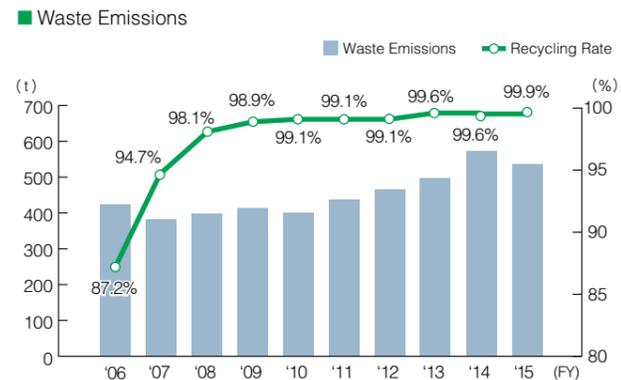


FY2015, CO<sub>2</sub> emissions were 5.14t-CO<sub>2</sub>. CO<sub>2</sub> emissions per unit of sales were 5.12t-CO<sub>2</sub> per 100 million yen. This came to 106.9% of FY2014 levels.



FY2015, total waste emissions were 535.6 tons. Our recycling rate was 99.9% which met our target of at least 99%.

At the Tomioka Site, we are continuing efforts to recover valuable substances from waste, and at the Ochiai Site, we are recycling infectious waste. Waste for landfill and incineration decreased 34.8% compared to FY2014.



### CO<sub>2</sub> Emissions by Scope

Since FY2014 we have calculated Scope 3 emissions to the extent that can be calculated and we made progress identifying emission sources so that we can prioritize GHG reduction measures in the supply chain.

The results of calculations are published on CDP and also through the environmental information disclosure program of the Ministry of the Environment.

CO<sub>2</sub> emissions and percentages by scope are given below.

### CO<sub>2</sub> Emissions and Percentages by Scope

Scope	CO <sub>2</sub> Emissions	Percentage
Scope 1 Emissions	281.58t-CO <sub>2</sub>	0.12%
Scope 2 Emissions	4,854.12t-CO <sub>2</sub>	2.09%
Scope 3 Emissions	227,628.13t-CO <sub>2</sub>	97.79%
Total	232,763.83t-CO <sub>2</sub>	100%

### Scope 3 Breakdown

Category	Estimated Results	Percentage
Purchased Goods and Services	123,954.48t-CO <sub>2</sub>	54.45%
Fuel and Energy Related Activities	77,727.34t-CO <sub>2</sub>	34.15%
Waste Generated in Operations	11.60t-CO <sub>2</sub>	0.01%
Business Travel	356.20t-CO <sub>2</sub>	0.16%
Employee Commuting	907.61t-CO <sub>2</sub>	0.40%
Use of Sold Products	24,670.90t-CO <sub>2</sub>	10.84%
Total	227,628.13t-CO <sub>2</sub>	100%

## Relationship with the Environment

### International Initiatives

To save as many patients as possible using cutting-edge ME technology, Nihon Kohden develops products that confirm to the regulations and requirements of the countries where they will be used.



#### Sustainable Growth 2017 Priority Tasks

Provide environmentally friendly products

#### Sustainable Growth 2017 Targets

- Provide environment friendly products and services by reducing energy consumption and resource usage and eliminating the use of harmful substances

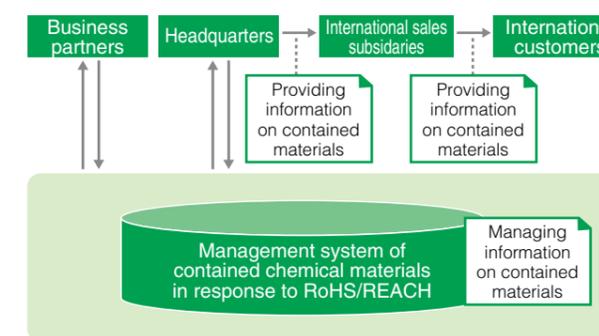
### Response to International Environmental Regulations

#### Response to RoHS Directive and REACH Regulation

Nihon Kohden has established research systems to ensure compliance with the chemical substance regulations of each country, including those in the EU. For example, we investigate banned substances under RoHS Directive\*, examine SVHC\*\* concentrations prescribed in REACH Regulation\*\*\*, notify governments as required, and respond to inquiries from customers.

When managing contained chemical substances, we developed a system for quick provision of accurate information by utilizing a contained chemical substance management system so that business partners and related Nihon Kohden divisions such as quality control, technical development and procurement can share information efficiently.

#### Flow of providing information on contained chemical materials



#### Initiatives in the EU

In the EU, which requires the application of stringent environmental laws and regulations, Nihon Kohden Europe also sells products that confirm to RoHS Directive and various other regulations.

We need to adapt to these regulations swiftly and ap-

propriately so that we can continue to supply products that satisfy customers in terms of the environment as well.

Moving forward, we will remain keenly alert to worldwide trends as we strive to achieve a balance between business continuity and environmental preservation.



\* RoHS Directive (Restriction of Hazardous Substances Directive): RoHS Directive is enacted by the EU on July 1, 2006 to restrict the use and import of electrical and electronic products containing harmful substances. Medical devices (Category 8) have been required to comply since July 22, 2014. While six substances were initially included, from July 22, 2021, the restriction will apply to ten substances (lead, mercury, hexavalent chromium, PBB, PBDE, cadmium, DEHP, BBP, DBP, and DIBP).

\*\* SVHC (Substances of Very High Concern): SVHC is a substance with carcinogenic, mutagenic or reproductive toxicity properties or similar properties (CMR), a substance with refractory, bioaccumulative, toxic or similar properties (PBT), or a substance with highly refractory, highly bioaccumulative properties or similar properties (vPvB).

\*\*\* REACH Regulation (Registration, Evaluation, Authorization and Restriction of Chemicals Regulation) REACH Regulation is an EU regulation enacted on July 1, 2007 to control chemical substances and their use in light of public health and environmental protection. Those chemical substances that have a significant impact (substances of very high concern: approximately 1,500 substances) are summarized in an SVHC list. There are restrictions on usage volume, and prior registration is required.

## Environmentally Friendly Products

Nihon Kohden works to develop environmentally friendly products as part of its efforts to contribute to society.



### Sustainable Growth 2017 Priority Tasks

Provide environmentally friendly products

### Sustainable Growth 2017 Targets

- Provide environment friendly products and services by reducing energy consumption and resource usage and eliminating the use of harmful substances

### TG-980P CO<sub>2</sub> Sensor Kit

By locating the intermediate processing unit inside the multi-connector, instead of in the middle of the cable, we were able to reduce the size and weight by about 50% compared to the previous model. TG-980P also uses fewer resources and produces fewer waste products. At the same time, input power has been reduced more than 80%, making it more energy efficient. The lead-free design also complies with RoHS Directive.

Thanks to the more compact and lightweight design, it is now easier to handle the cable during use. Cases where the cable falls out of the bed or medical device have been reduced, contributing to improved safety in medical care.



### Cardiolife AED-3100 Automated External Defibrillator

The AED-3100 can operate in environments as cold as -5°C. It also features strong water and dust resistance compliant with the IP55 standard which allows use even in harsh conditions.

After two minutes of CPR, AED-3100 completes analysis and charging in as few as 8 seconds. The interruption in CPR is short, and electric shocks can be delivered more quickly. Without compromising on the necessary functions, the volume of the main unit has been reduced 40% and the weight is 15% lighter than previous Nihon Kohden products. This makes the AED-3100 easier to carry and enables a smaller installation footprint.

The weight of the main unit and packaging materials has been reduced thanks to the compact size and fewer components used. This allows us to reduce waste products. Power consumption has also been reduced, and together with other improvements, this product boasts greater energy efficiency.



### P-730 series Disposable Pads

These are the first AED electrode pads produced domestically in Japan.

Baseline wandering is less likely to occur during CPR, and the use of an anti-cling protective film improves handling while wearing gloves.

The pads can be connected to TEC-2600/2500 series semi-automated defibrillators and TEC-8300 series defibrillators in order to shorten the time needed for life-saving.

As the pads are disposable, they are designed to contain no harmful substances.



### Cardiolife S TEC-2601 Automated External Defibrillator

Analysis time is only 3 seconds. Cardiolife S can be combined with P-740 series disposable pads to enable use in environments as cold as -5°C. Cardiolife S has improved vibration resistance, operating time, and more operating cycles, striking a better balance between high-functionality and ruggedness compared with previous models.

While ruggedness has been improved, the models are actually lighter than before, produce less waste, and have lower power consumption.



### P-511X Disposable Pads

These are disposable defibrillator pads intended for use in medical environments using X-rays.

The pads are more compact than previous models, and since they are disposable, they are designed to contain no harmful substances.



### Celltac PEAK FCM-2200 High DNA Content Measurement Equipment

The FCM-2200 is a flow cytometer that is able to swiftly measure cellular DNA content from samples extracted during surgery.

An onscreen operation guide makes it easy to use so anyone can easily take measurements.

The equipment does not contain the six designated RoHS Directive substances, and it reduces waste by using fewer components than previous models. Including accessories in the product reduce waste products by using less packaging materials.



### WEP-5258/5268 Telemetry System

Patient data for up to eight patients can be simultaneously displayed on a larger 19-inch color LCD display. The user can switch the number of displayed patients.

Patient attributes can also be entered by an optional magnetic card reader. This one-action entry procedure significantly reduces workload.

As with previous products, the system does not contain the six designated RoHS Directive substances. Moreover, while volume has increased due to the larger screen, waste has been decreased due to reduction in packaging materials.



### QI-670P Interface

This is an interface for BSM-6000 series bedside monitors.

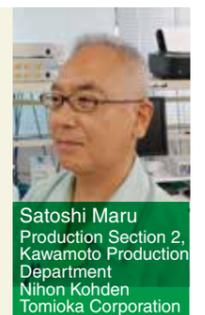
The interface does not contain the six designated RoHS Directive substances, uses fewer components, and achieves an improved recycling rate.



### TG-980P is a Product that Contributes to both Production Efficiency and After-sale Quality Control

TG-980P CO<sub>2</sub> sensor has eliminated the need for a relay cable so we managed to reduce assembly man hours by around 40% compared with previous models. Standby time during the calibration process has also been halved, and we have also reduced man hours during the inspection process. The main sensor unit and relay cable used to

be two separate parts but now they have been integrated and some components have been eliminated. This allows better product traceability (history management). I believe this product contributes to both production efficiency and after-sale quality control.



Satoshi Maru  
Production Section 2,  
Kawamoto Production  
Department  
Nihon Kohden  
Tomiooka Corporation

#### Activities in FY2015

Evaluation  
**Good**

- Average environmental impact reduction rate of 5.0% for all assessed newly developed products

#### FY2016 Action Plan

- Promote the development of sustainable products and reduce the environmental impact of all newly developed products by an average of 5.0%

# Site Report

Our activities span five sites taking on development, control, manufacturing, shipping, and repair.



### Sustainable Growth 2017 Priority Tasks

Promote energy conservation and waste reduction

### Sustainable Growth 2017 Targets

- Introduce low-carbon, high-efficiency technologies, continue improvement, promote energy conservation and contribute to waste reduction

## Environmental Activity Sites

ISO 14001 is in operation at five Nihon Kohden sites: Ochiai, Tomioka, Tsurugashima, Kawamoto, and Fujioka.

The Ochiai Site is made up of the Higashi-nakano Office, which operates as the head office and a training facility, and the Nishiochiai Office which houses the company's R&D base. We plan to relocate some functions to Tokorozawa, Saitama Prefecture in 2016.

The Tomioka Site is the main factory for Nihon Kohden products. The MIRAI Tomioka Production Center began operation in May 2015 and is part of efforts to streamline production.

The Tsurugashima Site is a shipping base for the ME consumables used for medical devices, large-scale medical devices, and replacement devices for repair. The site also accepts imported goods and carries out inspections. The site is working with transportation companies in an effort to improve transportation efficiency.

The Kawamoto Site engages in the development and production of ME consumables and conducts reliability testing for in-house products. The development division is striving to eliminate the use of harmful substances, while the production division is working to improve production efficiency to avoid wasteful disposal.

The Fujioka Site repairs products that could not be repaired at nationwide service centers. The site is making efforts to improve operational efficiency so that the items sent in for repairs by customers can be returned to them accurately and in a short time.

## Introduction to the Tomioka Site

A new plant, dubbed the MIRAI Tomioka Production Center, was commissioned in May 2015 as the main plant for Nihon Kohden products. The plant was designed to accommodate expanded production capacity as well as to enhance production efficiency and reduce costs.

### ● Tomioka Site Environmental Targets

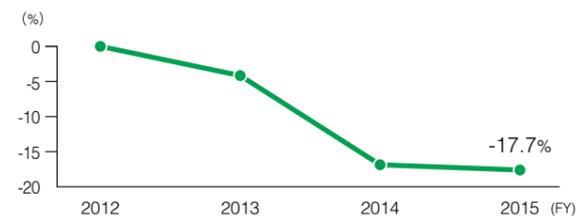
In line with the management goals set forth in Nihon Kohden Tomioka Corporation's Four-Year Mid-term Management Plan, the Tomioka Site is working to reduce its direct and indirect impact on the environment, and has declared and pursued three environmental targets.

### Tomioka Site Environmental Targets for FY2015

1. Reduce environmental impact and prevent pollution in business activities
  - Implement business improvements to raise business efficiency
  - Reduce first month defect rate by 5% compared with FY2014
  - Endeavor to prevent environmental pollution
2. Ongoing energy use reduction to reduce carbon footprint
  - Endeavor to prevent environmental pollution
3. Contribute to a recycling-oriented society
  - Make a habit of behavior designed to conserve energy and reduce CO<sub>2</sub> emissions per unit of production by 1% on average over FY2014

We have continued to position reductions to the initial defect rate as our first environmental goal since FY2012, and while the reduction bottomed out at 1% year on year in FY2015, we formed a new team as a priority measure to reduce initial defects and made efforts to reduce defects. As a result, the initial defect rate for FY2015 marked a 17.7% reduction from FY2012 levels.

### ■ Change in Initial Defect Rate from FY2012



We have continued to address our second environmental goal of reducing CO<sub>2</sub> emissions per production energy unit. With the relocation to a new plant, total floor area has increased by around 60%, and since this was the first year following relocation, we experienced some challenges in the control of air conditioning equipment. As a result, CO<sub>2</sub> emissions increased 37.8% over FY2014. However, in FY2016 air conditioners are being controlled appropriately in light of these results. Moreover, the administrative division has also expanded energy-saving measures and an initiative to curb air conditioning costs is underway. As a result, we are starting to see energy-saving effects.

### ■ Change in Power Consumption

Month	Comparison of Power Consumption in the Same Month in 2015
May 2016	10.6% reduction
June 2016	9.3% reduction
July 2016	16.2% reduction

As our third environmental target, we have worked to reduce waste for landfill and incineration per unit of production. Initiatives to cooperate in separate on-site waste and recycle have made progress, and we reduced waste by 36.5% by implementing thermal recycling of the small amounts of remaining rubber, resin and other substances.

### ■ Change in Amount of Waste for Landfill and Incineration

Year	Comparison with Previous Fiscal Year
FY2012	8.8% reduction
FY2013	28.1% reduction
FY2014	34.5% reduction
FY2015	36.5% reduction

### ● Initiatives and Achievements by Each Department

The production department responsible for device assembly and board mounting gathers the line leaders for each assembled product to receive training on the environmental targets from the department head.

The production department responsible for reagents has pursued ongoing improvement activities such as reducing the amount of reagent disposal. The department has recognized the importance of environmental pollution as a departmental goal, and has created opportunities for training in environmental pollution and toxic substances as well as the sharing of quality information.

The shipping department has pursued initiatives to improve transportation efficiency in cooperation with shipping-related packaging suppliers and delivery destinations. (Scope 3)



Scene from training in departmental environmental targets

### Activities in FY2015

- Evaluation **Satisfactory**
- 7.3% increase in energy consumption per unit compared with FY2014
  - 67.7% decrease in waste for landfill and incineration per unit compared with FY2014

### ■ Activities to Improve Production Efficiency and Streamline Operations in FY2015 from Among the Ten Departments at the Tomioka Site

Department Responsible for the Activities	Major Initiatives and Achievements
Device Assembly Production Department	Eliminate use of harmful substances in production and continue to reduce standard work man hours
Board Mounting Production Department	Reduce waste through loss visualization and solder switching
Reagent Production Department	Reduce operational errors, improve productivity and prevent environmental pollution
Shipping Department	Review storage space, improve work and boost transportation efficiency

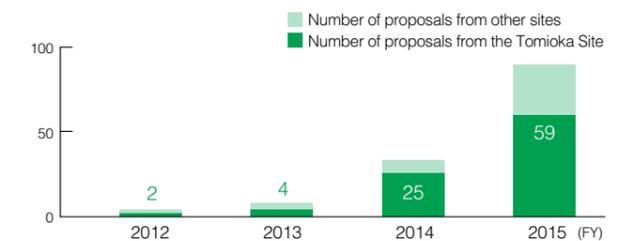
### ● Raising Awareness of Environmental Proposals

As a way for the Environmental Management Office to disseminate information, notice boards are utilized in an effort to raise awareness of environmental proposals. To further invigorate proposal activities this year, the Environmental Management Office solicited "proposals that include photos and words you want to preserve for the future." A photograph of a nearby field of sunflowers that included the words "that we may always be able to look up at a beautiful sky and breathe in sweet air" was used for an environmental poster as the symbol of the Tomioka Site's environmental activities in FY2016.



The Tomioka Site has also raised improvement proposals concerning the environment, actively makes use of the Tree Environmental Proposal Commendation System that involves monthly commendations, and helped raise awareness of its environmental activities.

### ■ Number of Proposals Submitted for the Tree Environmental Proposal Commendation System



### ● Future Initiatives

Moving forward, we will place importance on our relationship with the local community, make ongoing improvements to our main operations and work to achieve the environmental targets of the Tomioka Site to achieve The CHANGE 2020 long-term vision as a critical production center of the Nihon Kohden Group.

### FY2016 Action Plan

- 1% improvement in energy consumption per unit based on forecast values for FY2016
- Maintain FY2015 performance in terms of waste for landfill and incineration per unit

## Ensuring Fair Trade Practices

We aim to achieve fair business practices across the entire value chain, including our business partners.



### Sustainable Growth 2017 Priority Tasks

- Promote fair business practices

### Sustainable Growth 2017 Targets

- Implement initiatives such as CSR procurement that lead to the promotion of fair business practices

## Basic Approach

We strive to practice sound and fair purchasing and achieve fair trade across the value chain, including at our business partners. Our efforts to achieve fair trade include the running of in-house training and the strengthening of relationships with our business partners.

## Procurement Policy and Procurement Standards

To disseminate our stance on procurement to both inside and outside the company and ensure that our commitment will take root, we created the Nihon Kohden Procurement Policy and Nihon Kohden CSR Procurement Standards in 2013. The Nihon Kohden Procurement Policy represents Nihon Kohden's basic policy on procurement. The Nihon Kohden CSR Procurement Standards represent the compliance items Nihon Kohden expects its business partners to observe.

### Nihon Kohden Procurement Policy

As part of its corporate social responsibility efforts to become a more global company, the Nihon Kohden Group values its partnerships with its business partners and engages in procurement activities in good faith following the policy outlined below.

- 1 Comply with relevant laws and ordinances and social norms in business transactions.
- 2 Properly manage and protect confidential information and personal information obtained through business transactions.
- 3 Build relationships of trust. Practice fair, equitable procurement.
- 4 Practice proper quality, cost and delivery for customer needs.
- 5 Reduce our impact on the environment and practice procurement according to separately stipulated green procurement guidelines (\*see page 35).

### Nihon Kohden CSR Procurement Standards

#### 1. Legal compliance/fair business practices

- 1 Comply with applicable laws, ordinances, and government circulars such as the Companies Act, Anti-Monopoly Act, Act against Delay in Payment of Subcontract Proceeds, and relevant labor and environmental laws and regulations.
- 2 Comply with relevant import/export laws and regulations and the laws of countries and regions where we operate.
- 3 Do not infringe upon intellectual properties, including patent rights, copyrights, and trademarks, etc.
- 4 Do not give or receive inappropriate personal benefits.
- 5 Do not do business with anti-social persons or groups.

#### 2. Human rights

- 6 Respect the human rights of all people and not discriminate against employees in their benefits or employment.
- 7 Do not use child labor or forced labor.

#### 3. Quality

- 8 Comply with safety standards and regulations of all countries and regions.
- 9 Strive to maintain and enhance quality and build a quality assurance system that meets our standards to meet customer needs.

#### 4. Environment

- 10 Promote environmentally aware green procurement. Strive to reduce the impact of our products on the environment during their life cycle.

#### 5. Information management

- 11 Properly manage and protect confidential information and personal information obtained through business transactions.

## Compliance Training

To ensure that each and every employee has a correct understanding and awareness of sound and fair business practices and puts the CSR Procurement Standards into practice, we promote understanding and compliance with the Fair Competition Code, Act against Delay in Payment of Subcontract Proceeds, and other codes as part of the compliance training provided to all employees.

## Compliance with the Nihon Kohden CSR Procurement Standards

With the aim of promoting the CSR Procurement Standards across the entire supply chain, Nihon Kohden also asks its business partners for their understanding and cooperation with the Nihon Kohden CSR Procurement Standards. Business partners are required to conduct a periodic self-assessment on their environment and quality activities and answer a "CSR Activity Questionnaire" to confirm awareness and state of compliance with the Nihon Kohden's CSR Procurement Standards.

### Main items in the CSR Activity Questionnaire

- Activities relating to
- Legal compliance and fair business practices
  - Human rights
  - Quality
  - The environment
  - Information management
  - CSR promotion



We work to ensure that CSR activities also extend to our business partners.

### Disseminating the Procurement Standards

The scope of CSR activities has gone beyond the company level and started to spread across the supply chain including support for the CSR activities of suppliers. To promote CSR procurement, when we establish new business dealings we present the Nihon Kohden Procurement Policy and Nihon Kohden CSR Procurement Standards and ask the new supplier to confirm their understanding and comply with the requirements

### Confirming the State of Compliance

We promote CSR procurement while maintaining mutual communication with business partners. To ascertain the state of compliance with our procurement standards, every three years we ask all business partners to answer a CSR Activity Questionnaire. Through the questionnaire, we have business partners themselves check their CSR activities while Nihon Kohden evaluates their state of compliance. When an evaluation leads us to determine that a business partner may not be meeting our CSR procurement standards, we confirm the state of management at the business partner in question, and encourage improvement.

### Activities in FY2015

Evaluation  
**Good**

- Conducted CSR Activities Questionnaire for business partners

### FY2016 Action Plan

- Continue CSR Activities Questionnaire for business partners
- Continue education and training to promote CSR procurement

Furthermore, opinions received through the questionnaires are provided to the procurement division as feedback and utilized to achieve fair and responsible procurement activities.

### Training to Promote CSR Procurement

When promoting CSR procurement, it is essential to understand its importance and acquire knowledge of related laws, regulations and other requirements. Internally, we conduct annual training to disseminate knowledge of CSR and its significance and promote understanding for related personnel in the procurement division who will play a central role in promotion. In the course of communication with business partners through the CSR Activity Questionnaire, we endeavor to create opportunities for business partners to recognize the significance of CSR initiatives and the management resources that are required.

## Initiatives to Maintain and Improve Quality

To respond to customer needs, we strive to maintain and improve the quality of the components and materials we procure. We have new business partners cooperate with audits to confirm the appropriate operation of quality management systems, and have existing business partners cooperate with periodic reviews of operation and quality audits based on the quality of delivered components. We strive to further enhance quality by getting business partners themselves to understand that the quality of delivered components can have a significant impact on the quality of our end products.

## Enhancing Information Disclosure and Shareholder Return

Our management is highly transparent through appropriate information disclosure and we strive for stable long-term returns to shareholders.



### Shareholder Returns Policy

Delivering shareholder returns is one of our most important management tasks. Our basic policy is to continually provide a stable long-term dividend to shareholders with a target consolidated dividend payout ratio of 30% or more, while securing necessary retained earnings for future growth in areas such as R&D investment, capital investment, M&A and human resource development.

### Information Disclosure Policy

The Nihon Kohden Corporate Charter of Conduct requires that we aim for highly transparent management by fair and proper disclosure of corporate information to shareholders and society. We disclose Nihon Kohden Group related information in a timely, appropriate, fair and ease-to-understand manner. We seek to deepen understanding and trust from all stakeholders and gain appropriate evaluation of the company.

### Shareholder and Investor Engagement

#### General shareholders meeting

We hold our general shareholders meeting on a date that does not conflict with those of other companies to ensure that shareholders can attend. For foreign shareholders, convocation notices, notice of resolutions and voting result are prepared in English and posted to our website.

We also hold exhibitions of Nihon Kohden medical devices to explain their features and other information to shareholders.



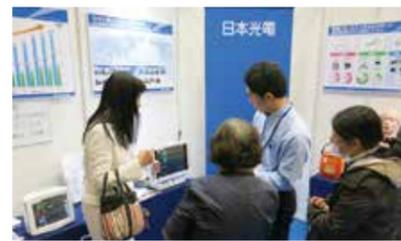
General Shareholders Meeting exhibition

#### Earnings presentations

Nihon Kohden hosts earnings presentations (interim and full year results) for securities analysts and institutional investors and organizes teleconferences (1st and 3rd quarter) where we discuss the Company's performance and strategy. Videos of the presentations and materials are posted to our website and made available to all shareholders and investors.

#### Company briefings and events for individual investors

We hold company briefings so individual investors across Japan can see our management strategy and business operations and extend their long-term support. We also have booths at investor relations events for individual investors, so the general public can see Nihon Kohden's products.



Events for Individual Investors IR Forum 2016 in Osaka

#### Investor relations page

Our website publishes key information needed by shareholders and investors, such as management policy, financial and performance highlights, dividend information and various disclosure documents. Information about the company's long-term vision, mid-term business plan, business segments and products is also published.

#### Factory Tours

We run tours of the Tomioka Production Center, which is the key production plant of Nihon Kohden, to give shareholders, securities analysts and institutional investors a deeper understanding of our business and manufacturing.

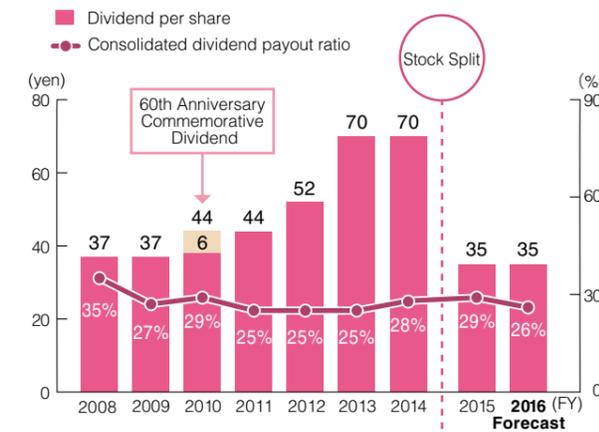
The tours introduce our initiatives to efficiently produce high quality products and include visits to the production areas for medical devices such as patient monitors and AEDs.



Factory tour for shareholders

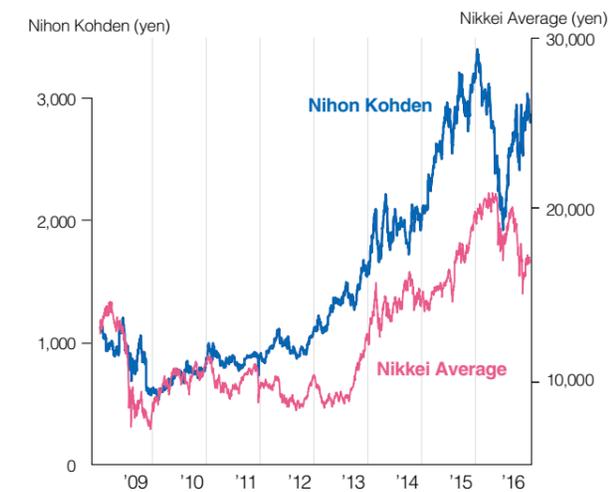
## Stock Information

### Change in Dividend per Share and Consolidated Dividend Payout Ratio



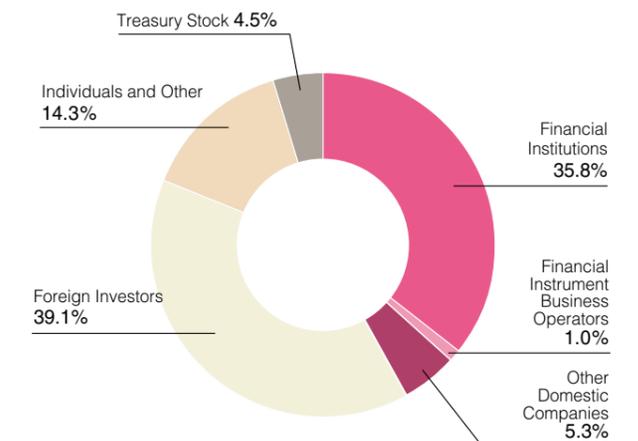
\* Effective as of April 1, 2015, each share of common stock was split into two shares. Figures up to FY2014 list the actual dividend amounts paid before the stock split.

### Change in Share Price



\* Effective as of April 1, 2015, Nihon Kohden Corporation carried out a stock split, with each share of common stock split into two shares. For the above share prices, trading values before the stock split date have also been adjusted retroactively.

### Ownership Breakdown (as of March 31, 2016)



## Topics

### Nihon Kohden receives award for excellence in Daiwa Investor Relations 2015 Internet IR Awards

Nihon Kohden received an award for excellence in the Daiwa Investor Relations 2015 Internet IR Awards in November 2015. Daiwa Investor Relations Co., Ltd. evaluated and scored the IR sites of all 3,662 publicly-listed companies in Japan according to its independent standards and selected 144 companies with exceptional IR sites that are actively utilized for information disclosure and engagement.

### Nihon Kohden listed in JPX-Nikkei Index 400

Nihon Kohden has been listed in the JPX-Nikkei Index 400 since its disclosure in January 2014. This is a share index of "companies that are highly attractive investments for investors" and meet global investment standards, such as efficient capital utilization and management that recognizes investors.



## Achieving a Fulfilling Workplace

We believe that each employee demonstrating their skills and abilities will lead to company growth. Therefore we strive to develop a workplace where diverse human resources can flourish.



### Sustainable Growth 2017 Priority Tasks

- Respect human rights and promote appropriate working practices

### Sustainable Growth 2017 Targets

- Initiatives for human rights and good working practices, such as use of diverse human resources and work-life balance

## Basic Approach

To continue contributing to the world as a truly global company in a rapidly-changing age of fewer births, an aging population, increasingly diverse values and the advance of globalization, we need to create a workplace environment in which each employee can fully utilize their skills.

In addition to improving work environments and enhancing employee development systems, Nihon Kohden is committed to efforts that promote diversity and to the employment of human resources possessing a diverse range of traits. We also actively tackle the promotion of work-life balance so that employees can go about their work in a fulfilling and motivated fashion.

## Diversity Promotion

Respecting the diversity of each individual while allowing them to think and act independently and demonstrate their individual characteristics at the organizational and group levels, and channeling these qualities into organizational strengths translates into corporate competitiveness. To promote diversity, we develop a workplace environment in which each individual can demonstrate their full potential and promote activities to enhance our ability to innovate as an organization.

### Policy for Diversity Promotion Activities

By respecting diversity and creating a workplace environment in which each individual can demonstrate their full potential, we seek to improve job fulfillment, create new value, invigorate the organization, and enhance corporate value.



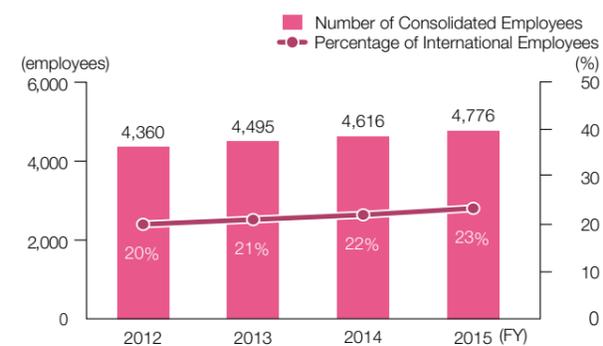
Diversity and Inclusion

### Employment Status

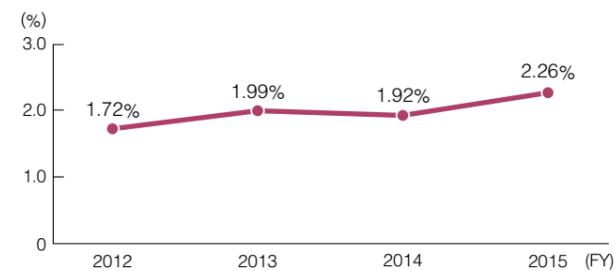
Regular Employees	Fixed Term Employees	Temporary Employees	Post-retirement Reemployment	Part-time Employees	Total
1,625	72	285	84	152	2,218

Figures for Nihon Kohden Corporation

### Percentage of International Employees



### Employment Rate of People with Disabilities



## Career Development Support for Female Employees

### Mentor Program

We run a mentor program for newly appointed female managers. Corporate officer-level mentors with extensive knowledge and industry experience act as mentors to newly appointed female managers, helping them to resolve career development issues and providing opportunities to support their personal growth.

Through dialogue, we also broaden outlooks, establish social awareness, and support the strengthening of internal networks, and seek to develop capabilities of judgment and leadership in female employees, while helping them to set ambitious goals.

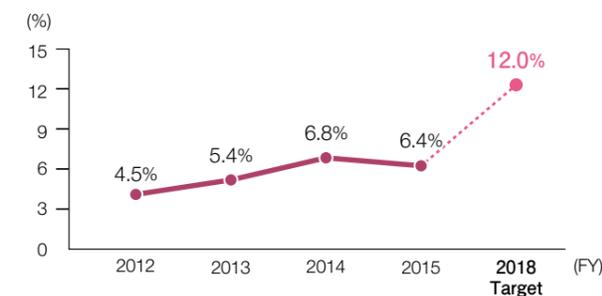
### Networking Events for Female Employees across Different Industries and Business Sites

We host networking events across different industries and business sites so that women can discover a sense of achievement and fulfillment in their careers and consider their future career paths.



Cross-industry networking event for female employees

### Percentage of Female Managers – Results and Target



## Supporting a Work-life Balance

### Reforming Working Styles

Promoting harmony between work and home, where employees work reasonable hours and take holidays and appropriate rest promotes employee health, encourages new work-related ideas and awareness, enhances motivation, and has the effect of boosting business efficiency.

Nihon Kohden practices "Work Style Reform." We encourage individuals to transform their mindsets, improve the way they do business, and look at things from a different perspective. This brings innovation to the job and also enhances creativity and productivity.

We promote "Health Management" so that our employees can lead healthy and enriched lives. By thoroughly enforcing days with fixed work departure times and encouraging employees to take annual leave with pay, we promote improved business efficiency aimed at a healthy work-life balance, encourage greater creativity, reduce working hours, and create more time for private activities. This allows employees to make more effective use of their time to invest in themselves, engage in self-improvement, form personal networks, take care of their health, spend time with their families, and engage in interests or volunteer activities.

### Kurumin Certification

Nihon Kohden promotes an improved environment to help employees strike a balance between work and child-rearing. As recognition of this, we obtained the "Kurumin" certification mark from the Ministry of Health, Labour and Welfare in March 2011.



### Programs to Support Work-life Balance

- Childcare Leave**  
Leave Period: Until the end of March after an employee's child reaches the age of one.
- Family Care Leave**  
Leave Period: Up to two years of leave can be taken.
- Reduced Working Hours**  
Details: Daily working hours can be reduced by up to one hour (this system is available when certain conditions are met while the child of an employee is an elementary school student or younger).
- Shifted Working Hours**  
Details: The hours worked can be shifted by up to one hour without changing the daily working hours (this system is available when certain conditions are met while the child of an employee is an elementary school student or younger).
- Days with Fixed Work Departure Times**  
Details: Wednesdays and Fridays have been set as days on which employees must leave work by a set time.

## Human Resource Development

### Basic Approach

Growth and development of each employee leads to corporate competitiveness. Nihon Kohden set the following basic policy on human resource development.

### Human Resource Development Policy

- Strengthen the development of autonomous employees, professionals and leaders, and accelerate the cultivation of employees who can be successful globally.
- Enhance the ability to develop employees in the workplace, bolster personal growth and boost organizational strength by enhancing awareness of employee development on the part of all employees.

- Developing Autonomy**  
People with a strong awareness of their roles and responsibilities who adapt flexibly to change as well as think and act independently as they strive to reach their goals
- Developing Professionals**  
People whose skills are highly rated both inside and outside the company, produce excellent results, and spare no effort to continually refine those skills
- Developing Leaders**  
People who have a positive effect on those around them, get the most out of members, and strive to attain organizational goals
- Developing Global Competency**  
People who possess an understanding of and the ability to adapt to other cultures, have a strong set of personal ideas, and who can take on new challenges while communicating in a diverse range of environments

## Relationship with Local Community

### Nihon Kohden's Contributions to the Community

We strive to be a good corporate citizen respecting culture and customs through active contribution to the community.



#### Sustainable Growth 2017 Priority Tasks



Community involvement

#### Sustainable Growth 2017 Targets

- Contribute to local communities through NPOs
- Donate medical devices for educational institutions

### Donation of Medical Equipment to Training Schools for Clinical Engineers

Recently, the sophistication of medical equipment has been increasing at the same fast rate as advances in information and communication technology (ICT). Training schools for clinical engineers have not kept pace, with some schools still using dated equipment for educational purposes. For safety, Nihon Kohden discards or updates a lot of equipment that could be refurbished and used for teaching purposes.

In FY2014 we started donating such refurbished equipment to schools in Japan. Upon donation, Nihon Kohden service engineers also ran a workshop on periodic inspection to support education that reflects actual work in the clinical field.

#### Results of Donations to Training Schools for Clinical Engineers

Year	Recipients	Products Donated	Total Units
FY2014	8 schools	Patient monitors, defibrillators, ECGs	8
FY2015	16 schools	Patient monitors, EEGs, defibrillators, ECGs, hematology analyzers	16



Donation to Nihon Medical Welfare Professional Training College

Donation to Shuto Iko College of Medical Care & Welfare

#### Supporting the education of clinical engineers

Thanks to the help of the local sales rep and service staff, we made our second donation of refurbished medical equipment without a hitch. Our staff were rewarded by the pure smiles and heartfelt thanks from the schools,

and some employees reported a great boost of energy from something that was different from their daily intense work. We hope to continue to actively promote these kinds of initiatives in the future.



Sumito Oyagi  
Assistant Manager  
Planning Section,  
Business Promotion Department,  
Customer Service Operations

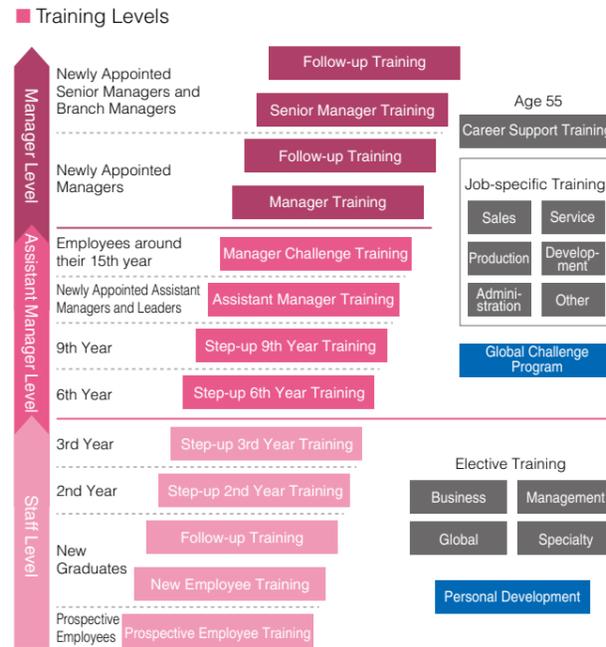
### Education and Training Structure

Nihon Kohden aims to cultivate employees who can be successful globally. To realize that, we believe employees need to be: **1) Autonomous**; **2) Professional**; and **3) Leader** who can foster the development of their subordinates. We have worked to establish education and training systems and a personnel system designed to develop and strengthen employees equipped with these three qualities.

The purpose of our multi-level training system is to have employees take on challenges themselves rather than receiving training passively. The company has developed its education and training structure with the basic policy of supporting those challenges.

In addition, through the introduction of elective training, we help individual employees improve their skills in specialized fields they have chosen themselves as a mechanism to boost their growth as professionals.

In FY2015, our employees engaged in 20 hours of training on average, with average training costs of 20,000 yen per person.



### International Training Program

The International Training Program is a program designed to give employees the experience, knowledge and adaptability they will need to be successful globally.

Through the program, we provide employees with opportunities for long-term study abroad at language schools, on-the-job training at overseas offices, practical training at overseas research institutions and companies, and study at overseas universities and research institutes.

### Elective Training System

#### 1 Personal Training Subsidy System

System to support the costs of voluntary training and educational activities an employee engages in on a voluntary basis outside work to gain knowledge, techniques or skills related to company work

#### 2 Personal Development Subsidy

System to subsidize tuition when an employee engages in personal development with the aim of having employees improve their abilities to perform duties, and encouraging and enhancing their motivation to seek personal development

### Nihon Kohden's Contributions to Global Healthcare I Felt through the International Training Program

I had wanted to be successful internationally since my days working in sales in Japan, and through my work at Nihon Kohden, I have learned about the solutions we can provide for healthcare and also studied English outside work hours.

I expressed the desire to engage in training overseas on my own, and was allowed to take on the challenge. The training wasn't just about acquiring English skills; I visited

many users in Africa and the Middle East. Through the training, I built up experience communicating with people from various cultural backgrounds and got the impression that Nihon Kohden's products are making contributions to healthcare not only in Japan but around the world.

In my current department, I value these experiences and am working together with my colleagues around the world to make even more contributions to global healthcare.



Ryota Masuda  
Critical Care Solutions  
Sales & Marketing Department  
International Operations

### Topics

#### Nihon Kohden America Selected as a Great Place to Work®

In August 2015 and August 2016, Nihon Kohden's US-based sales subsidiary Nihon Kohden America received the Great Place to Work® Certification based on feedback by its employees in six areas including: the quality of the company's challenges, atmosphere, rewards, pride,

communication, and bosses. This honor was awarded by the independent analysts at Great Place to Work® Institute, the global authority on high-trust, high-performance workplace cultures. The Certification recognizes the investment Nihon Kohden America makes in its people.



#### Activities in FY2015

Evaluation  
**Good**

- Encouraged Work Style Reform aimed at promoting work-life balance

#### FY2016 Action Plan

- Increase the percentage of women in management
- Promote Work Style Reform aimed at enhancing creativity and productivity

## International Scholarship Program

We have established a scholarship program for doctors in Asia that aims to help them acquire medical skills. In October 2015, we cooperated with the NPO Japan Bangladesh Society to launch a training program for Bangladeshi doctors. Two doctors selected from the Society of Neurologists of Bangladesh were accepted into the program and underwent practical training on EEGs and EMGs at Japanese medical institutions. The doctors were able to learn techniques for reading EEG waves and other appropriate skills, experience rare medical cases, and enhance their skills.

After returning to Bangladesh, they have made use of these experiences to play leading roles in contributing to educational activities for junior doctors.



Participants holding completion certificates for the international scholarship program

## Social Contribution by Employees

### Employee assistance programs

We support employees in the Japan Overseas Cooperation Volunteer program and employees social contributions both professionally and privately such as work leave to donate bone marrow or participate in volunteer activities.

### Regional cleanup activities

Nihon Kohden employees volunteer in cleaning activities in various regions. Every summer, Nihon Kohden Tomioka Corporation employees undertake volunteer cleaning activities in the Tomioka Silk Mill world heritage site. Nihon Kohden Minami Kanto Corporation employees collect trash over a wide area around the company premises once a month.



Cleanup volunteers at the Tomioka Silk Mill

## Bone Marrow Donor Lecture

As part of its social contribution activities, Nihon Kohden holds in-house bone marrow donor lectures.

It is believed that at least 2,000 patients are in need of transplants each year. While our greatest wish is for that number to decline, increasing the number of people registered with bone marrow banks increases the possibility that patients can receive transplants.

We hold periodic in-house lecture presentations so that employees can get a proper understanding of donor registration and bone marrow transplants.



Bone marrow donor lecture presentation

## Third-party Feedback

### Overall

Looking at this year's CSR report, the first thing that struck me was that the volume has increased by more than 50% over last year. I believe this is the result of more active information disclosure regarding the three fields of healthcare, environment, and corporate activities in the Sustainable Growth 2017 mid-term CSR plan, as well as further breaking down corporate activities into governance and society and clarifying the action taken for each stakeholder.

Of course, a large volume of information isn't necessary good in its own right, but my impression is that the necessary information has been disclosed in a well-organized manner. The inclusion of a photograph showing the 12 members from when the company was founded is also wonderful, as it gives a sense of how Nihon Kohden wants to present itself to and be seen by the world.

CSR is the responsibility a company assumes for its impact on the environment and society through its own corporate activities in order to become a trusted company. It is by no means something reflecting the degree of social contribution, and CSV\* is also a part of it. That is to say, the concepts of society, the environment, ethics, human rights, and consumers come together as a core strategy of corporate activities, and it is important that this process is published in a CSR report as a first step. On this point, the section on "Nihon Kohden in the Hospital and Community" makes it easy to understand how the company's business domains specifically affect stakeholders, while the four values created by Nihon Kohden give a clear indication of the company's future trajectory. In addition, the ten principles across the four areas of the United Nations Global Compact are also incorporated in international CSR-related guidelines and I think it is excellent that Nihon Kohden has signed on to the compact and is pursuing specific activities in this regard. Moreover, linking the three policies and ten priority issues of Sustainable Growth 2017 with GRI guidelines is another extremely important perspective that clarifies the company's stakeholders. In this way, this year's report paints a clear picture of Nihon Kohden and the stakeholders surrounding it, and is structured so as to disclose information from that perspective. This is the result of more essential CSR activities and I hope to see even greater development moving forward.

Sustainable Growth 2017 has been designed around three fields, namely healthcare, environment and corporate activities. I will offer feedback with respect to each of these fields below (note that feedback on corporate activities is separated into "governance" and "society.")

### Governance

In terms of corporate governance, Nihon Kohden has transitioned to the structure of a company with an audit & supervisory committee, and I expect that in the future, we will see more results from a stakeholder perspective. On the compliance front, the report makes it difficult to see any concrete progress. The more a company becomes a global corporation, the greater the need to not only comply with the laws and regulations of each country, but also engage in conduct on a cross-sectional basis in light of corporate ethics. Depending on circumstances, even if there is no change in substance (Nihon Kohden Code of Ethics and Conduct), the promotion issues to be given priority may vary by country. I would like to see a more proactive disclosure of information including the results of educational efforts.

## Response to the Third-party Feedback

We are deeply grateful to Professor Ishida for again providing us with valuable feedback on our CSR report as he did last year.

Professor Ishida recognized that the Nihon Kohden Group has clearly defined its stakeholders and disclosed information from each of their perspectives, and that we have incorporated international CSR-related guidelines into our CSR activities, and also expressed hopes that we would further develop those efforts.

Regarding the Sustainable Growth 2017 policies of healthcare, environment and corporate activities, he recognized the value created through Nihon Kohden Group products and services in the healthcare field. On the other hand, he expressed the desire for us to share information on GHG reductions from a more long-term

perspective in the environmental field and to provide more insight into concrete progress made with regard to corporate activities. We will treat this feedback and the issues raised as important areas to address through the promotion of CSR and work to strengthen efforts in this regard.

Through the realization of The CHANGE 2020 long-term vision, we aim to provide solutions to social issues, enhance our corporate value and provide value to society. We will also strive to enhance our CSR activities so that Nihon Kohden continues to be a company that values its stakeholders, earns society's trust and contributes to the development of a sustainable society.

Hideki Ishida

Professor Emeritus at Tohoku University  
Representative at Earth Village Research Lab LLC



### Healthcare

While I believe this overlaps with many parts found in the Strong Growth 2017 mid-term business plan, Nihon Kohden has made "risk zero," "high utilization rate by users" and "excellent usability" the basis of its policies in the value chain and continued to launch revolutionary products that improve the quality of healthcare, enhance patient QOL, improve the efficiency of medical practice and lead to preservation of the global environment, as exemplified by cap-ONE. Reading the special feature and about other such advancements brought me great excitement, and I sincerely hope that Nihon Kohden continues to aspire to new heights in product development.

Meanwhile, with proactive communication through seminars and workshops for customers, planning of working styles and facilities by team-based female employees at the newly commissioned MIRAI Tomioka Production Center, Nihon Kohden continues to develop strong networks with various stakeholders. I would like to see these endeavors continue to create greater value.

### Environment

The newly commissioned Tomioka Production Center has completed ISO 14001 registration, activities are ongoing at five sites, and as noted in the section on healthcare, Nihon Kohden has put an array of sustainable products on the market. That the company has established and worked towards quantitative targets concerning inputs and outputs is also commendable. Three targets have been set at the Tomioka Site and we are seeing concrete results. That said, in the context of broader trends with Japan's draft commitment to "cut CO2 emissions by 26% from 2013 levels by 2030" due to the COP21 Paris Agreement, which was adopted in December 2015, while Nihon Kohden is pursuing scope-based GHG\*\* reduction measures, it needs to include information on what action should be considered for the future from a long-term perspective.

### Society

Nihon Kohden has sought to actively disclose information to outside stakeholders through its corporate website and other media, and the running of factory tours also deserves credit. Internally, the company seeks to develop its human resources through measures that actively accept the diversity of its employees, including networking events for female employees in different industries and business sites, a mentoring program for newly appointed female managers, and the international training program. As a result, the setting of ambitious targets such as a 12% female manager hiring rate in FY2018 is impressive. The donating of refurbished medical equipment to clinical engineer training schools, the donation of medical equipment internationally, and the international scholarship program are activities that further expand the definition of stakeholder and I hope they will be continued.

In closing, I hope Nihon Kohden continues to demonstrate even greater leadership towards the creation of a sustainable future.

\* CSV: Created Shared Value  
\*\* GHG: Greenhouse Gases



Takashi Seo  
Operating Officer  
Corporate Strategy  
Department

### Activities in FY2015

Evaluation

Good

- Began scholarship program for international medical professionals
- Donated medical equipment and made donations to healthcare-related groups

### FY2016 Action Plan

- Enhance coordination with NPOs
- Continue scholarship program for international medical professionals