

# YASKAWA Report 2015



# Contents



15



# YASKAWA

Marking the 100th anniversary of foundation in 2015, the Yaskawa Group renewed its corporate logo to declare its intention to evolve and grow further as a global corporation.

It is a simple logo expressing a sense of trust and stability using capital letters that realize both visibility and legibility. Supple curved lines express flexibility and creativity of Yaskawa employees that create solutions to various problems. They also give an image of humanity, showing our customer-oriented culture. The lines extending upward express Yaskawa's intention to expand its global business and its potential.

# Introduction

# Leading the world over 100 years. Constantly supporting the "times to come."

Since its founding in 1915, Yaskawa Electric has continued to support the cutting-edge industries of the times. From "motor manufacturer" to "automation provider," we gave birth to the now universally accepted concept of mechatronics\*, and now as we evolve to "total solution provider," we mark our 100th anniversary in 2015. Through our endeavors to realize a society of clean energy utilization and human-robot coexistence, we shall create the times to come.

\*: Yaskawa Electric led the world in putting forward the term "mechatronics" in the late 1960s. This concept evolved when we combined our customers' machinery with Yaskawa's electronic products to create superior quality and function.

## Yaskawa Electric's Mission

To widely contribute to the evolution of society and the welfare of humankind through the performance of its business.

# Yaskawa Electric's Management Principles

- 1. To emphasize the importance of quality of products and constantly develop and improve technologies in which we can take pride throughout the world.
- 2. To improve the efficiency of operation and secure profits necessary for the survival and continued growth of the company.
- 3. To endeavor to keep a market-oriented attitude, to meet the needs of the market and do our utmost to serve our customers in the best way possible.

# Vision 2025

# Offer a new value to society through fusion of core technology advancement and open innovation

With our 100th anniversary in 2015 as a new starting point, we at Yaskawa Electric have set our Vision 2025 to exploit our core technologies in tackling emerging global challenges such as declining birthrates and a rapidly aging population in developed counties as well as environment and energy problems.

# Our Goal

# **Respect Life**

We aim to contribute to improving quality of life and building a sustainable society with technologies accumulated over the past century.

# **Empower Innovation**

We venture in new technologies/domains/targets to bring "Waku-Waku"<sup>\*1</sup> excitement to people.

# **Deliver Results**

We promise to deliver assured results to stakeholders, while continuously enhancing business execution capabilities.

\*1 Waku-Waku: Onomatopoeia used in Japanese language to express someone's feeling of enthusiasm

Greate a society where people's capabilities are maximized, through the application of mechatronics technology to medical/welfare segment.

# Humatroni

Challenge in Medical/ Welfare Market Achieve revolutionary industrial automation,through combination of world's leading edge technologies and open innovation.

# **Mechatronics**

 Pursue World No.1 in Core Business
 Deliver Revolutionary Industrial Automation

# OPEN INNOVATION Pride in Technology

Motion Control Robotics Power Conversion

> Provide safe and secure living in a sustainable society.

# **Clean Power**

Establish Energy Creation/ Storage/Application Business

\*2 Humatronics: Term coined to denote a cross of Human and Mechatronics

# Action

# Yaskawa Electric places value in manufacturing, developing human resources, and relationships with the environment and society.

As stated in the management principles of Yaskawa Electric, "our mission is to widely contribute to the evolution of society and the welfare of humankind through the performance of business," the concept of corporate social responsibility is thus incorporated in Yaskawa's DNA since its founding. Based on this spirit, we shall promote our "business strategy," "social contribution," and "environmental conservation" activities globally towards becoming an enterprise that responds to the expectations of our stakeholders.

# Social Contributions

Furthering the quality of people's lives. Becoming a driving force toward harmony with the local community and social development/activation.

- Participation in local community events and sponsoring of the Kosen RoboCon (Technical College Students' Robot Contest)
- Yaskawa Mirai Club activities
- Public opening of Robot Village, etc.

# **Business Strategies**

Pursuing the No. 1 global share through the two doctrines of "emphasis on quality" and "customer first."

- Mid-term business plan "Realize 100"
- Development of new businesses
- and promotion of open innovation
- Deepening of glocal management, etc.

# Environmental Promotion

Being more earth-friendly through energy creation, storage, and application. Aiming toward reducing environmental impacts and realizing a resource recycling society.

• Daily operations based on an eco perspective

- Development of energy-saving, space-saving motors
- Construction of regenerative energy utilization systems, etc.

# **Human Resource Utilization**

Make full use of global human resources and diverse talents. Create a pleasant working environment to create corporate value.

•Diversity promotion activities •Realization of work-life balance •Early identification of global key talent, etc.

# **Corporate Governance**

An advanced compliance system is established to perform sincere and fair corporate activities without deviating from social norms.

- Promotion of compliance Building trust with stakeholders
- Disclosure of corporate information, prevention of insider trading, etc.

# **Financial and Non-financial Data**

Villions of yen	)	(Fiscal year)	2005	2006	2007	2008	2009
Net sales			322,916	368,971	382,327	350,249	224,710
Operating income			24,486	33,564	36,487	20,806	<b>△6,977</b>
Operating income ratio			7.6%	9.1%	9.5%	5.9%	-
Ordinary income			24,331	33,383	35,212	20,024	△6,049
Ordinary	income ratio		7.5%	9.0%	9.2%	5.7%	-
Net inco	me		10,157	18,982	20,242	6,892	△5,699
Net inco	me ratio		3.1%	5.1%	5.3%	2.0%	-
		Net sales	133,909	159,601	177,899	160,848	104,814
	Motion Control	Operating income	12,278	19,832	21,370	11,755	△3,169
*1		Operating income ratio	9.2%	12.4%	12.0%	7.3%	-
Sales and		Net sales	113,458	126,723	123,550	114,124	57,084
Profit by	Robotics*2	Operating income	9,850	8,983	8,576	3,200	<b>△8,327</b>
Business Segment		Operating income ratio	8.7%	7.1%	6.9%	2.8%	-
looginont .	-	Net sales	41,932	49,487	50,517	46,768	41,498
	System	Operating income	△259	1,814	3,940	4,637	5,476
	Engineering	Operating income ratio	-	3.7%	7.8%	9.9%	13.2%
	Japan	·	171,569	200,275	190,822	169,086	116,197
	The America	s	51,286	55,343	50,947	43,943	29,351
Sales	Europe		39,766	46,566	58,424	52,887	24,332
by Destination	Asia		58,310	65,249	80,869	82,830	53,900
Other			1,985	1,538	1,265	1,503	930
	Overseas sa	les ratio	46.9%	45.7%	50.1%	51.7%	48.3%
Per	Earning - ba	sic	43.18	81.12	81.46	27.38	△22.64
Share	Earning - diluted		39.72	75.29	80.50	_	-
nformation (yen)	Dividends		6.0	6.0	10.0	13.0	3.0
-	Iders' equity		52,750	80,788	100,862	97,068	88,459
Shareho	Iders' equity ra	atio	20.7%	29.6%	34.9%	39.0%	36.6%
	turn on equity		22.3%	28.4%	22.3%	7.0%	<b>△6.1%</b>
Interest-	bearing debt		62,556	46,750	33,829	32,894	42,235
Debt-to-	equity ratio (ti	mes)	1.2	0.6	0.3	0.3	0.5
Inventori		-	58,177	58,136	57,902	54,705	46,200
Inventor	y turnover (mo	onths)	2.2	1.9	1.8	1.9	2.5
	expenditures		9,154	8,452	9,121	8,611	4,119
•	tion and amo	rtization	6,699	6,962	7,676	8,028	7,840
		oment expenses	8,073	8,417	9,738	9,704	8,493
lon-financ	•		,		,		,
No. of er	mployees (per	sons)	7,754	8,056	8,347	8,463	8,176
No. of employees rehired (persons) No. of regular employees and temporary contracted workers aged 60 to 64		ed (persons) contracted workers aged 60 to 64	-	-	65	106	164
People with disabilities employed (%) As of June 1, 2014 for FY2014		_	-	1.56%	1.62%	1.75%	
No. of non-Japanese employees(persons) Regular employees and contract employees		nployees(persons)	_	-	12	14	16
Use of pa	arental leave post using the program/U	Drogram Jse rate	_	-	7/100%	3/100%	5/100%
Parental	leave program	n	_	-	0	2	1
Average days of paid leave taken per year (No. of days/person)			_	-	12.26	12.44	8.69
(No. of days/p	erson)						

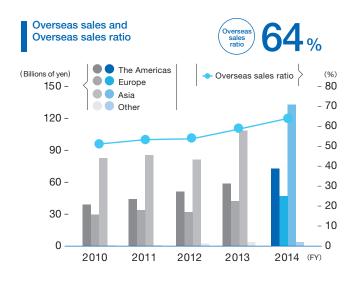
\*1: Starting FY2013, reportable segments changed to the following 3 segments: Motion Control, Robotics, and System Engineering. There have also been partial changes in the division of businesses within these segments. Value and profit ratios of each segment for the period up until FY2012 are based on figures before the change was implemented. The figures for former Information Technologies segment and Other segment are omitted.

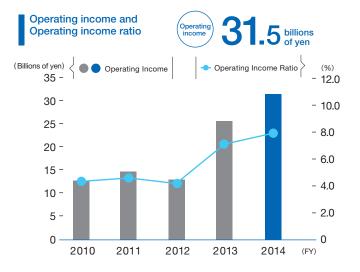
2010	2011	2012	2013	2014	(Fiscal year)		(Millions of yen)
296,847	307,111	310,383	363,570	400,153	Net sales		
12,874	14,818	13,070	25,702	31,532	Operating income	•	
4.3%	4.8%	4.2%	7.1%	7.9%	Operating income	ratio	
13,429	15,626	14,053	27,084	33,884	Ordinary income		
4.5%	5.1%	4.5%	7.4%	8.5%	Ordinary income r	atio	
6,544	8,432	6,800	16,964	24,819	Net income		
2.2%	2.7%	2.2%	4.7%	6.2%	Net income ratio		
156,450	149,410	144,333	162,346	188,116	Net sales		
8,980	5,824	3,248	16,444	21,748	Operating income	Motion Control	
5.7%	3.9%	2.3%	10.1%	11.6%	Operating income ratio	Control	*1
83,843	101,065	110,223	122,543	135,956	Net sales		Sales and
1,673	7,014	8,365	9,511	10,558	Operating income	Robotics*2	Profit by Business
2.0%	6.9%	7.6%	7.8%	7.8%	Operating income ratio		Segment
34,349	35,520	37,263	35,327	40,980	Net sales	Custom	
2,061	1,917	1,504	△5	△768	Operating income	System Engineering	
6.0%	5.4%	4.0%	_	_	Operating income ratio	Lighteening	
144,754	143,019	143,456	150,101	144,249	Japan		
38,779	43,985	51,113	58,481	72,616	The Americas		
29,610	33,939	32,047	42,499	46,921	Europe		Sales by
82,749	85,276	81,308	108,595	132,779	Asia		Destination
955	890	2,456	3,892	3,590	Other		
51.2%	53.4%	53.8%	58.7%	64.0%	Overseas sales rat	tio	
26.00	33.51	27.03	67.42	98.45	Earning - basic		Per
-	_	25.65	63.98	93.60	Earning - diluted		Share Information
6.0	10.0	10.0	12.00	20.00	Dividends		(yen)
93,220	100,109	112,218	134,076	171,388	Shareholders' equ	uity	
35.2%	35.9%	37.1%	39.4%	44.1%	Shareholders' equ	uity ratio	
7.2%	8.7%	6.4%	13.8%	16.3%	ROE: Return on e		
41,439	58,612	54,684	55,528	52,430	Interest-bearing d		
0.4	0.6	0.5	0.4	0.3	Debt-to-equity rat	tio (times)	
58,066	63,800	64,325	78,364	85,469	Inventories		
2.3	2.5	2.5	2.6	2.6	Inventory turnove		
6,655	9,907	15,895	16,980	36,369	Capital expenditu		
7,057	7,606	8,114	9,214	11,534	Depreciation and		
9,724	10,398	10,731	14,033	15,317	Research and de		penses
	1				Non-financial data		
8,085	8,246	10,383	11,463	11,356	No. of employees	•	
199	239	246	236	213	No. of employees No. of regular employees and te	rehired (perso emporary contracted wor	ons) kers aged 60 to 64
1.85%	1.65%	2.15%	2.15%	2.04%	People with disabilities employed (%) As of June 1, 2014 for FY2014		ed (%)
14	19	18	20	20	No. of non-Japanes Regular employees and cor	ntract employees	
2/100%	5/100%	5/83%	7/100%	4/100%	Use of parental le		
1	4	1	1	3	Parental leave pro	am (persons)	
12.30	12.81	12.44	12.49	12.48	Average days of p (No. of days/person)		
23,688	<b>22,086</b> *3	<b>22,138</b> *3	<b>22,770</b> *3	<b>20,737</b> *3	Transition in CO2 em and sales activities	issions from pro	oduction

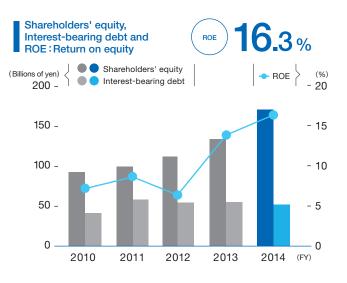
\*2: The segment name was changed from "Robotics Automation" to "Robotics." (effective FY2006)
 \*3: Including sales bases from FY2011.

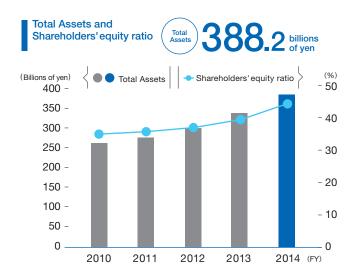
# **Financial and Non-Financial Highlights**

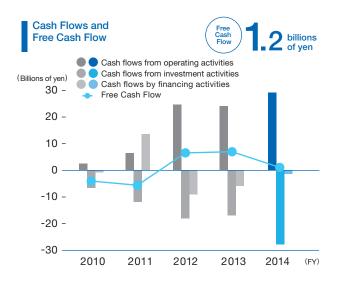


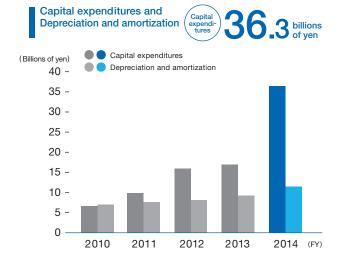


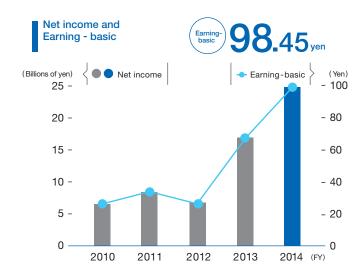


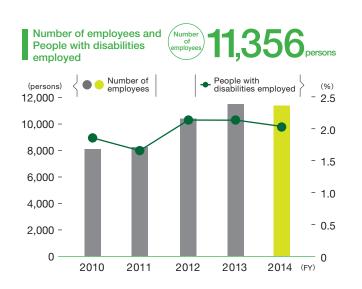


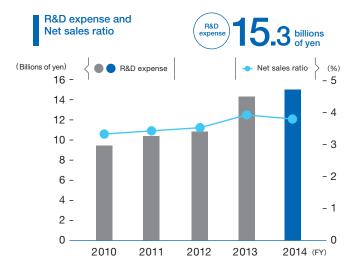








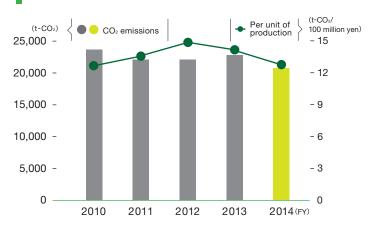




Paid Dividends per Share



Transition in CO2 emissions from production and sales activities and CO2 per basic unit of production output



YASKAWA ELECTRIC CORPORATION

(11)

Message from the President

# We shall mark our 100th anniversary with record-setting performance for advancing our business toward

In FY2014, we at Yaskawa Electric were able to exceed 400 billion yen in net sales for the first time, and in FY2015 we commemorated our 100th anniversary of foundation. We shall reflect on the 100 years up to now and shall begin to take steady steps towards the next 100 years.

> Representative Director Chairman of the Board President

(12)

# of foundation and build up the foundation the next 100 years.

Since being founded in 1915, we at Yaskawa Electric have set "electric motors and their applications" as our business domain to start up various modern industries in the region and have been striving to expand our business. In order to engage in business, not by copying Europe and America, which were more advanced at the time, but through our own technologies, we set up our company creed of "becoming a technology-centered company," proposed the concept of "mechatronics," which is the foundation of our business, ahead of the rest of the world, and have maintained quality-first management with the determination to develop the world's top or the world's first revolutionary technologies and products.

Also, while operating on an efficient, globally-common basis, we have also been promoting glocal management of adapting our corporate roles to regional characteristics with our focus set on customers and applications.

In the times to come, there is a possibility that the powers of IoT\*and AI will further accelerate changes in society and bring about open innovations that give rise to new technologies and excellent business models. At the same time, we must contribute, as a corporation, to resolving the global challenges of "declining birthrates and rapidly aging population in developed countries" and "depletion of energy due to increasing population."

With an aim at increasing the earnings of existing businesses, we at Yaskawa shall improve our business executing capability through continued fortification of our development capability, production capability, and sales capability and realize sustained growth.

\*IoT: Abbreviation for "Internet of Things." Refers to the technology of connecting everything to the internet.

### Reflecting on FY2014

In regard to the business environment in FY2014, although the economies of newly emerging countries besides China lacked momentum, firm growth was seen in the U.S., mainly in the automobile market. In China, where the market scale is large, although there were highs and lows depending on the market, stable growth continued overall, supported by the expansion of production, mainly of smartphones. In regard to the business in Japan, the depreciation of the ven progressed greatly throughout the fiscal year, bringing about improvement of the export environment, and a generally recovering trend was seen with some industries improving in earnings and capital investments exhibiting a gradually increasing trend.

and especially due to the favorable trends in production facility investments in China. In regard to the Drives business, whereas steady sales of general-purpose AC drives were achieved, driven by the thriving U.S. market, sales of PV inverters were influenced by major electric power companies in Japan pending replies to applications for connection and weakened in comparison to the previous period that was favorable. The Robotics business remained favorable due to automobile-related capital investments staying at a high level globally and due to automation trends in production sites of general industries besides automobile applications.

business expanded greatly, supported by the increase in demand for

smartphones and steady capital investments in automobile related fields

Under this environment, in our Motion Control business, the AC servo

Full-year Performance for FY2014 Unit: Billions of yen							
	FY2014 actual results	FY2014 plan	Difference with respect to plan	FY2013 actual results	Difference with respect to previous FY		
					Amount increase/decrease	Percentage increase/decrease	
Net Sales	400.2	400.0	+0.2	363.6	+36.6	+10.1%	
Operating Income	31.5	31.5	+0.0	25.7	+5.8	+22.7%	
Ordinary Income	33.9	33.0	+0.9	27.1	+6.8	+25.1%	
Net Income	24.8	23.5	+1.3	17.0	+7.9	+46.3%	
Overseas Sales Ratio	64.0%			59.0%			

Note: The figures in the "FY2014 plan" column are figures that were announced externally when the financial results for the 3Q were announced on January 22, 2015.



What are important are startup acceleration of new businesses and global expansion. We shall evolve into an organization that expands business domains with our own capabilities and without dependence on market conditions.

#### Market Environment in FY2015

With the market environment surrounding our corporate group in FY2015, there are numerous causes for concern, with the economies of newly emerging countries showing signs of decline and financial problems occurring mainly in Europe. The circumstances cannot be viewed optimistically, especially with the slowdown of growth becoming prominent in China, which has been driving global economic growth up to now, and currency trends continuing to be unstable under the

influence of global financial instability.

In consideration of such uncertain global conditions, with highs and lows in growth becoming clear according to market, continuation of a structure where the economies of newly emerging countries drive the global economy can no longer be anticipated. Significant turnaround of performance due to currency effects also cannot be expected for the future.

#### Plans for FY2015

Under such an environment, FY2015 will be the final fiscal year for completing the current mid-term business plan "Realize 100." Although the net sales target of 400 billion yen of this plan was realized one year in advance, it is regrettably regarded that it is difficult to attain the operating income target of 40 billion yen. This is due to increase of sales amount being delayed in several projects while investments toward future growth, such as the establishment of Robot Centers aimed at fortifying sales capability, etc., were continued.

On the other hand, in regard to the full-year forecasts for FY2015 announced on April 20, 2015 (net sales of 435 billion yen and operating income of 36.5 billion yen), despite increasing uncertainties, mainly in China, we shall aim at realizing record-high net sales and operating income through global fortification of sales capability, mainly in growing markets, and controlling investments and costs.

In terms of trends according to market, with smartphones, which exhibited extremely strong growth in the previous period, it is difficult to expect growth as strong as that of the previous period due to the influence of completion of capital investments by the respective manufacturers. In regard to automobiles, although production is expected to peak out despite continued steady growth in the near-term, there is vigorous activity toward automation in the automobile industry as a whole. On the other hand, in fields besides smartphones and automobiles, the range of application of our products is expanding with there being strong trends towards servo implementation in various machine tools and strong needs for automation in production sites of general industries, such as foods, building materials, etc.

As a strategy, we shall further fortify our development capability, production capability, and a sales capability. In regard to development capability, we shall accelerate development of the next-generation product series of robots and AC drives and launch these in the global market without fail in FY2016. We shall also focus our efforts on initiatives toward proposing Yaskawa's version of Industry 4.0\*1 and on promotion of open innovation. In regard to production capability, production in regions of demand is our basic policy and we shall expand robot production in China in response to increased demand in the Chinese market. Further, we shall strengthen the production in China of the AC servo " $\Sigma$ -7," with which sales in China was started in FY2014. Local production shall be expanded to answer future increases in demand overseas and in regard to domestic production in Japan, we shall improve productivity through improvement of the rate of automation, etc., and promote fortification of a globally optimal production system.

We shall fortify our sales capability globally and mainly in growing markets. In the Robotics business, in order to expand the use of robotics in non-automobile fields in addition to the favorable automobile-related market, we shall provide, through the "Robot Centers," the know-how required to introduce robotics to system integrators dealing in automation in various fields. We are currently fortifying global deployment of the Robot Centers and shall establish 7 centers in FY2015 to bring the total number of centers to 38. The overall sales shall thus be supported by the effect of expanding the use of robotics should the main field of automobiles slow down.

\*1 Industry 4.0: The concept of the fourth industrial revolution proposed by the German government. Refers to the linkage of goods and services inside and outside factories via the internet and other communication networks to create new values that did not exist before and construct new business models.



Production line at the Shenyang Plant



Chubu Robot Center completed in May 2015

#### **Compliance with the Japanese Corporate Governance Code and Returns to Shareholders**

In FY2015, we fortified our governance in compliance with the Japanese Corporate Governance Code. To further strengthen corporate governance and the supervisory function of the Board of Directors with respect to the Management, we have increased the number of external directors to three and transitioned to a company with audit and supervisory committee having an "Audit and Supervisory Committee," in which the external directors comprise the majority, as of the 99th Regular General Meeting of Shareholders held on June 18, 2015. Through this we shall aim at improving soundness and efficiency of management.

In our long-term business plan "Vision 2025" for the next 10 years, announced at the beginning of the FY2015 period, we have set, for the first time, target values for payout ratio and ROE. In this plan, we aim at improving the payout ratio to 30% in five years and achieving additional increase in the five subsequent years. Also, from the standpoint of returns on invested capital, we have set forth a basic policy of maintaining an "ROE" of 13% or higher. By this policy, we are planning dividends of 20 yen per year per share for FY2015.

#### **To Our Stakeholders**

In arriving at our landmark 100th anniversary of foundation, we shall carry out intensive fortification of our business executing capability to solidify our basis for advancement in the next 100 years. In the present fiscal year, we shall aim at achieving record-setting operational results as a culmination of our 100-year history.

Full-year Foreca	ast for FY201	Unit: Billions of yen			
		FY2014	Change from previous FY		
	FY2015 plan	actual results	Amount	Percentage	
Net Sales	435.0	400.2	+34.8	+8.7%	
Operating Income	36.5	31.5	+5.0	+15.8%	
Ordinary Income	37.0	33.9	+3.1	+9.2%	
Net Income	24.0	24.8	▲0.8	▲3.3%	

Also, at the head office in Kurosaki, Kitakyushu, we opened the "Robot Village" as a 100th anniversary project. Here, we have set up an amusement facility where stakeholders can experience not only robots but also the fun and wonders of "manufacturing." We would like everybody to visit this facility to come in direct contact with our business and hope that such occasions will lead to opportunities to vitalize Kitakyushu and local communities and showcase Japan's "manufacturing capabilities" anew to the world.

From a mid- to long-term viewpoint, we will be facing major social changes, such as declining birthrates and rapidly aging population in developed countries, increases in prices and wages in newly emerging countries, etc. In order to maintain productivity under these circumstances, the introduction of robotics and automation of production are being promoted under government leadership in key countries. I also believe that the arrival of a society where humans and robots coexist is becoming a reality through the evolution of IT and other technologies that are advancing rapidly.

We at Yaskawa are determined to make use of our motion control technologies, which are the forte of our group, and our "manufacturing capabilities," such as component capability and solution providing ability, to contribute to resolving global challenges, such as environmental problems and the problem of declining birthrates and rapidly aging population. Under these concepts, we shall create and expand businesses further while making contributions to society through the businesses and pursue the realization of improved corporate value and sustained growth.

I would appreciate our stakeholders' continued support and patronage.

As a culmination of our 100-year history, we shall aim at achieving record-setting operational results

Long-Term Business Plan Special Feature -"Vision 2025" (FY2016-2025)

Interview

Director Corporate Senior Vice President General Manager, Corporate Planning Division

### Shuji Murakami

After joining Yaskawa Electric Manufacturing Co., Ltd. in April 1982, served as Vice General Manager of the Motion Control Division, etc., and assumed the position of General Manager of Corporate Planning Division in April 2008.

# With our vision set on the next 100 years of Yaskawa Electric, we have formulated "Vision 2025" that maps the growth strategy for the first 10 years

FY2015 is the final fiscal year for "Vision 2015," which is our current long-term business plan, and "Realize 100," which is our mid-term business plan. Therefore on April 20, 2015, we at Yaskawa Electric announced our next long-term business plan that is aimed at 2025 and is to serve as the basis for formulating the next mid-term business plan. In this special feature article, Shuji Murakami, Director, Corporate Senior Vice President, and General Manager of the Corporate Planning Division, shall provide a general review of the current "Vision 2015" and describe the background to the setting of the new "Vision 2025" long-term business plan and the growth strategy for realization of this plan.

#### Yaskawa Electric's Vision 2025

Offering new values to society through the fusion of core technology evolution and open innovation

Our Goal

Respect Life Empower Innovation Deliver Results



Humatronics : Term coined to denote the hybridization of Human and Mechatronics

(16)

### **Q.** First, please provide a general review of Vision 2015.

Reflecting back on Vision 2015, we have steadily built up forms of business in the direction of creating new businesses in the "Robotics Human Assist business domain" and the "Environment & Energy business domain." Especially, in the Environment & Energy business field, the PV inverter business has grown to a business of the 20 billion yen scale. Also in the Robotics Human Assist field, we have been sowing seeds in the direction of biotechnology, medical, and welfare fields with an aim at utilizing robots in situations closer to humans. These endeavors are being inherited in Vision 2025 in the business domain of "Humatronics." Meanwhile, in the existing "Mechatronics Solution business domain," which is at the base of these new businesses, we have acceler-

ated global deployment and have made great advances since the "Challenge 100" mid-term business plan that was started in FY2009. However, in regard to numerical targets set in our current "Realize 100" mid-term business plan, although the business scale (net sales) for the entire corporation was achieved one year in advance, there remains issues in regard to the progress of new businesses and structural reformation of the system engineering business. Although we consequently foresee the non-attainment of targets in terms of profits, this is also a result of making aggressive prior investments aimed at future growth, and we shall be reaping the results of such investments steadily in the period of the next mid-term business plan.

### Q. What is the aim of setting the long-term business plan?

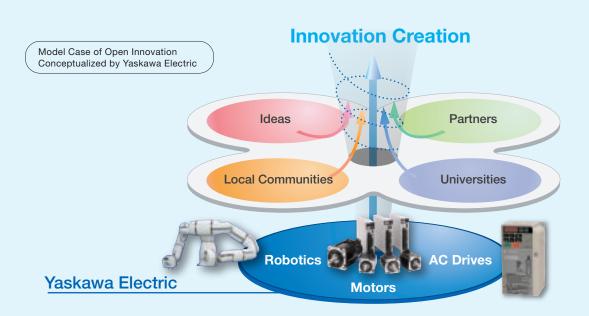
The operations of Yaskawa are set in direction by 10-year visions and specific targets and schemes are indicated in mid-term business plans of 3 to 4-year periods constituting the 10 year period. With the businesses of Yaskawa, the product development cycle of our customers is long and the process of sowing to harvesting may not be completed within the period of a mid-term business plan and may cross over into the subsequent

mid-term business plan. It is thus important to make preparations for the future in 10-year spans. In view of the next 100 years of Yaskawa Electric, which commemorates its 100th year of foundation this year, we have clarified, internally and externally, the growth strategy for the first 10 years of the coming 100 years in the currently announced Vision 2025.

#### Q. What thoughts are put into the new keyword "open innovation"?

As a technology-centered company, we are proud of the products and technologies that we have developed up to now. And in the process of achieving new themes received from our customers who appreciate our high technical capabilities, we have made numerous innovations. This is our corporate DNA as well. On the other hand, in order to continue to realize corporate growth exceeding the market growth rate even as the global competition becomes more severe, we also consider it necessary to take in completely new ideas in addition to our initiatives up to now to enhance our business mobility. For example, with Industry 4.0, which is

forecasted to advance rapidly in the near future, there is a limit to how much each company can accommodate individually and it is important to collaborate with more partners and to be able to move speedily. Further, by building up a win-win relationship that makes use of the domains in which each company specializes, we believe that we and our partners can contribute widely to the world and consequently attain victory in the competition. Under such a concept, we shall make headway to the next 10 years through offering new values to society through the fusion of core technology evolution and open innovation.



# **Q.** How were the numerical targets set?

Vision 2025 was drafted by members comprising a broad range of generations from young employees to executives and was formulated through repeated discussions by the Management Committee and the Board of Directors. Firstly, based on benchmark results of competitors within and outside Japan, we came up with a target line of 1 trillion yen in terms of business scale or corporate value and an operating income margin of 10%. In setting up the strategy to reach this line, doubt was raised as to whether a high-growth market, such as China in the

Numerical Targets for FY2025

domain

	FY2015 Targets	
Net Sales	435.0	
Percentage of Net Sales from New Business Domains*1	7%	]_
Operating Income (Margin)	36.5(8.4%)	
Payout Ratio	22%	
Capital Efficiency (ROE)	13%	

\*1 New business domains : Clean Power business domain, Humatronics business

past 10 years, will emerge and thus in regard to the market environment surrounding our company, it was judged necessary to view that growth will be suppressed in line with the existing market trends. A growth target was then set to fill this gap by further pursuit of gaining the top global share in existing businesses, cultivation of new fields, acceleration of growth in new businesses, utilization of M&A, etc., and achieve net sales of not less than twice that of 2015 and an operating income of not less than 100 billion yen in 2025.

of yen
re
re

\*2: Stepwise increase to 30% by 2020

# **Q.** Targets for payout ratio and capital efficiency (ROE) are set in Vision 2025. What is the concept behind improvement of shareholder value?

Looking back at the history of our company, our financial structure was weak and without leeway in the 1990s after the collapse of the bubble economy. In these circumstances, we promoted the reformation of our business structure, carried out selection and concentration, and focused our energies on businesses that can expand globally. Although we encountered the Lehman Shock in 2009 and extremely difficult circumstances, such as the super-strong yen, etc., followed, we put our efforts into fortifying our businesses and improving our financial structure by accelerating production in regions of demand, etc. As a result, our profitability improved, our capital increased stably, and consequently, our shareholders' equity ratio reached 40% and our DE ratio also became 0.3 and reached the targeted level. We were thus able to gain the capital necessary for corporate stability and growth, and under the judgment that we have now entered a stage of placing priority on appropriate distribution of profits, we set numerical targets for the payout ratio and the capital efficiency (ROE) in Vision 2025. We would like to meet the expectations of our shareholders by increasing the payout ratio in stepwise manner and paying dividends in accordance with our profit level in consideration of the balance of investments for the future and growth potential. Also, our capital efficiency (ROE) is at a high level as it is and we plan to maintain and improve this without fail to secure reinvestments for growth and accelerate our growth.

## **Q.** What is the growth strategy for achieving the targets of Vision 2025?

It is not easy to realize the targeted scale of sales, and a buildup of approximately 200 billion yen in addition to the market growth expected in the existing business domains is required. We shall realize this by increasing market shares by launching new product of high competitive advantage and creation of new markets related to Industry 4.0. It is also forecasted that the needs for automation will become higher than ever in a wide range of fields, including food processing, electrical/electronic parts assembly, etc., and the adaptation of robotics technologies to meet these needs will become a key factor. We shall achieve increases through open innovation, that is, through new automation solutions arising from the collaboration

of partners adept in such new applications with the technologies that we have cultivated up to now. Also in regard to the new business domains of Clean Power and Humatronics, it is forecasted that the awareness for environmental problems accompanying energy consumption and the awareness for improved quality of life in the society of declining birthrates and rapidly aging population will increase, and by grasping these as business opportunities, we plan to increase the net sales of 30 billion yen of the FY2015 plan by 4 times or more in the 10 subsequent years. Also, we shall engage in all business activities with our sight constantly set on strategic alliances and M&A.



We shall become more open, connect with various people, and share ideas to search for further possibilities and grow.



# **Q.** What are our added values and competitive advantages?

Partners looking forward to taking on new challenges using robotics have gathered at our Robot Centers that have been established at more than 30 locations in the world and through these centers, the reliability of our products has been increased and, at the same time, much know-how has been accumulated. This is also one form of open innovation. Besides our company, there are no manufacturers that have an assortment of not only robots but also controllers, servos that are the key components of robots, and AC drives as well as system engineering capability and network technologies, such as M2M\*, which is a tool for realizing IoT, and we believe that this provides high convenience for our partners. As additional features of our company, we place importance on local accommodation capability and capability to provide accommodations in close relationship with our customers to provide the best locally-oriented services anywhere in the world.

\*M2M: Abbreviation for "Machine to Machine." Refers to the technologies for communication among equipment and the system for performing remote monitoring and control using wired and wireless networks.

### **Q.** What type of organization is aimed at in Vision 2025?

We are carrying out glocal management in which we place importance on local circumstances while being a global company. There are locally competing companies at the respective global sites and we must realize accommodations equivalent to or better than such companies. However, if only accommodations that are optimal for each region is stressed, our resources will become dispersed and inefficiencies will arise. Our head office must thus lead our group as a whole while make use of expertise through the fostering of global human resources. We shall also improve our organizational strength by respecting diversity and furnishing an environment where various people can play active roles as employees. Further, for human resources with the strong will to take on challenges, we shall provide appropriate treatment and provide a more attractive working environment. In the glocal management of our company, we attach importance in continuing to deploy such initiatives globally and locally.



#### **Q**. What is aimed at by the coexistence with the local community that is put forward in Vision 2025?

We consider that the deployment of global business is made possible because employees can carry out their business activities in each local community without anxiety and we consider that we should return this favor to the local community. We would like to build up a relationship of coexistence and co-prosperity through further vitalization of the local community and the prospering of our company itself as a member of the local community. We are also putting efforts into constructing a win-win relationship with local universities through joint research, etc. We feel that such efforts enable us to secure excellent human resources even overseas and are full of merit in terms of deploying business globally. Further, coexistence with the local community is important in terms of promoting open innovation. By all kinds of people gathering together, new ideas and new businesses are born. Our company shall become more open, connect with various people, and share ideas to search for further possibilities and grow.

# **Segment Highlights**

### **MOTION CONTROL**

Motion & Control BusinessDrives Business

#### **Business Contents**

#### Constituted of the Motion & Control business, which deals with AC servo drives and controllers as the key products, and the Drives business. Motion & control products are incorporated in production equipment for electronic parts, semiconductor parts, etc., that require high precision. Our AC drives are used in social infrastructure, such as large-scare air conditioning units, escalators, elevators, etc., and contribute to energy-savings.

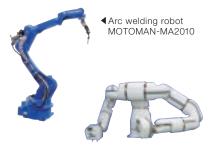
#### Products



### ROBOTICS

- Arc and spot welding robots
- Painting robots
- •Handling and picking/packing robots
- Clean/vacuum transfer robots for semiconductor and LCD-manufacturing equipment

Supplies vertical articulated robots as key products to contribute to the automation of welding, painting, assembly, conveyance, etc., at production sites of automobile-related markets and various other fields.



Dual-arm robot for biomedical application▲ MOTOMAN-BMDA3

### SYSTEM ENGINEERING

- Steel plant business
- Social system business
- Environment & Energy business
- Electrical power business
- Industrial electronics business

Mainly targets the market of various large-scale plant facilities, such as steel plants and water treatment plants, as well as large-scale cranes for which stable operation is essential.

Large-scale wind power generator

Medium-voltage matrix converter



### OTHER

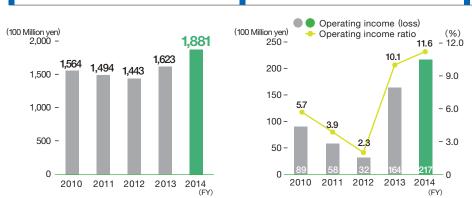
- ●IT-related services
- Logistics,etc.

The segment covers information-related businesses and businesses such as logistics services, etc.

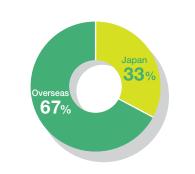
CDMA 1X packet communications adapter MMLink-1X► North P

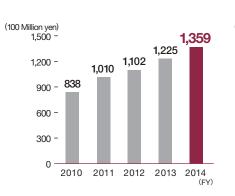


 Laser beam machine LIBWE

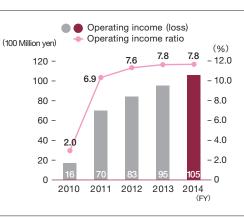


# FY2014 Percentage of Net Sales in Japan and Overseas

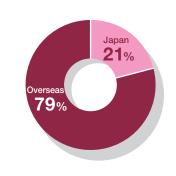


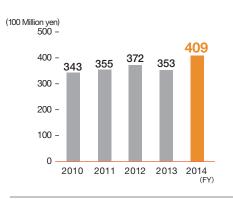


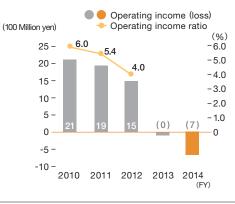
FY2014 Net Sales\*

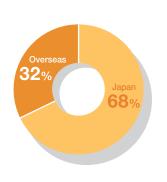


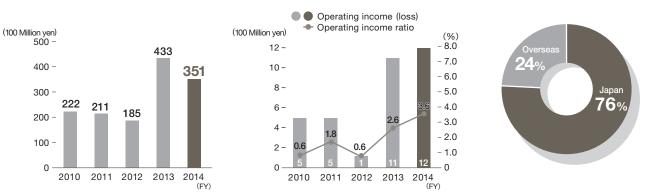
**Operating Income (Loss)\*** 











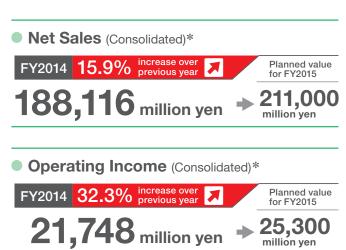
\*: Starting FY2013, reportable segments changed to the following 3 segments: Motion Control, Robotics, and System Engineering. There have also been partial changes in the division of businesses within these segments. Value and profit ratios of each segment for the period up until FY2012 are based on figures before the change was implemented.

# Motion Control Motion & Control Business

The Motion & Control business provides products such as AC servo drives, controllers, etc., and these are incorporated in production equipment for electronic parts, semiconductor products, etc., in which high precision is required.

By accurately grasping demand opportunities with expansion trends in the growth markets, we have gained the highest global market share.





\* : Total numerical value for the Motion & Control business and the Drives business of the Motion Control segment.

Our competitive edge shall be enhanced further by improving our development capability by making full use of global development bases and promoting automation of manufacturing processes.

Our net sales shall be expanded by expanding the application ranges of our products without dependence on a specific market.

General Manager Motion Control Div. **Akira Kumagae** 

Percentage of net sales\* 47.0%

\*: Total numerical value for the Motion & Control business and the Drives business of the Motion Control segment.

### Review of FY2014 Operations

In FY2014, our M&C business produced favorable results in both orders and sales by capturing the vigorous demands for various manufacturing equipment due to favorable trends in smartphone-related and automobile-related markets mainly in Japan, China and the U.S. In particular, we were able to expand profits through increased orders and sales of new products centered on " $\Sigma$ -7" and effects of full operating use of the Shenyang Plant in accordance with the growth of Chinese market. For " $\Sigma$ -7," with which significant improvement of performance is realized in comparison to conventional devices, the model lineup was expanded and full-fledged global sales activities were accelerated. Also for our new products, we released a smartphone application for improving product traceability and maintainability and started providing BTO (Build to Order) services and troubleshooting information display services using cloud computing to improve customer convenience. We are thus working on functions deemed necessary for future trends towards Industry 4.0 and IoT ahead of the times. Internationally, we strengthened our collaboration in development and distribution with VIPA in Europe, and in the U.S., we reinforced our engagement in general industries, such as the food industry, in addition to the semiconductor industry which we excel at. In China, our local development capability for the local market has been promoted, resulting in increase in orders, and has come to play a part in global development to make contributions in shortening of product development periods.

### Outlook

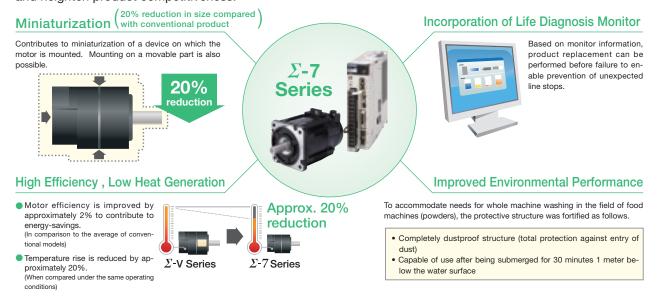
For FY2015, strong conditions are expected to continue within Japan in the machine tool-related markets and liquid crystal/electronic partsrelated markets due to high demands for smartphones, etc., and in Europe and the U.S., steadiness is expected in the semiconductor-related markets and machine tool-related markets. In China, increased demand is prospected in the machine tool-related markets and metal working machine-related markets, and we are also planning to start production of large-capacity models in Shenyang for applications in which future advancement of motorization is predicted. In Korea and Taiwan, we shall conduct our sales promotion activities while closely observing investment trends in the semiconductor/liquid crystal-related markets. Overall, it is prospected that favorable conditions will continue globally in the first half of the year.

By continuing to receive the tailwind of the market, we shall make full use of our global development system in FY2015 toward expanding the model lineup of " $\Sigma$ -7" that incorporates various local needs and fortifying our global production capability, including the IT infrastructure and the promotion of production automation, to grasp the demands of the favorable markets without fail and, at the same time, engage in new markets and markets of low share. Being the final year of the "Realize 100" mid-term business plan, we shall lead our efforts so far to actual results to achieve the plan targets reliably and aim at achieving the largest earnings as the M&C business in FY 2015.

#### **Business Topics**

#### Features of the new product " $\Sigma$ -7"

Numerous improvements have been added to the conventional product to answer the needs of our customers and heighten product competitiveness.

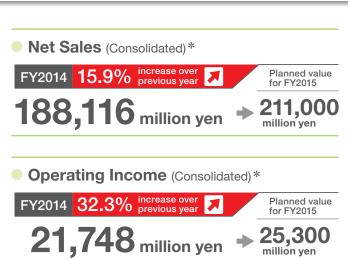


# Motion Control Drives Business

General-purpose AC drives, which are the main products of this segment, play active roles in social infrastructures such as large-scale air conditioning, escalators, elevators, etc., and have gained the world's top share through the high technical capability and quality.

We shall also perform market deployment of strategic new products, such as the matrix converter that makes use of regenerative energy possible, power conditioners for solar and wind power generation, etc.





\* : Total numerical value for the Motion & Control business and the Drives business of the Motion Control segment.

High added value in products is realized through high power supply quality, etc., of the new matrix converter. We shall continue to fortify our global competitiveness to answer the increasingly advanced and diverse demands of our customers.

General Manager Drives Div. **Michihiko Zenke** 

Percentage of net sales\* 47.0%

\*: Total numerical value for the Motion & Control business and the Drives business of the Motion Control segment.

### Review of FY2014 Operations

In regard to the Drives business in FY2014, sales of general-purpose AC drives were supported by the steady demand in the U.S. that made up for the slow business in China. On the other hand, with PV inverters, the business that was favorable in FY2013 weakened due to the influence of withholding of purchase of renewable energy by major electric power companies.

In FY2014, we released the new "U1000" in our difference-making lineup of matrix converters. This product enables machines to be simplified and reduced in size in comparison to systems using AC drives, realizes energy-savings by enabling regenerative energy use, and has the remarkable feature being free of harmonics. Applications are spreading to diverse uses due to contributions to customer solutions and significant improvements of added values of systems.

In September 2014, Solectria Renewables, LLC, in the U.S. (hereinafter, "Solectria") was acquired as a second-tier subsidiary. Global expansion shall be accelerated through realizing synergetic effects in sales and development in the PV inverter business.

### Outlook

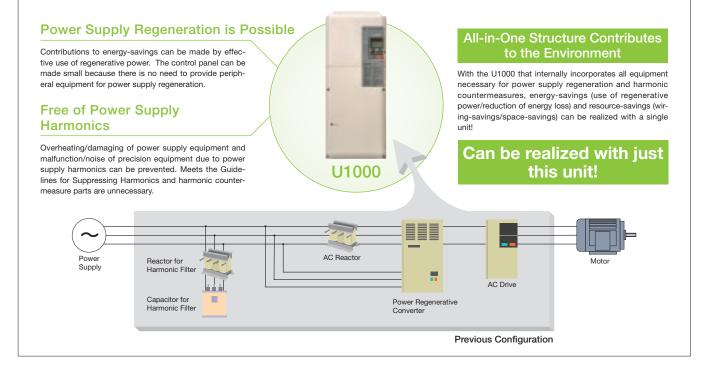
For FY2015, although the AC drives markets in Europe and the U.S. are expected to remain favorable, it is predicted that the demand for AC drives in China will remain weak due to stagnation of infrastructure investment. In regard to the Japanese market for PV inverters, although the influence of withholding of purchase of renewable energy will remain for industrial use products, growth is predicted for the residential use market.

In these circumstances, we shall focus our efforts to increase orders further with our difference-making products as arms. First, based on our new lineup of large-capacity models added with the "U1000," we shall dominate the market with harmonic free applications in fans, pumps, compressors, etc., and regenerative applications in elevators, escalators, cranes, and other lifting machines. Also in regard to PV inverters, we shall introduce the world's first ultracompact models equipped with the new GaN power device into the residential use market to increase orders and raise the share in this field. Also in coordination with Solectria, we shall start sales in the U.S. and Asia where market expansion can be anticipated. Further, to fortify our global competitiveness, we shall prepare, in the present fiscal year, for sales of our next AC drive products planned to be released in FY2016.

#### **Business Topics**

#### Features of the new product "U1000"

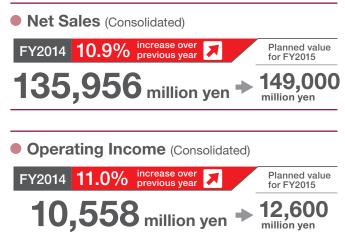
The U1000, which incorporates our unique technologies, exhibits excellent environmental performance.



ROBOTICS

The industrial robots provided by this segment contribute to automation of welding, painting, assembly, conveyance, etc., in various industrial fields particularly in automobile-related markets. The component machine parts, controllers, etc., are developed within the company and by finely tuned accommodation of advancing customer needs, we have gained the leading status in the industry.



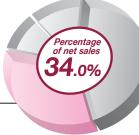


While meeting our customers' needs, we shall promote the standardization of models and components and improve productivity and profitability.

Also, by expansion of the Robot Centers, we shall work together with our users to seek new ways of using our products and push forward with creation of new businesses.

General Manager Robotics Div. and Biomedical Business Div.

Yoshikatsu Minami



### Review of FY2014 Operations

The business environment of the Robotics business in FY2014 remained favorable domestically and internationally and especially in China due to the vigorous demand in the automobile industry. Both net sales and operating income increased over the previous year and renewed the record high.

The lineup of the MOTOMAN industrial robots, adopting the "DX200" controller released in FY2013, has been substantiated. With the "DX200" series, the business efficiency was improved through standardization and merits for customers were pursued through unification of spare parts, improvement of maintainability, etc.

For the general industrial market, in which actual utilization of robots has been few up to now, the deployment of Robot Centers is being continued to provide sites where customers and system integrators (Sler's) can examine and verify ways of utilizing robots. In FY2014, one center was opened in Indonesia (Jakarta) in October and construction of the Chubu Robot Center (Miyoshi City, Aichi Prefecture), which is to be the third center within Japan, was started. In particular, within Japan, the orders in the general industrial market increased by approximately 30% from FY2013 to FY2014, demonstrating that the activities of the Robot Centers are steadily leading to actual results.

In terms of production, the robot production capability of the China (Changzhou) plant was expanded to answer the strong demands in the Chinese market, and the construction of a new plant in Japan was started to fortify the production capability.

Also, the Biomedical Business Division was set up anew in FY2014 to fortify marketing, sales, and development to promote transformation into a core business.

## Outlook

For FY2015, strong demand in the automobile industry and expansion of demand in the domestic and international general industry are expected. We shall engage in further deployment of Robot Centers, system fortification in newly emerging markets where future growth is anticipated, and expansion of production capabilities in Japan and China.

In regard to Robot Centers, in addition to the opening of the Chubu Robot Center (Miyoshi City, Aichi Prefecture), which is to be the 32nd center in the world, opening of a center in Korea (Daegu) and expansions of centers in China (with 7 existing centers) and Thailand are being planned to continue with the fortification of customer support domestically and internationally.

Also, production in a new plant in Japan (Nakama City, Fukuoka Prefecture) shall begin in August 2015, and the production capability of the China (Changzhou) plant shall be fortified to reinforce the product supplying system globally. A production system that can accommodate future expansion of the demand for robots shall thereby be secured.

Although after-sales services have so far been provided for a period of 10 years after purchase of a robot, we shall start working on "Lifetime Service" of providing services over a longer term after purchase so that our customers can use our robots with even more confidence.

We shall develop new robots and robotic systems as products for the biomedical field and release these to the market to spread the use of robots further and promote transformation into a core business.

#### **Business Topics**

#### **Global Deployment of Robot Centers**

The Robot Centers shall be deployed globally, mainly for the general industrial market, as sites where customers and system integrators (Sler's) can examine and verify ways of utilizing robots.



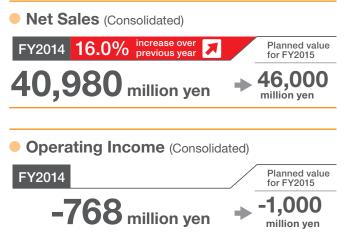
# **System Engineering**

The main market targets of this segment are large-scale plant facilities and large-scale crane equipment, with which stable operation is essential.

We participate in projects from the planning stage to provide support from technical proposals to aftersales services.

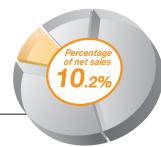
In the steel industry, our products are adopted in every blast furnace operating in Japan, and we provide systems of high reliability.





While making efforts to improve profitability through substantiation of software aspects utilizing IT, etc., in existing businesses (steel plants and water treatment related businesses), we shall expand our business to marine vessels, large-scale wind power generation, and other environmental/energy fields.

General Manager System Engineering Div. **Hiroyuki Ougi** 



### Review of FY2014 Operations

In FY2014, we were affected by changes in the business environment such as the slump in steel plant capital investment and the deceleration of the Chinese economy, etc.

In the Steel Plants business, we were able to meet customer needs through improvement of production efficiency, delivery of systems of high stability and extensibility and suspension period minimization in Japan and through engineering collaboration with local partners and customers, etc., overseas.

In the Social Systems business, we delivered highly functional HMI's, adopting remote monitoring devices and EI (electrical instrumentation) systems capable of accommodating sudden changes in weather, to water supply/sewerage facilities to contribute to system advancements.

In the Electric Power business, we delivered 22 kV distribution towers for system interconnection to support the rapid increase in wind, mega solar, and other power generating equipment to contribute to stable operation of commercial systems.

As for medium voltage drive equipment, cumulative sales of 2,000 units have been attained since the start of sales in 1995 and global developments are being accelerated.

We are also participating in the "Kitakyushu Smart Community Creation Project," which is a part of the "Master Plan for Next-Generation Energy and Social System Demonstration" of the Ministry of Economy, Trade and Industry, and have carried out a verification test of an energy management system (FEMS) at a plant of our group.

In the Large-Scale Drives business, the high voltage AC drive FSDrive-MV1000 was certified for the vessel-class standard of NK (Nippon Kaiji Kyokai) and we have begun to expand sales of drive systems for vessels that are considerate of the environment and realize energy-savings. We have furnished the system of collaboration with The Switch Engineering Oy (hereinafter referred to as "The Switch"), which was acquired as a subsidiary last July, to engage in developing a global business centered on electric equipment for large-scale wind power generation.

## Outlook

For FY2015, gradual recovery is expected in the markets for both steel and water treatment, which are the main fields for this segment, and in these circumstances, we shall realize high profitability in these business and also promote the expansion of the Large-Scale Drives business in large-scale wind power generation and hydropower/tidal power generation applications through fortified collaboration with The Switch, as well as in marine vessel, CHP (combined heat and power utilization), and general industrial applications, etc., in the environmental/energy fields.

In the Steel Plants business, we shall grasp the capital investment trends of various companies and aim at expanding the share and increasing orders through proactive system propositions into new areas with our high voltage drive technologies and new products as arms. In the Social Systems business, we shall accelerate the expansion of the field of business into mega solar power generation, solar/wind/hydropower and other hybrid power generation systems, energy management systems using storage batteries, etc.

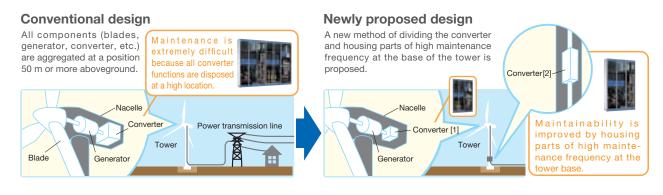
In the social infrastructure field, capital investments, mainly for environmental improvement accommodation, renewal, and reconstruction, are expected to remain high in the future and investments for advanced water treatment, flood damage prevention, resource recovery, energy problems, etc., are in an increasing trend. We shall therefore develop our business not only in public sector fields but in civilian and overseas markets.

To realize expansion of the field of business and securing of profits in this segment, we shall expand the field of application of our products and technologies toward cultivating new applications and expanding our share. We shall also strengthen our sales, development, and production capabilities by promoting system development to capture the needs ahead of the times and global deployment of the respective businesses.

#### **Business Topics**

#### The New Business of Large-Scale Wind Power Generation

Introduced here is a part of propositions that have become more attractive from a user's viewpoint through collaboration of the wind turbine electrical component manufacturer, The Switch (Finland), which became a wholly-owned subsidiary in July 2014, and Yaskawa Electric.



#### **Business by Region**

The ways in which the 'realization of glocal management', set forth in the mid-term business plan "Realize 100" (FY2013 to FY2015), is manifested as measures and results in respecive rezions shall be introduced according to each rezion.

Ine construction of a system, which, in addition to management with a global mindset, can provide the best, locally-oriented accommodations anywhere in the world.

# The Americas

Consolidated Net Sales

### Review of FY2014

Despite reduction of capital investment as a result of reduced crude oil prices and slight deceleration due to poor weather in the East Coast in the fourth quarter, the U.S. economy in FY2014 exhibited strong growth overall.

Yaskawa America was able to post record-setting results in all of orders, sales, and profits due to steady market growth, winning of largescale project orders through sustained sales efforts, increased added value through cost reduction, etc.

Also during this period, we were able to acquire Solectria Renewables, LLC, a manufacturer of PV inverters, as a subsidiary to gain access to the U.S. solar power generation market, with which mid- to long-term growth is expected.

# Outlook

It is expected that steady domestic consumption will drive the U.S. economy to grow gradually in FY2015 as well. However, slowdown of growth in some fields due to reduced crude oil prices and downside risks due to economic downturns in Brazil and other newly emerging markets are becoming apparent. Also in regard to the financial aspect, the raising of the interest rate by the FRB is forecasted and there is concern that this may become a regulatory pressure for the economy.

**64**%

In these circumstances, we shall focus our efforts on expanding the profits of existing businesses, improving efficiency through review of our production system, fortifying the management base and discovering synergistic effects in the solar power generation business into which we have entered, and fortifying our business base in the Mexican market in which investments are becoming active.

### Topics

#### Social Contribution Activities in the Americas

# Donation Activities for Treatment of Intractable Illnesses

In a fund-raising activity, employees and friends travel 100 miles (approximately 160 km) or more on bicycles to raise treatment fees and research funds for the treatment of the intractable illness, multiple sclerosis. A similar fund-raising activity of marching in an event is also being carried out to raise research funds for pancreatic cancer treatment. We at Yaskawa America are providing donations every year to these contribution activities.

#### Support for Neighboring Universities

We donate drive products, etc., for use as educational materials to several nearby universities. For example, for Wisconsin University, we provide product and monetary donations and have our employees actually perform lectures, etc., to serve a role in training engineers.



Fund-raising activity for multiple sclerosis (employees and their families and friends)



Pancreatic cancer eradication activity (both persons are employees)

# Europe

Consolidated Net Sales

# Review of FY2014

The European economy in FY2014 was adversely affected by the Ukraine problem and EU's economic sanctions against Russia as well as the uncertainty and speculation against the eurozone triggered by the Greek economy.

On the other hand, the German economy, being favorable due to active exports to China, the U.S., and European countries, drove growth in the Europe, Middle East, and Africa (EMEA) region. For Yaskawa Europe, the demand for robots from Tier 1 companies of the automobile industry grew favorably.

At Yaskawa Europe, we focused our efforts on building up a direct sales route to the German market, targeting machinery manufacturers, nonautomobile OEMs, and large-scale end users. To cover the expansive EMEA region, we strengthened our sales partner strategy. We also focused our efforts on the Drives & Motion business and mixed sales of VIPA products.

### Outlook

In FY2015, the uncertainty in the eurozone due to the Ukraine problem and changes in the circumstances of Greece will still be of major concern. Political unrest in the Middle East due to IS is also having an effect.

64%

On the other hand, the economies of Germany and other parts of Europe are at high levels and the demand from Tier 1 companies of the automobile industry remains favorable. Reaching of an agreement in negotiations between the UN and Iran is also expected to have an extremely favorable effect on the European economy.

As Yaskawa Europe, we shall make use of the comprehensive strength of Robotics, Drives & Motion, and VIPA to fortify direct sales business to machinery manufacturers and OEMs. We shall expand our sales with the DX200 Series of robots, the  $\Sigma$ -7 servo drives, and products developed jointly with VIPA. We shall also bring to unison the subsidiaries that are spread across the EMEA region to cover the growing markets without fail.

#### Topics

#### Social Contribution Activities in Europe

#### Holding a Girls' Day Event

We support "Girls' Day," which is promoted by the German government and corporations. This event is aimed at having female students be interested in technical careers from a young age, and at 3 sites of Yaskawa Europe, we invited 60 or more female students and explained the work of engineers in the Robotics and Motion Control businesses.



Girls' Day Event

#### Flooding Disaster Relief Activities

The employees of Yaskawa Europe engaged in relief activities for victims of the flooding disaster that brought great damage to 1.2 million people in Bosnia and Herzegovina. We donated clothes, sanitary goods, and other daily necessities and also made monetary donations. We also prepared trucks for delivering donations to the flood-affected regions.



Circumstances of damage due to flooding

# China

21% Consolidated Net Sales

### Review of FY2014

With the Chinese economy in 2014, the pains of structural adjustment and exhaustion of stimulus packages combined to lower the GDP growth rate to +7.4% or 0.3 points below that of the previous year. Even in these circumstances, vigorous capital investment demand was seen in smartphone-related and automobile-related markets, etc.

At Yaskawa Electric (China), we were able to greatly increase sales

in the Servo business and Robotics business aimed at the favorable smartphone- and automobile-related markets and the sales in China expanded by 20% or more over the previous fiscal year. As a result, the ratio of sales in China with respect to the global figure for the Yaskawa Electric group reached approximately 20%.



Shanghai Robot Center

## Outlook

Although slowdown of economic growth is forecasted for China in FY2015, in the fields of energy-savings, automation, and robotics, which are stressed in the mid- to long-term targets of "Made in China 2025" announced in May by the Chinese government, we shall increase the share of our products, which have been evaluated highly in the market, and shall aim at further growth in China.

64%

Although there is uncertainty in the future trends of the Chinese economy, the consumptions of durable consumer goods, such as smartphones, automobiles, etc., are still at high levels and demand related to manufacturing equipment, which is our strongpoint, is expected to remain vigorous.

We shall reinforce the production capabilities of the servo plant in Shenyang and the robot plant in Changzhou to meet the expanding demands in the Chinese market without fail.



Exhibits at the China International Robot Show in July 2015

### Topics

#### Initiatives in China

#### **Collaboration with Chinese Educational Institutes**

Yaskawa Electric and Shanghai Jiao Tong University opened a joint laboratory on the school campus in 2008. We work together to research



service robots and support the development of engineers in mechatronics. In May 2015, we held the Yaskawa Cup Engineering Contest in order to choose a team from the University to participate in the International Design Contest (IDC) held in Singapore, in July 2015.

#### Robotics Training Center at Changzhou Institute of Mechatronic Technology

When the Robotics Engineering Unit was set up in the Changzhou Institute of Mechatronic Technology in 2013, 7 robots made by Yaskawa Electric were



installed to support the fostering of robotics engineers in China. In November 2014, representatives of vocational and technical institutes of various parts of China were invited to hold a conference on industrial robot educational activities.

#### Sales Promotion Activities in China

We made a tour of various places in China with a mobile showroom carrying our product lineup.





The Shanghai Robot Center, which displays application examples with 20 or more robots, was opened in December 2014. Robot Centers were also opened in Guangzhou and Chengdu.



# Asian Countries Except China

12% Consolidated Net Sales

# Review of FY2014

Our company's business in the ASEAN/Oceania region, which is anticipated to become a large market in the future, has been expanding steadily in the past several years. However in 2014, there was a lull in the economic environment due to the delay of recovery from the political turmoil in Thailand, the sluggish growth of infrastructure investment in Indonesia, etc.

In regard to each business, although the Robotics business secured a share of more than 40% through business developments in Thailand and Indonesia with active automobile industry sectors, we were affected by the sluggish growth of the automobile industry in Thailand last fiscal year. Our Systems business was also weak due to port-related investments, etc., entering a drop-off period. On the other hand, with the Motion Control business, we fortified our sales network to capture favorable markets of cellphone-related devices, etc., and this resulted in the securing of nearly twice the amount of orders in comparison to the previous fiscal year and steady growth.

### Outlook

In FY2015, it is expected that the economies of Thailand and Indonesia, which are major markets for the Robotics and Motion Control business, will recover and that high growth rates will be maintained in regions, such as the Philippines and Vietnam. Large-scale investments are also projected for markets related to the Systems business. From the previous fiscal year to the present fiscal year, we have been making proactive investments and efforts for increasing orders, such as the renovation of the Robot Centers in Thailand and Indonesia, the establishment of

64%

a sales office in Vietnam, the expansion of sales partners in the respective countries, etc. This fiscal year, we are planning to engage in new applications through the full use of the renovated Robot Centers and expand our business by accurately capturing favorable markets riding on economic growth recovery through our sales capability and solution providing capability that we have strengthened up to now.



Thailand Robot Center

#### Topics

#### Social Contribution Activities by Yaskawa India

#### Visit to Special-Needs School

We at Yaskawa India made a visit to a special-needs school attended by children with various disabilities. Nearly all employees of the Bangalore district participated and enjoyed the interchange with the children. Also by donating meals, stationery, canes for visually impaired children, etc., we were able to see the extremely happy faces of the children.



#### Support of Charity Event

Yaskawa India supports a charity event (Walk-A-Thon 2014) of walking through the city of Bangalore with people with disabilities and is the sole Japanese corporation to be a main sponsor of this event. On the day of the event, all of the staff wore the same uniform and marched through 5 km of the city with the event slogan of "realizing a better society."



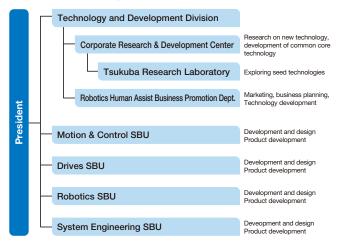
### **Technology Development**

#### Policy and Items of Research and Development

We are working to strengthen our ability to execute global businesses in such existing business fields as motion control and robotics and to turn success into further product development. In addition, we are pursuing research and development that will contribute to society well into the future, including the development of technologies and products in the "Environmental & Energy Business Domain," which is related to renewable energy systems, electrical drive systems for automobiles, etc., and other aspects of energy-savings and energy creation, and in the "Robotics Human Assist Business Domain," which relates to robots coexisting with humans.

#### Research and Development Structure

Yaskawa's research and development structure is made up of the Technology and Development Division, which performs research and development of promising technologies for the future, and the development and design departments in charge of product development in the respective SBUs (Strategic Business Units).



#### Progress Status of Glocal Development in "Realize 100"

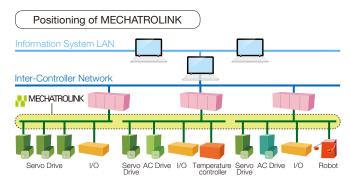
We are in the process of constructing a quadrupole development system in Japan, the Americas, Europe, and China as a development system capable of releasing new products in a timely manner in the respective markets and regions. The number of overseas development staff required is planned to increase fourfold in the 4 years from FY2012 with fortification being focused especially in China and Europe.

In the U.S. and China, development of motion control products and robots is being carried out in collaboration with the development departments in Japan to pursue technology development linked to next-generation products. Also in Germany, we have established a development base for ASICs (application specific integrated circuits) in the PLC manufacturer, VIPA, which we acquired in FY2012, and we are strengthening our development capability through collaborative development in Japan and Germany. In India, we are in the process of constructing a software development base.

#### R&D Results & Topics for FY2014

To contribute to advancing the functions and improving the precision of industrial devices in the motion control market, we developed and commercialized the MECHATROLINK motion field network, and to further spread and promote this technology, we have been disclosing the technology to companies that share our objectives since 2003. MECHA-TROLINK has now been adopted as a part of the international standards "IEC61158" and "IEC61784" that set forth standards for industrial field networks and has been additionally registered in August 2014.

By the present adoption by the IEC standards, it is anticipated that MECHATROLINK will spread further internationally and contribute to improved productivity in production sites around the world.



As part of our "Environmental & Energy Business Domain" operations, we commercialized the residential-use, indoor-installed PV inverter Enewell-SOL V1 Series (200 V, single phase, 4.5 kW), which became the first in the world to incorporate a GaN (gallium nitride) power semiconductor module. The Enewell-SOL V1 Series has the smallest size in the world in its class and contributes to creating a more comfortable living environment by its quietness and high power generation efficiency.

As part of our "Robotics Human Assist Business Domain" operations, we have been participating, since FY2013, in the "Project to Promote the Development and Introduction of Robotic Devices for Nursing Care" promoted by the Ministry of Economy, Trade and Industry, and have developed equipment that assists transfer between a nursing bed and a wheel chair. This transfer assist device had been adopted for the "Robotic Care Promotion Project" being carried out by the Ministry of Economy, Trade and Industry and the Association for Technical Aids, Inc. and has undergone demonstration and evaluation at a nursing care facility in Kitakyushu City, Japan.





Transfer assist device

#### Basic Concept of Intellectual Property

Yaskawa Electric respects third-party intellectual property while using our own intellectual property to actively protect our products, giving them an edge on the market.

Dual-arm robot for biomedical uses MOTOMAN-BMDA3 (Several patents, specialized to the biomedical business, are pending.)



#### Positioning of Intellectual Property Activities in the Management

Our intellectual property activities are integrated with our business strategies and R&D strategies to secure global intellectual property rights and promote the utilization of the intellectual property rights as defensive means in business expansion. As a result of fortification of global patent application, we achieved the top global application rate (the proportion of Japanese patent applications filed in 2012 for which a foreign application was filed in at least one country; applicable to companies and organizations filing not less than 200 applications in Japan) of 83.6% according to the Japan Patent Office Annual Report 2014.

#### TOPICS

Yaskawa-Kun's Outstanding Performance at Children's Tour Day Held at the Japan Patent Office



The dual-arm robot "Yaskawa-Kun" was put on exhibit on "Children's Tour Day" held in August 2014 at the Japan Patent Office in Kasumigaseki, Tokyo. For "Children's Tour Day" of FY2014, 24 government departments carried out elaborate programs to provide an opportunity for children of elementary to junior high school age and their parents to deepen mutual interaction and get to know of society. The Japan Patent Office held events under the theme of: "Ideas are Japan's assets! Let's get to know of familiar inventions, designs, and brands!" A program was set up where Yaskawa-Kun prepared and presented ice cream to children who were able to correctly answer all questions in an "Invention-Design-Brand Quiz Rally," concerning patents, designs and trademarks. The event was greatly successful with the number of partici-

pants being increased by 85% over that of the previous year and "Yaskawa-Kun" won the highest popularity rank in a visitor questionnaire survey. Of course, "Yaskawa-Kun" is protected by our company's intellectual property rights.



Panels explaining patents concerning "Yaskawa-Kun"

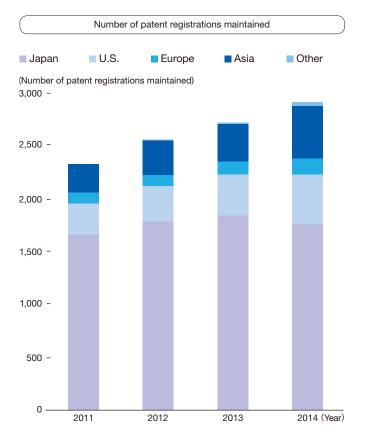
#### Intellectual Property Activities

The intellectual property division, which provides company-wide supervision, and staff positioned within the R&D divisions and business divisions (including those of the local subsidiary in China) cooperate to promote global intellectual property activities that support R&D and product development.

We shall also promote and fortify technology leakage prevention activities and focus our efforts on international standardization activities without insistence on monopolization of intellectual property rights.

#### Status of Intellectual Property Rights (Maintenance of Rights)

We shall promote activities to protect our products by intellectual property rights in various countries of the world. In particular, we shall fortify patent application and rights acquisition activities to secure the advantages of our products in China and newly emerging countries, which are increasing in importance as production bases or markets.



(34)

# **Corporate Governance**

We recognize the importance of corporate ethics based on compliance with laws and regulations, etc., and consider the increasing of shareholder value through expediting of managerial decision making in accordance with changing social and economic environments and improvement of soundness of management to be an important theme.

To realize the above, we shall build up good relationships with all stakeholders including our shareholders, customers, suppliers, local community, employees, etc., and shall substantiate corporate governance while further strengthening the current organization of the General Meeting of Shareholders, Board of Directors, Audit and Supervisory Committee, Accounting Auditor, etc.

Also, for our shareholders and investors we shall make efforts to provide prompt and accurate information disclosure and improve managerial transparency through broad disclosure of information.

#### Transition to Company with Audit and Supervisory Committee

To further strengthen corporate governance and the supervisory function of the Board of Directors with respect to the Management and improve soundness and efficiency of management, we have transitioned to a company with audit and supervisory committee having an "Audit and Supervisory Committee" as of June 18, 2015.

The Audit and Supervisory Committee is comprised of five directors (three of whom are external directors), and further managerial transparency shall be secured through audit, by the Audit and Supervisory Committee, of execution of business operations by the respective directors.

Also, by making the Audit and Supervisory Committee, which has an audit function, a constituent of the Board of Directors, the supervisory function of the Board of Directors can be improved, and thus with the opportunity of transition to the company with audit and supervisory committee, we shall substantiate our corporate governance further.

#### Management System

#### **Board of Directors**

Yaskawa's Board of Directors is comprised of a total of eleven members, including five directors (three of whom are external directors) who are members of the Audit and Supervisory Committee, and determines matters as prescribed by laws and regulations and important management issues and supervises the execution of business operations by the respective directors.

The three external directors (Yoshiki Akita, Kazumasa Tatsumi, and Yasuto Tanaka) provide indications and opinions from an objective perspective independent of the top management in the Board of Directors. None of the three is a person executing business at a major supplier or a major shareholder of Yaskawa and all three have been judged to have no risk of having a conflict of interest with ordinary shareholders and have thus been notified to the Tokyo Stock Exchange, Inc. as being independent executives as set forth by the Stock Exchange.

#### Status of the External Directors

Name	Concurrent Positions	Reason for Appointment				
Yoshiki Akita	Chairman and Representative Director, Layers Consulting Co., Ltd. External Director, Bell-Park Co., Ltd.	Possessing a wealth of knowledge and experi- ence as a certified public accountant and as representative director of a consulting firm. We therefore consider that he has a great deal to contribute to the management of Yaskawa Electric as an external director.				
Kazumasa Tatsumi	Attorney and President, Kazumasa Tatsumi Law Office Outside Director, IZUTSUYA CO.,LTD.	Mr. Tatsumi possesses a wealth of experience, knowledge, etc., as an attorney and has thus been judged to have a great deal to contribute to the management of Yaskawa Electric as an external director.				
Yasuto Tanaka	Director, Corporate Exective Vice President Krosaki Harima Corporation	Mr. Tanaka has experience in successively holding directorial posts in an administrative department and a sales department of a busi- ness corporation and has thus been judged to have a great deal to contribute to the manage- ment of Yaskawa Electric as an external direc- tor.				

(36)

#### **Management Committee**

The Yaskawa Electric's Management Committee is comprised of executive directors, executive officers, etc., who deliberate on important decision-making matters regarding the execution of business operations. The Management Committee is held once a month in principle and extraordinarily as needed in the formation of a flexible and agile business execution system.

#### Internal Control System

We have charged the Board of Directors, Management Committee and other bodies with carrying out appropriate and effective administration of business operations through internal control systems.

In addition, the Board of Directors issues resolutions regarding basic policy for improving and maintaining the articles of incorporation, information disclosure policy, risk management systems, division of duties, operational authority, and group company management, and revises them as needed.



## Compliance Systems

Based on the "Yaskawa Electric Group Corporate Activity Standards" as rules for corporate actions, we shall engage in constructing and improving a system for promoting compliance and implementing compliance measures.

## Implementation of measures

#### **Compliance Committee**

The top management itself promotes compliance through regular holding of the Compliance Committee, chaired by the director in charge of administration, to determine compliance action plans and monitor the content of actions and posting of "Compliance Messages," written by the respective committee members, on the company intranet site.

#### **Consulting/Reporting Contact Office**

For the purpose of prevention and prompt correction of compliance violation acts, a "Compliance Hotline" system that enables direct consultation with and reporting to an external contact office (attorney office) independent of the Management has been set up in addition to an internal department in charge of compliance to substantiate a system for monitoring compliance problems. Information that is provided is managed strictly as a secret and the system is constructed in consideration of concealment of the person requesting consultation or reporting information and preventing discrimination due to the person requesting consultation or reporting information.

#### **Compliance Education**

Education on compliance is given in training sessions provided according to hierarchy and according to job rank. Also, in FY2014, training on the theme of "harassment acts" was implemented on a company-wide basis and a pamphlet titled "Compliance Case File," in which compliance problems that are likely to be encountered in daily business are summarized in an easily understandable manner using illustrations, etc., was distributed to improve the compliance awareness of employees.

#### Implementation of Employee Questionnaire Survey

A "Compliance Questionnaire Survey" is implemented on a regular basis to measure the compliance awareness of employees and ascertain internal needs for compliance measures. Tabulation results are announced internally and utilized for further improvement and substantiation of compliance measures.



Corporate Governance

## Risk Management Systems

Basic policies for day-to-day preparedness and cases of crisis at Yaskawa and its subsidiaries are set forth explicitly based on the Basic Regulations for Risk Management. Also, a Risk Management Committee is established to construct a risk management system, perform company-wide risk management, as well as to perform system construction and provide advice and instruction for risk management for subsidiaries.

## Director Compensation

Yaskawa transitioned to a company with audit and supervisory committee at the 99th Regular General Meeting of Shareholders held on June 18, 2015 and the compensation was thus established anew at this Meeting of Shareholders.

The annual compensation limit for directors (excluding director members of the Audit and Supervisory Committee) is the total (excluding employee wages) of the fixed annual amount up to 430 million yen and the profit-linked amount of not more than 1.0% of the consolidated net income for the fiscal year prior to that of the General Meeting of Shareholders at which the director was appointed or reappointed.

The annual compensation limit for director members of the Audit and Supervisory Committee is not more than 100 million yen.

The amounts of compensation, etc., of the directors and auditors for FY2014 are as follows.

#### Compensation, etc. paid to directors and auditors

Classification	Number of Officers	Amount of Compensation, etc.
Directors	7	319 million yen
Auditors	5	55 million yen
Total (total for external officers)	12 (3)	374 million yen (19 million yen)

## In-House System for Information Disclosure

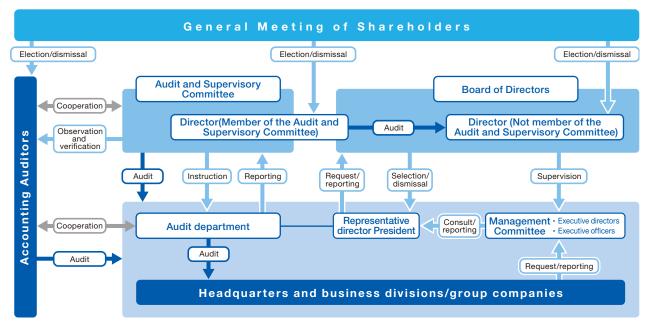
We have established the Yaskawa Group Corporate Activity Standards, which state our basic policies. These policies are

1) We shall engage in communication not only with shareholders, but also with members of society at large, including active and fair disclosure of corporate information, making every effort to prevent insider trading, and 2) We shall operate businesses based on fair, transparent, and free competition and sound trade, which strictly observe all laws and never violate social norms.

Based on these policies, we strive to conduct timely and appropriate information disclosure with regard to the company operations (such as facts about decisions made and actual events, information about financial results), including those of subsidiaries to investors and financial instrument exchanges.

## Corporate Governance System

## Diagram after installation of Audit and Supervisory Committee



(38)

## **Directors and Corporate Vice Presidents**

As of June 18, 2015

### Directors (excluding director members of the Audit and Supervisory Committee)



Representative Director Senior Executive Vice President Noboru Usami



Director Corporate Senior Vice President Shuji Murakami

Representative Director Chairman of the Board President Junji Tsuda



Director Corporate Senior Vice President Yoshikatsu Minami





Director Corporate Vice President **Yuji Nakayama** 

## Director Members of the Audit and Supervisory Committee



Director and Member of the Audit and Supervisory Committee Masahiko Oda

## Corporate Vice Presidents

Hiroyuki Ougi Corporate Senior Vice President

Takeshi Ikuyama Corporate Vice President



Director and Member of the Audit and Supervisory Committee Konosuke Noda

Koichi Takamiya

Masanori Imafuku

Corporate Vice

Corporate Vice

President

President



Outside Director and Member of the Audit and Supervisory Committee Yoshiki Akita

Michihiko Zenke

Akira Kumagae

Corporate Vice President

Corporate Vice

President



Outside Director and Member of the Audit and Supervisory Committee Kazumasa Tatsumi

Masahiro Ogawa

Corporate Vice

Manfred Stern

Corporate Vice

President

President

# Outside Director and

Member of the Audit and Supervisory Committee Yasuto Tanaka

### Kazuaki Yoshida Corporate Vice President

Michael Stephen Knapek Corporate Vice President (39)

## Human Resource Utilization

In order to bring out the full potential of our global human resources and diverse talents, we engage in various diversity promoting activities. Also, through realizing work-life balance, etc., we are furnishing pleasant working environments while valuing the individuality of the employees.

## **Promotion of Diversity**

As part of its long-term business plan "Vision 2025" announced in March 2015, Yaskawa is performing various activities under the theme of promoting diversity (human resources diversity) to create a corporate culture that can bring out the strengths of the diverse human resources.

## Background of Diversity Promotion at Yaskawa

In its mid-term business plan, "Realize 100," the Yaskawa Group aimed at a glocal management that can speedily answer market needs all over the world and a development capability and a search for new markets based on collaboration with partners such as universities of various regions (open innovation). For such globalization and development of new markets, new viewpoints and ideas that do not lie along an extension of the past are essential and the source of such viewpoints and ideas is none other than diverse human resources having different values and experiences. Although the diversity (human resources diversity) in the Yaskawa Group has developed from overseas local subsidiaries, we have declared to engage in the promotion of diversity at the global headquarters of Yaskawa Electric and the respective group companies in Japan to further strengthen the business constitution and acquire market competitiveness.

## Basic Policy for Diversity Promotion

We established the Diversity Management Div. headed by the President, in September 2014 to deploy diversity promotion measures with the following three items as missions.

## Missions of the Diversity Management Div.

- 1. To construct a corporate constitution strong against environmental changes by adopting and fostering human resources with diverse values and ways of thinking.
- 2. To incorporate diverse opinions and viewpoints to create a corporate culture where innovation arises as a matter of course.
- 3. To realize a satisfying working environment by eliminating all factors of discrimination and respecting the individuality of employees.

Yaskawa regards the promotion of work-life balance through reformation of the way of working to be pivotal to diversity promotion and at the same time positions these as the wheels of a vehicle for corporate advancement. By examining flexible and diverse ways of working and personnel systems and tying up with the "K30 promotion activities" aimed at increasing the business efficiency by 30% through improvement of the labor productivity of each and every employee, we shall work toward reforming the corporate culture with an aim at becoming a corporation where one can advance his/her career while realizing compatibility of work with individual lifestyles and life events, such as child rearing and nursing care.

(40)

## Status of Engagement

With human resources diversity, there are various attributes of diversity, such as race, nationality, age, gender, personal history, etc. We at Yaskawa have taken up the promotion of activity of women, who make up the largest minority, as the top priority theme and are engaging in various measures under the strong commitment of the top management.

#### Strong Commitment of the Top Management

The top management itself, including the president, issues diversity messages for employees and holds employee interactive gatherings focused on women, mid-career recruits, etc. The top management thus directly provides opportunities for taking up the diverse opinions of employees.

#### **Training and Mentoring Programs**

In November 2014, we invited Naoki Atsumi, who is the top authority on diversity and work-life balance, to hold a seminar for all directors and personnel-related management positions. We also invited a female manager, active in the financial circle, as a lecturer to hold a lecture for all female employees and held group training programs for female employees (open invitation or selected) and all management positions. Further in response to an opinion of a female employee that it is difficult to plan a future career, a mentoring program is provided for management positions to mid-level positions.

#### Supporter Activities and Information Transmission

Employees with various individual characteristics and problem awareness wishing to change the company were invited to be promotion supporters. Currently 40 supporters, including overseas resident employees, are engaged in voluntary activities, such as workshops, child-rearing employee networking, etc., to help develop the corporate culture from the bottom up.

Also, a website for the Diversity Management Div. was set up on the corporate intranet to transmit, at an average pace of twice a month, information, not only on the promotion of female activities, but also information introducing the diversity of human resources and ways of working in countries where overseas Yaskawa group companies are located.

## Status and Set Targets of Human Resources Diversity at Yaskawa

A characteristic of Yaskawa is that female employees surpass male employees in average age and average years of employment and it is our pride that we have built up a working environment where women can continue to work while raising children. However, in the leader class, there are presently only 4 women of the manager class and 13 women of the assistant manager class and the number is still low. In these circumstances, we are making efforts toward the fostering and assignment of a young mid-level career class, acquiring female engineers, and hiring diverse human resources, including non-Japanese and disabled persons, with an aim at making women comprise half of new graduate recruits for clerical positions.



Lecture for all female employees

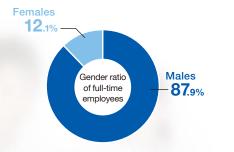


romotion supporter workshop



Full-time employee gender data of Yaskawa Electric (as of March 21, 2015)

	The number of full-time employee	Avg. Age	Avg. Number of Years in Employment
Females	326	42.5	20.0
Males	2,374	39.4	15.7
Total	2,700	39.9	16.4



## Developing Human Resources at Yaskawa Electric (Fostering Human Resources That Continue to Take Up the Challenge)

The basic policy of Yaskawa is to foster human resources with the passion to contribute to global projects by providing a place where employees can take up the challenge and through communication to encourage growing and fostering.

## Interactive Gatherings with the Management

The President of Yaskawa Electric himself took charge of human resources development starting in FY2007, intending to improve programs throughout the company. Aiming to foster a corporate climate to encourage growing and fostering, he has worked to establish an expanding practice of communication that emphasizes dialogue with employees. Specifically, he adopted the policy of fostering employees who care about and are proud of Yaskawa Electric.

He also sponsored and participated in the interactive gatherings, the "Y-Wai Club" which has met 179 times to date and attracted 1,723 attendees (FY2007-FY2014). He also started interactive gatherings with the head office and division general managers, and these have been held 733 times to date and attracted 5,046 attendees (FY2007-FY2014).

Through bidirectional interaction with the participants, we aim at developing a corporate culture of taking up the challenge and fostering human resources that continue to take up the challenge.

## Fostering of Global Human Resources

We are putting our efforts into global human resource education as the globalization of the Yaskawa Group accelerates.

## "Global Tolerance Reinforcement Program (3 days of training within Japan)"

Mind-setting concerning knowledge, skills, and mental attitude necessary for residing overseas is provided for human resources for whom overseas posting is expected in the near future. The participants prepare actions plans up to the posting and work hard for self-improvement after the training as well.



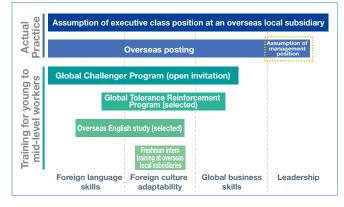
## "Global Challenger Program (overseas training for 1 year)"

An opportunity is provided by which mid-level and young employees with passion can raise their hand to take up the challenge of overseas work. The program aimed not only at growth of the participants but also at improving the globalization awareness of other workers. Workers of overseas local subsidiaries can also participate in this program, leading to activation of exchange among human resources, improvement of group power, and global adaptation of workplaces taking on the workers.



Y-Wai Club gathering

### Growth Steps of Global Human Resource Candidates





## Conceptual Image of Exchange among Human Resources in the Global Challenger Program

(42)

## **Developing a Pleasant Working Environment**

Under our fundamental policy of "creating a safe, friendly, and pleasant workplace," we strive to build a workplace environment where employees can maintain health and vigor whether at work or at home and live a full, satisfying social life.

## Yaskawa's Measures Against Harassment

We at Yaskawa consider it most important to create and maintain a workplace environment where all employees are respected as individuals and can work with mutual trust.

Any form of harassment by any employee shall not be ignored or overlooked.

In FY2014, training concerning the definition of harassment and ways of preventing it was carried for all employees and a special page concerning harassment was set up in our intranet to thoroughly notify information on consultation contact offices, etc.

## Initiatives for Improving the Level of Safety and Health

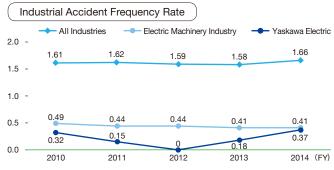
At each workplace, we provide work standards and training to ensure that work is carried out safely, perform risk assessments, and carry out accident



prevention activities in daily operations. Internal audits are also carried out to determine whether the results of these activities meet health and safety policies and targets, and by performing activities that reflect these results, we have been able to achieve an industrial accident frequency rate below the average of the same industrial field.

Especially in this fiscal year, we are making preparations to implement chemical substance risk assessment to further improve the level of safety and health.

Safety patrol



"Frequency rate": Expresses the frequency of occurrence of accidents by the number of casualties due to industrial accidents per 1 million gross hours of actual work. Calculation method: (Number of casualties due to industrial accidents/gross hours of actual work) × 1,000,000



## Employee Heath Support

Employee general and special physical exams are carried out organically and efficiently, from ascertaining the working environment and selecting employees, to performing tests and follow-up care, while giving ample consideration to relevant laws and regulations and various tests characteristics. This not only results in preventing workrelated illness, but also provides health care guidance and education with an emphasis on lifestyle and occupational support.



## Mental Health Care

From the standpoint that mental diseases and disorders are just like physical diseases in being illnesses can happen to anyone, we provide living and occupational support as necessary.

Also, as part of our measures to minimize psychological stress that can impact an employee's health and lifestyle in various ways, we carry out stress surveys using questionnaires and provide feedback, based on the results, to individuals and their workplaces.

### Support for Returning to Work from Sick Leave

When an employee who is forced to take leave due to illness or injury are ready to return to work, consultation is performed not only with the employee him/herself but also with his/her manager and managing department and an industrial doctor to ensure that a supportive physical environment and human support structure is provided to the extent possible.

Fall prevention seminar

43

## **Social Contribution Activities**

To continue our company's evolution as a corporate citizen working together with society, we are pushing forward with revitalizing local communities and providing support to the young people, who will play an active role in the future

## Yaskawa Mirai Club Initiatives

The Yaskawa Mirai (Future) Club was established on Yaskawa Electric's 90th anniversary in 2005 for the purpose of expressing our gratitude to all of our supporters including our customers, shareholders, and local residents, as well as further contributing to society.

Specific activities of the club, which is comprised of our employees who endorse the club's goals and voluntarily become a member, include their setting aside a portion of their salary to support groups involved in fields such as "medicine and welfare," "sound upbringing of youth," and "environmental protection and greening."

In the future we plan to expand the club's activities by gathering ideas from members on new activities and groups to support. While the amount contributed by each person may be modest, the accumulated contribution of many employees contributes greatly to the community. We will continue to recruit new members to help make a difference in the community.



askawa Mirai Club agriculture experience activities



Yaskawa Mirai Club volunteers for flood recovery in Hoshinomura

## Supporting Robot Competition for Students

Since 2005, Yaskawa Electric has co-sponsored the annual Technical College Students' Robot Contest, popularly known as the Kosen Robo-Con, in which engineers-to-be from around Japan compete in contests focusing on robot production ideas and technology as well as robot performance. 2014 marked RoboCon's 27th anniversary.

As a company in the robotics business, we support this educational opportunity in order to encourage many young students to get involved in manufacturing and in hopes of fostering the next generation of talent.





Water station volunteers a itakvushu Marathon 2015'

Technical college students' robot contest

## Activities of the Track & Field Team

Yaskawa Electric supports various sports activities with an aim at providing people with "dreams" and "inspirations." The Yaskawa Electric Track & Field Team has been active for over 40 years mainly in long-distance

running events, such as ekiden relay races and marathons and is spreading its field of activity, from participation in the All-Japan Corporate Team Ekiden Championships (New Year Ekiden) to the World Track and Field Championships and the Olympics.



New year ekiden 2015

(44)

## **Community Exchange**

Yaskawa Electric strives to interact with the community and build a better relationship with people in local communities. To do this, we hold plant and office tours as well as firsthand work experience workshops, offer sponsorship of the local soccer team and active participation in local events.

## Tours of Plants and Offices

Our robot plant is part of the industry tour itinerary that is actively promoted by Kitakyushu city, where our head office is located. Yaskawa Electric offers a wide range of plant and office tours for children and adults. Visitors thus become better acquainted with our robot and other manufacturing sites. In FY2014, we welcomed more than 10,000 visitors.



## Participating in the "Wasshoi Hyakuman Natsumatsuri" (Summer Festival)

A dance team of 160 Yaskawa Group employees participated in the Hyakuman odori (summer dance), which is part of the Wasshoi Hyakuman Natsumatsuri, a summer festival for the residents of Kitakyushu city, where it won an award for excellence. Through active involvement of our employees in local events, we promote interaction with local communities and communication among employees.



Wasshoi Hyakuman Natsumatsuri

## Volunteer Activities at "Kitakyushu Marathon 2015"

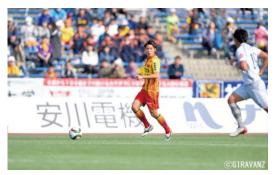
In 2014, a full marathon was held for the first time in Kitakyushu. We supported this event in both 2014 and 2015 as the main sponsor.

Also, more than 150 employees and their families volunteered to contribute to local revitalization.



## Sponsoring Giravanz Kitakyushu

We have supported the Kitakyushu-based professional soccer team, Giravanz Kitakyushu, since 2009. We also contribute to the cultivation of young people by promoting sports in the local region. Our sponsor logo is displayed on the team uniforms in FY2014 and everyone in the Yaskawa Group is rooting for them.





## Displaying Yaskawa-Kun at Various Special Events

Yaskawa-kun, an ice-cream vending robot, debuted in the summer of 2010

and continues to be exhibited at various events. Many adults as well as children, who ordinarily have little opportunity to see an industrial robot, are enjoying it greatly.



(45)

## Head Office Renewed as "Robot Village!"

Transmitting the fun and wonders of manufacturing to contribute to the fostering of the next generation and activation of the local community -

In 2015, Yaskawa Electric marked its 100th anniversary of foundation. As a 100th anniversary commemorative project, we have positioned and renewed our head office in Kitakyushu City as "Robot Village." Through the Robot Village, we shall transmit the fun and wonders of manufacturing and aim at becoming a corporation that is further rooted in the local community and familiar to everybody. We shall also utilize the Robot Village as a place for creating the future of robots together with everybody.

## **Robot Village**

Robot Village is made up of five areas – the "head office building," equipped with the newest environmental technologies, the "YASKAWA Innovation Center" where one can experience the fun and wonders of manufacturing, the "greenbelt," which is open to the local community, the "robot factories," where one can tour the site of cutting-edge manufacturing where robots make robots, and the "cafeteria," which is a welfare facility and place for relaxation and refreshment for employees.

> Head Office Building The "PixCell-Double Muse" statue greets customers at the 1st floor entrance.





Greenbelt (open to the public: 9:00 to 16:30)



YASKAWA Innovation Center (reservation required for tours)





Cafeteria

(46)

## Abou Innova

## About YASKAWA Innovation Center



YASKAWA



Transmitting the fun and wonders of manufacturing and the newest robotic technologies.



UTICS

EXPER

Exciting workshops and seminars are planned for "learning, thinking, and creating" by actually coming in contact with Yaskawa Electric's technologies.



The Mechatronics Wall combines the motion control technology of Yaskawa Electric with projection mapping through synchronous control of 256 servo motors for an out-ofthis-world experience.



At the entrance, the actual MOTOMAN No.1 is displayed and visitors are greeted by synchronous operation performance, etc., by the newest robots.





At the "YASKAWA ECO FACTORY," the environmental technologies incorporated in the Robot Village are introduced by AR software and video images.



being researched and developed are exhibited and demonstrated at the "Innovation Stage."





Industry-academia collaboration laboratory for nurturing the next generation through "learning, thinking, and creating" of robots and robotic technologies.

Participation type theme space for physically experiencing the wonders of Yaskawa Electric's manufacturing and thinking about the coexistence of humans and robots.

Lounge space for knowing the current Yaskawa Electric, communicating cutting-edge technologies and future prospects, and personally experiencing Yaskawa Electric itself.

## Reception of Tours

YASKAWA Innovation Center is an exhibition facility for conveying "robotic technologies" and the "appeal of manufacturing."

Although tours are free of charge, reservations are accepted from groups (of 10 persons or more). Also, the facility is open during the day on weekdays.

The tour course is planned to take approximately 100 minutes, including the tour of the robot factory. Please see our website regarding details on how to apply, etc.

Through these tours we would like to have people of the local community physically experience the inspiration of manufacturing, bring out the interests of children who are to shoulder the future of manufacturing industries, and contribute to the activation of the local community as a part of industrial tourism. Please watch the video introducing the Robot Village on Yaskawa Electric's official website.



[URL] https://www.yaskawa.co.jp/en/centenary/robot

## Eco-Conscious Initiatives at the Robot Village

Five eco-conscious perspectives have been incorporated in the Robot Village to realize halving of CO<sub>2</sub> emissions and 35% reduction of peak power consumption.

The five eco-conscious perspectives and their representative examples are introduced here.

## Create Creating Energy

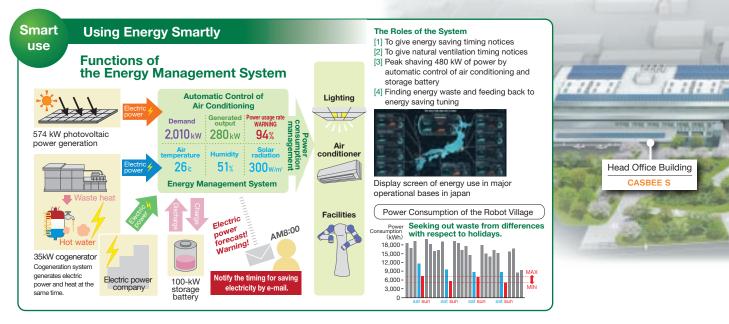


## Creating electric power by photovoltaic power generation Panel capacity: 574 kW, equivalent to 367 households

 Making comfortable, energy-saving workplaces free of waste, excess, and irregularity

Head Office Building: CASBEE\* "S"

Plant No. 2, Welfare Building, and YASKAWA Innovation Center: CASBEE\* "A"



## **Eco-Conscious Technologies of the Head Office Building**

"Comfort" and "energy savings" are realized at the same time through application of cutting-edge technologies that make use of the gifts of nature.



 Yaskawa
 Number of floors / 4 floors above ground

 Electric
 Total floor space / 11,246 m²

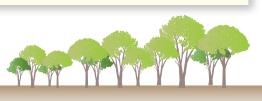
 Solar panels 170 kW
 Completed / April 2015

## Greenbelt

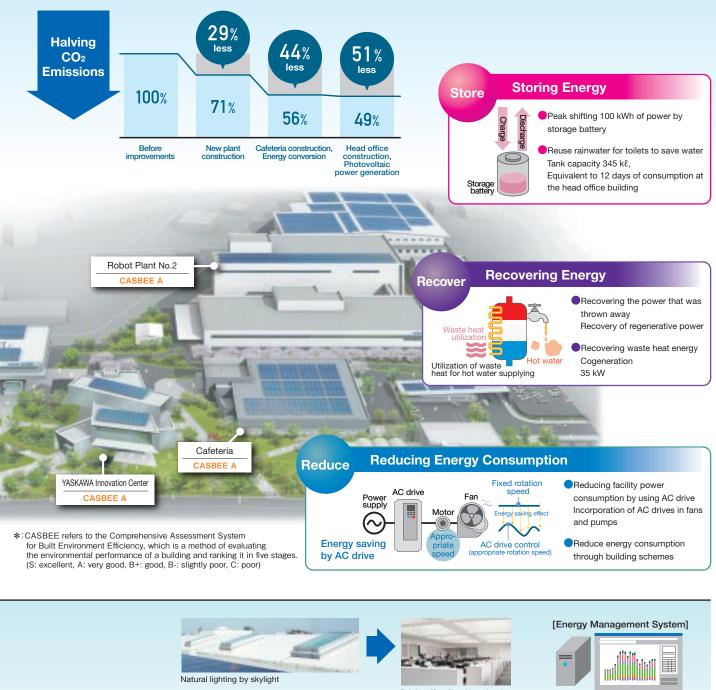
In the new head office (so-called "Robot Village") opened in June 2015, we created the "Greenbelt" in which we planted approximately 100 species of trees, mainly consisting of locally indigenous species, in consideration of biodiversity. We shall continue to foster this forest, which is open to the general public on weekdays, as a place where citizens can familiarize and interact with nature.

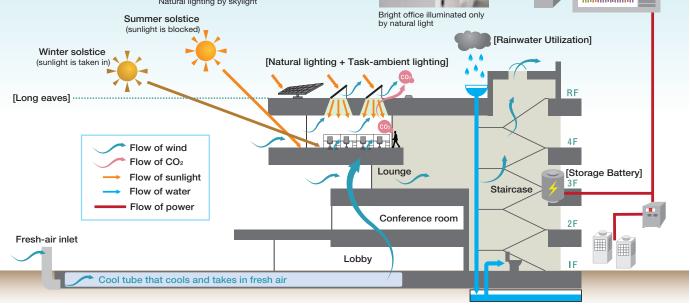
In the future, we will also like to use this forest as a forest of education, such as observation of living organisms that inhabit the forest, etc.





(48)





## **Environmental Management**

We are promoting environmental management in order to pass on the bounty of the earth's blessings to the next generation.

## Yaskawa Electric's Environmental Management

With an aim at developing a sustainable future, the Yaskawa Group is promoting environmental management by taking measures against global warning, by pursuing the recycling and the saving of resources, and by ensuring proper management of chemical substances as our priority objectives. For environmental management, activities, in which all employees participate, are performed with social contribution and improvement of corporate value as the bases of promotion and with green products and green processes in perspective.



## Environmental Policies

## **Basic Philosophy of Environmental Protection**

Our management philosophy is that our company's mission is to contribute to the evolution of society and the welfare of humankind through our business activities.

The Yaskawa Group recognizes that the protection of the environment is one of the most important issues for all humankind. In every aspect of business, we must consider and act in ways to protect the environment, and in doing so, we will be in agreement with our own management philosophy and serving our duty to society.

## **Basic Action Guidelines**

- 1. Seek to realize a sustainable society by positioning the problem of the global environment as one of our most important management issues and engaging in company-wide environmental protection activities.
- 2. Assess the environmental impact of our business activities and product development and strive to reduce the burden on the environment in each of the phases of the product's lifecycle from research and development to design, material procurement, manufacturing, distribution, use, and disposal.
- 3. Observe environmental laws and regulations and furthermore, set our own standards and strive to continuously raise the level of our environmental management.
- 4. Take on the challenge of innovation in environmental and energy technology and strive to develop and supply next-generation products and services that will resolve environmental issues.
- 5. Implement environmental education and awareness-raising activities, increasing the awareness of all employees regarding environmental protection while also taking steps toward harmonious coexistence with local communities by means of environmental protection programs.
- 6. Provide for thoroughgoing commitment by all employees to our environmental policies, and actively make our environmental policies and information accessible to the public at large.

### FY2020 Targets

- **Climate Change Prevention**
- · Reduce CO<sub>2</sub> emissions through products and services
- Improve errorsy (and overall) efficiency
  Reduce specific energy consumption 10% (based on FY2012 results)
  Reduce peak power consumption 20% (based on FY2010 results)
- Adopt renewable energy and cut overall energy consumption rate at least 4%

#### Explore options for recycling and conserving resources

· Reduce use of scarce resources Achieve zero emissions Reduce final waste disposal rate to 0.5% or less

· Reduce paper volume 30% (compared with FY2011)

#### Proper management of chemical substances

- · Practice global management to promote green procurement. Achieve 100% green procurement rate for all new procurements.
- Basic Philosophy of Biodiversity



To realize a sustainable society, the Yaskawa Electric Group recognizes that our business activities are founded on various services provided by biodiversity and shall promote the conservation of biodiversity through business activities and social contribution activities based on our Basic Philosophy of Environmental Protection and our Basic Action Guidelines under the concept that the protection of the global environment is one of the most important themes in common to all human beings.

## Action Guidelines

- 1. We shall strive to prevent global warming, recycle and save resources, and perform appropriate management of chemical substances in our business activities.
- 2. We shall promote our environment/energy business domain to reduce environmental loads from both energy saving and energy creating aspects.
- 3. We shall deepen our employees' knowledge on biodiversity and collaborate with the local community, administration, NPOs, and NGOs to carry out activities both internally and externally.

## ■ Acquisition of the Environmental ISO 14001 Company-Wide Integrated Certification

From 1998 to 2001, we acquired the international standard ISO 14001 (Environmental Management System) certification at all production sites in Japan (according to each production site unit) and have been carrying out environmental activities as a "global standard corporation that is considerate of the environment and can make continuous improvements in environmental loads."

To further advance these activities, we made clear the objective of acquiring the company-wide integrated certification of ISO 14001 since FY2013 and have been making preparations regarding the organization system, separation of responsibilities, preparation and review of regulations, trial implementation, etc. As planned, we received an audit and acquired the integrated certification in May 2014.

Under this new management system, we are promoting activities toward achieving high environmental targets.

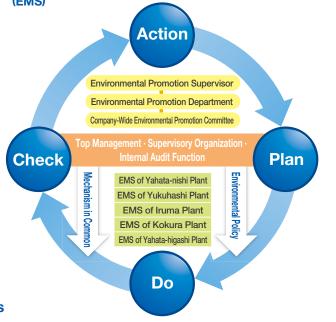
### **Objectives of Integrated Certification Acquisition**

- · Strengthening of top management capabilities and improvement of the level of environmental management
- Operational unification, activation, and fortification of linkage of environmental activities of all business departments under the head office administration department
- Preparation for expansion of the scope of environmental management

#### Requirements of Integrated EMS

- $\cdot$  Construction of an organization for supervision of the integrated EMS
- · Execution of management under a framework in common
- · Formulation of environmental policy by the top management
- · Implementation of top management review

## Outline of the Integrated Environmental Management System (EMS)



## Employment Awareness-Raising Activities

#### Promotion of full-participation "Green 1000" activities

Full-participation activities covering a broad environmental field are promoted under the name of "Green 1000" to improve the environmental awareness of each and every employee and with "green products" and "green processes" in perspective.

By the introduced digital signage, real-time power consumption display linked with an energy visualization system and PowerPoint presentations of the "Energy Saving/Electricity Saving Campaign," "Robot Village Environmental Items," "Sorting of Miscellaneous Recyclable Paper," "Introduction of Yaskawa Eco-Conscious Products Installed in Plants," "Biodiversity Education Material," etc., are transmitted/displayed on monitors installed on walls of the welfare building and the head office building to help employee awareness-raising activities.





Real-time power consumption display by energy visualization system

Display of environmental themes by monitors in the cafeteria

## Preventing Global Warming

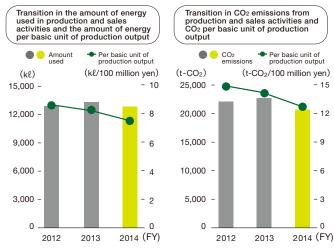
## Initiatives to Save Energy

Total CO2 emissions from production activities in FY2014 amounted to 19,966 t-CO2 with a reduction of 1,421 t-CO2 being achieved in comparison to FY2012.

The energy consumption in crude oil equivalent was 11,867 kl and reduced by 527 kl in comparison to FY2012, the amount of energy per basic unit of production output was 7.3 kl/100 million yen, and the target basic unit of 8.2 kl/100 million yen was thus attained. In FY2014, the amount of energy per basic unit of production output was reduced well beyond the target through improvement of energy usage efficiency through consolidation of robotics plants, increase of production output, etc.

For energy-savings and electricity-savings, solar panels of a total capacity of 804 kW were installed by FY2014. Installations shall be continued and we plan to acquire 4% of the total consumption power from renewable energy by FY2020.

A gas cogeneration facility was introduced at the Yahata-nishi Plant and the hot water heated by waste heat is supplied to the employee cafeteria. In terms of facility operation, the save-3M activity of finding waste (Muda), irregularity (Mura), and excess (Muri) and taking measures is being performed. In FY2014, we performed save-3M patrol at the respective plants, engaged in measures of 23 themes, and thereby achieved a reduction effect of 25 t-CO<sub>2</sub>/year.



Note: The conversion factor is of 0.42 kg-CO<sub>2</sub>/kWh used for calculation of CO2 emissions from ele

Cogeneration facility



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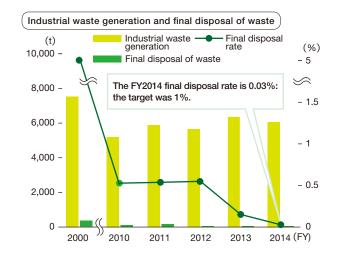
Save-3M patrol scene

## **Resource Recycling and Resource Saving**

## Reduction of Industrial Waste

We are striving to expand effective use of resources by reducing industrial wastes, enforcing thorough waste sorting, etc.

The final disposal rate in FY2014 was 0.03% and we were able to maintain our target of not more than 1%. This was a result of collaborating with waste disposal companies to pursue sorting and recycling methods for avoiding final disposal and perform an overall review concerning wastes. In FY2015 we shall strive to further reduce environmental loads by managing wastes and valuables in more detail.



## "Miscellaneous Paper" Sorting Activities

At the Yahata-nishi Plant, paper (7 types), such as corrugated cardboard, copy paper, etc., are disposed as valuables.

In FY2014, we started the sorting and recycling of "miscellaneous paper"\* that used to be mixed with general waste to be incinerated.

Although there was initially some confusion concerning the new concept of "miscellaneous paper," as a result of continuous awareness-raising activities, we were able to achieve an improvement effect of reducing the amount incinerated as general waste by approximately 11 tons (14.5%: compared to FY2013).

Through these activities, we were also able to achieve the synergistic effect of improving the sorting of paper besides "miscellaneous paper."

## The "Miscellaneous Paper" Recovery Area

\*Indications are made to prevent mixing of miscellaneous paper with general waste.



Examples of "miscellaneous paper" (valuables):

- Pieces of paper used for notes, etc. Boxes for sweets
- Boxes for screws and other purchased parts
- Tissue boxes and envelopes Etc.

(52)

## **Biodiversity Conservation Initiatives**

In the Kitakyushu district, in which the head office is located, we are participating in the "Acorn Bank" activity, which is a major part of the "Environmental Capital 1 Million Tree Planting Project - Hibikinada Bird-Singing Green Corridor Creation Project," to provide seedlings necessary for creating a green corridor.

Local elementary school pupils pick up acorns, which are then grown as seedlings that are planted in the Hibikinada district. By growing local acorns, we can provide tree seedlings that are strong to seaside environments.





## List of Environmental Data

We are working toward self-action objectives on a daily basis in order to inspire commitment toward environmental load reduction. The environmental data (results) from FY2010 to FY2014 is listed below.

Input item		Unit	FY2010 <sup>*1</sup>	FY2011	FY2012	FY2013	FY2014	
		Electricity	10,000kWh	4,660	4,276	4,246	4,418	4,138
		City gas amount	10,000m <sup>3</sup>	38	26	31	37	657
Production Input energy and sales	Liquefied petroleum gas	t	467	509	482	470	470	
	Heavy oil, light oil, kerosene, gasoline	kl	94	309	210	241	196	
		Steam and heat	TJ	23.3	17.8	22.4	18.6	0
Logistics <sup>*4</sup>		TJ	48.7	51.0	50.2	43.4	42.3	
Amount of greenhouse gas (SF6) handled		t	2.23	2.28	1.86	1.42	0.47	
Amount of chemicals handled subject to the PRTR law		t	54.1	63.5	52.2	63.2	56.8	
Amount of water used		1,000m <sup>3</sup>	203	195	193	200	198	
Paper resources		t	114	137	123	124	117	

Output item		Unit	FY2010 <sup>*1</sup>	FY2011	FY2012	FY2013	FY2014	
Greenhouse CO	CO <sub>2</sub> emissions	Production and sales	t-CO <sub>2</sub>	23,688	22,086	22,138	22,770	20,737
gas*2		Logistics*4	t-CO <sub>2</sub>	3,338	3,497	3,445	2,977	2,902
-	SF6 emissions		kg	58	59	45	35	11
Greenhouse	00	Scope 1 and 2	t-CO <sub>2</sub>	_	_	-	-	30,262
gas <sup>*3</sup>	CO <sub>2</sub> emissions	Scope 3 <sup>*5</sup>	t-CO <sub>2</sub>	_	_	_	-	45,237
Air pollutants NOx SOx			kg	698	309	372	262	179
			kg	42	22	49	15	7
Water	BOD		t	7.17	7.12	5.21	8.32	11.3
pollutants COD		t	1.26	1.36	1.03	1.02	1.16	
Release		t	30.0	50.3	38.4	52.2	44.5	
PRTR	Transfer		t	3.5	8.3	7.6	7.2	8.6
Industrial	Industrial Amount of generation		t	5,198	5,870	5,642	6,373	6,152
waste and	Amount of final d	Amount of final disposal		28	35	31	10	2
valuables Fina	Final disposal rate		%	0.54	0.59	0.55	0.15	0.03
Industrial waste, A	Amount of generation	Amount of generation		5,911	6,440	6,246	6,758	6,522
	Amount of final disposal		t	71	75	72	51	54
	Final disposal rate		%	1.21	1.16	1.15	0.75	0.82

 $\ast 1:$  For FY2010, only the data for the production sites are shown.

\*2: An emission factor of 0.42 kg-CO2/kWh is used to calculate the CO2 emissions of electric power.

\*3: Emission factors made public by electric power companies are used to calculate the CO<sub>2</sub> emissions of electrical power. The Scope 3 value is the total value for Categories 2, 3, 5, 6, and 7. It is verified by the Japan Quality Assurance Organization that there is no error in calculation of the emission values of the respective Scopes.

[Range of applicability of data] Yaskawa Electric, group companies and affiliated companies within Yaskawa Electric business sites, and Yaskawa Motor Corporation. However, the ranges are set separately for the following items.

\* 4: "Logistics" : Yaskawa Logistec Corporation

\* 5: "Scope 3" : Yaskawa Electric and group companies and affiliated companies within Yaskawa Electric business sites

## **Corporate Information**

As of March 20, 2015

Corporate Name	YASKAWA Electric Corporation
Founded	July 16, 1915
Employees	Consolidated 11,356 Non-consolidated 2,724
Head Office	2-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan Phone +81-93-645-8801 Fax. +81-93-631-8837
Tokyo Office	New Pier Takeshiba South Tower, 1-16-1 Kaigan, Minato-ku, Tokyo 105-6891, Japan Phone +81-3-5402-4511 Fax. +81-3-5402-4580

## Group Companies

### Japan

#### YE DATA INC.

Information-related products and services (optomechatronics, Information security and information multimedia)

#### YASAKWA CONTROLS CO., LTD.

Manufacturing and sales of electric machines, and parts

## YASKAWA ELECTRIC ENGINEERING CORPORATION

Maintenance, test operation and adjustment of electric machines and facilities and technical training

### YASKAWA MECHATREC CORPORATION

Sales of electric machines and other machinery

#### YASKAWA MOTOR CORPORATION

Design, manufacturing, sales and maintenance of motors, generators and motor applications

## YASKAWA LOGISTEC CORPORATION

General product distribution

## YASKAWA OBVIOUS COMMUNICATIONS INC.

Public relations planning, advertisement and publications; producing catalogs and technical documents

#### Europe

#### YASKAWA EUROPE GmbH (Germany)

Manufacturing, sales, and after-sales service of AC drives, servo motors and controllers. Sales and after-sales service of robots

YASKAWA NORDIC AB (Sweden) Sales and after-sales service of robots

#### YASKAWA ELECTRIC UK LTD. (U.K.)

Manufacturing, sales, and after-sales service of AC drives

#### YASKAWA EUROPE TECHNOLOGY LTD. (Israel)

Development, manufacturing, sales, and after-sales service of servo motors and controllers. Sales and after-sales service of robots

Sales Offices	Chubu Office	Phone +81-561-36-9310 Fax. +81-561-36-9311	
	Osaka Office	Phone +81-6-6346-4500 Fax. +81-6-6346-4555	
	Kyushu Office	Phone +81-92-714-5331 Fax. +81-92-714-5799	
Plants	Yahata-nishi Plant, Yukuhashi Plant, Iruma Plant, Nakama Plant, China (Shenyang, Changzhou, Shanghai)		
Laboratories	Corporate Research & Development Center (Kokura Plant), Tsukuba Research Laboratory		

#### Asia

YASKAWA ELECTRIC (CHINA) CO., LTD. (China) Sales and after-sales service of AC drives, servo motors and controllers SHANGHAI YASKAWA DRIVE CO., LTD. (China)

Manufacturing and sales of AC drives

YASKAWA SHOUGANG ROBOT CO., LTD. (China) Sales and after-sales service of robots

YASKAWA ELECTRIC (SHENYANG) CO., LTD. (China) Manufacturing, sales, and after-sales service of servo motors and controllers

YASKAWA ELECTRIC (SINGAPORE) PTE. LTD. (Singapore) Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC KOREA CORPORATION (Korea) Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC TAIWAN CORPORATION (Taiwan) Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC INDIA PVT. LTD. (India) Manufacturing and sales of AC drives. Sales and after-sales service of robots

#### The Americas

#### YASKAWA AMERICA, INC. (U.S.A.)

Manufacturing, sales, and after-sales service of AC drives, servo motors and controllers. Sales and after-sales service of robots

YASKAWA CANADA, INC. (Canada) Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELETRICO DO BRASIL LTDA. (Brazil) Sales and after-sales service of AC drives, servo motors and controllers

WASKAMA BUIL

MOTOMAN ROBOTICA DO BRASIL, LTDA. (Brazil) Sales and after-sales service of robots

FIRST ORDER MOTOR

## **Stock Information**

As of March 20, 2015

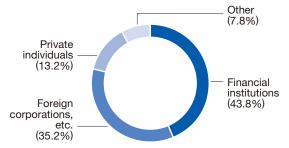
Number of authorized shares	 560,000 thousand
Number of shares outstanding	 260,957 thousand
Common stock	 27,842 million yen
Number of shareholders	 25,846
Stock code	 6506 (Japan)

## Major Shareholders

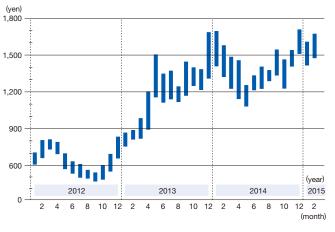
Major shareholders (top 10 shareholders)	Number of shares (1,000s)	Share- holding ratio
The Master Trust Bank of Japan, Ltd. (Trust Account)	15,275	5.85%
Japan Trustee Services Bank, Ltd. (Trust Account)	14,599	5.59%
Mizuho Bank, Ltd. (MHBK)	8,100	3.10%
Japan Trustee Services Bank, Ltd. (Sumitomo Mitsui Trust Bank, Limited (Employee Retirement Benefit Trust Account))	7,970	3.05%
Meiji Yasuda Life Insurance Company	7,774	2.98%
Northern Trust Company (AVFC) Account Non Treaty	6,475	2.48%
Japan Trustee Services Bank, Ltd. (Sumitomo Mitsui Trust Bank, Limited Re-trust Account, The Bank of Fukuoka, Ltd. Employee Retirement Benefit Trust Account)	6,375	2.44%
SAJAP	6,237	2.39%
STATE STREET BANK AND TRUST COMPANY 505225	4,301	1.65%
BNP Paribas Securities (Japan) Limited	3,618	1.39%

Note: Treasury stock is deducted in the calculation of the shareholding ratio.

## Share Distribution by Shareholder Type



## Company Share Price



Note: The prices displayed are the monthly high and low prices traded at Tokyo Stock Exchange.

The Company's stock has been selected for the Nikkei Stock Average and the JPX-Nikkei Index 400.



## YASKAWA

YASKAWA ELECTRIC CORPORATION

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