

## **Toyota Industries Report**

**2015** 



TOYOTA INDUSTRIES CORPORATION

Contents	Inside cover
Editorial Policy / Cautionary Statement	1
Message from the Chairman and President	2–3
Corporate Philosophy	4–5
Outline of Businesses	6–11
Financial Highlights	12
Top Interview	13–19

Corporate Governance	20–25 20–21
Internal Control System	21
Management of Confidential Information	21-23
Risk Management	24–25
Our Efforts toward the Creation of a Hydrogen-Based Society	26–29
2 Offering New Clean Diesel Engines with Significantly Enhanced Environmental Performance to Customers around the World	י <b>30–34</b>

.36-43

36-41

52-53

.56-58

.59-60

.54

.55

#### **Business Activities**

Based on quality first, the Toyota Industries Group strives to offer products and services that meet customer expectations.



## Contents

Logistics	42–43
Automobile	
Vehicle	
Engine	45–46
Car Air-Conditioning Compressor	
Car Electronics	
Textile Machinery	50

Materials Handling Equipment / Logistics ...

Materials Handling Equipment..

Relationship with Our Customers.

Relationship with Our Associates.

Relationship with Our Business Partners.

Relationship with Our Local Communities..

Relationship with Our Shareholders and Investors

#### **Relationship with Stakeholders**

Toyota Industries aims for growth in harmony with society through its relationships with various stakeholders, including customers and business partners



#### **Environmental Initiatives**

Globally carrying out activities based on the Fifth Environmental Action Plan. Tovota Industries is steadily achieving progress for all action items.



Vision for Environmental Activities	62
Structure to Implement Environmental Management	63
Fifth Environmental Action Plan	64–65
Establishing a Low-Carbon Emission Society	66–67
Establishing a Recycling-Based Society	68–69
Reducing Environmental Risk and Establishing a Society in Harmony with Nature	70–71
Environmental Management	72–73
Environmental Impact Flow and Environmental Accounting	74

#### **Financial Section / Corporate Information**

Toyota Industries posted record highs in net sales, operating income, ordinary income and net income in fiscal 2015.



Consolidated Eleven-Consolidated Balance Consolidated Stateme Consolidated Stateme

Financial Section .....

Comprehensive Inco Consolidated Stateme

Changes in Net Ass

Consolidated Stateme

Corporate Information... Board of Directors, Au Members and Mana Maior Consolidated Su Major Production Base

Investor Information...

Editorial policy

In aiming to realize a deeper understanding of the Toyota Industries Group among a broad spectrum of stakeholders, the Annual Report and Social and Environmental Report have been combined into the Toyota Industries Report from the fiscal year ended March 31, 2008. In addition to the Toyota Industries Group's management policies, the report provides easy-to-understand information regarding its business, social and environmental activities over the past year as well as its future direction.

#### Period covered by the report

This report focuses on activities carried out in fiscal 2015 (April 1, 2014 to March 31, 2015), but also includes some information outside this period.

#### Organizations covered in the report

Toyota Industries Corporation and its consolidated subsidiaries

#### Reference guidelines

- Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.1 ● ISO 26000

#### Cautionary Statement with Respect to Forward-Looking Statements

This report contains projections and other forward-looking statements that involve risks and uncertainties. The use of the words "expect," "anticipate," "estimate," "forecast," "plan" and similar expressions is intended to identify such forward-looking statements. Projections and forward-looking statements are based on the current expectations and estimates of the Toyota Industries Group regarding its plans, outlook, strategies and results for the future. All such projections and forward-looking statements are based on management's assumptions and beliefs derived from the information available at the time of producing this report and are not guarantees of future performance. Toyota Industries undertakes no obligation to publicly update or revise any forward-looking statements in this report, whether as a result of new information, future events or otherwise. Therefore, it is advised that you should not rely solely upon these projections and forward-looking statements in making your investment decisions. You should also be aware that certain risks and uncertainties could cause the actual results of Toyota Industries to differ materially from any projections or forward-looking statements discussed in this report. These risks and uncertainties include, but are not limited to, the following: (1) reliance on a small number of customers, (2) product development capabilities, (3) intellectual property rights, (4) product defects, (5) price competition, (6) reliance on suppliers of raw materials and components, (7) environmental regulations, (8) success or failure of strategic alliances with other companies, (9) exchange rate fluctuations, (10) share price fluctuations, (11) effects of disasters, power blackouts and other incidents, (12) latent risks associated with international activities and (13) retirement benefit liabilities.

The fiscal year ended March 31, 2015 is referred to as fiscal 2015 and other fiscal years are referred to in a corresponding manner.

[Cover Photo] New GENEO internal-combustion lift truck

		TH.A	1
1	IT.S.	11 11	2
	S. A		57
	H T		A L

	76-84
/ear Summary	76–77
Sheets	78–79
ents of Income	80
ents of ome	81
ents of ets	82–83
ents of Cash Flows	84
	85-89
dit & Supervisory Board Iging Officers	85
ubsidiaries	<b>86–87</b>
ƏS	88
	89

• Japan's Ministry of the Environment Environmental Accounting Guidelines (2005 Version) • Japan's Ministry of the Environment Environmental Reporting Guidelines (2012 Version)

## **Message from the Chairman and President**



Tetsuro Toyoda Chairman Akira Onishi President We sincerely appreciate your support of Toyota Industries Corporation and the Toyota Industries Group.

Looking at the overall economic conditions during fiscal 2015, ended March 31, 2015, although the U.S. economy remained solid, the Chinese economy recorded slower growth. As a result, the global economy registered a mild recovery overall. The Japanese economy decelerated as the consumption tax hike pushed down consumer spending.

Under these business conditions, the Toyota Industries Group focused on its quality first approach to earn the trust of customers and worked to expand sales by appropriately responding to respective market trends. As a result of these measures, Toyota Industries achieved record highs in consolidated net sales, operating income, ordinary income and net income.

Regarding the future outlook, the recovery in the world economy is expected to sustain momentum while in Japan consumer spending is anticipated to recover on the back of a rise in wages. Nevertheless, the business environment remains clouded by a host of uncertainties, including Japan's overdependence on the U.S. economy, a further deceleration of the Chinese economy, an unstable situation in the Middle East and a deflationary trend in Europe.

Amid these circumstances, the Toyota Industries Group is building a stronger business foundation and addressing key management issues by leveraging the Group's comprehensive strengths to further raise corporate value.

As immediate tasks, we will maintain and improve our muscular business structure to respond flexibly to rapid changes in the business environment. Specifically, we will comprehensively take into account quality and costs from the design stage, reduce lead times from development to sales and undertake cost improvement activities. Additionally, we will push ahead with the development of new technologies unmatched by competitors around the world and plan and develop appealing products tailored to the characteristics and needs of customers in each market. Moreover, we will work to build global production and sales structures and expand our value chain to provide a wide range of services.

Over the medium to long term, based on our quality first approach, we regard our top priority tasks as responding to environmental and safety issues and enhancing global competitiveness. In doing so, we will support industries and social foundations around the world by continuously supplying products and services that anticipate customers' needs in order to contribute to a comfortable society and enriched lifestyles.

As articulated in Vision 2020, we will develop environment-friendly, energy-saving products focusing on the keywords of the 3Es (Energy, Environmental protection and Ecological thinking), while integrating functions and services demanded by customers (Value Chain) and providing these worldwide (World Market). Through these measures, we aim for growth in three business units, namely the "solution" business unit consisting of materials handling equipment, logistics and textile machinery; the "key components" business unit encompassing car airconditioning compressors and car electronics; and the "mobility" business unit covering vehicles and engines. The Toyota Industries Group aims to work in unison to realize Vision 2020 based on the Medium-Term Management Plan, which lays out specific measures in each business unit up to fiscal 2016.

To support our global consolidated management, we will raise workplace capabilities, diversify the utilization of personnel and nurture human resources capable of playing active roles on the global stage. In addition, to counter a rise in risks resulting from an expansion in business activities, we aim to mitigate such risks and make a swift and accurate response when such risks materialize.

Besides creating a workplace that places the utmost priority on safety and thoroughly carrying out compliance, which includes adhering to laws and regulations, we will actively participate in social contribution activities. Through these efforts, we aim to win the trust of society and grow in harmony with society.

In closing, we ask for your continued understanding and support.

August 2015

Tetsuro Toyoda Chairman

Akira Onish President

# Aiming for the Realization of a Comfortable Society and Enriched Lifestyles

The spirit of founder Sakichi Toyoda has been encapsulated in the Toyoda Precepts, which serve as Toyota Industries' corporate creed. Our Basic Philosophy carries on that spirit and is stipulated as basic management policies.

Based on this Basic Philosophy, we constantly strive for the sustainable growth of our businesses by contributing to the realization of a comfortable society and enriched lifestyles. While fulfilling our social responsibilities through business activities, we are making proactive efforts to serve as a good corporate citizen in non-business areas as well.

#### **Toyoda Precepts**

Carrying out the spirit of founder Sakichi Toyoda,

- Always be faithful to your duties, thereby contributing to the Company and to the overall good.
- Always be studious and creative, striving to stay ahead of the times.
- Always be practical and avoid frivolousness.
- Always strive to build a homelike atmosphere at work that is warm and friendly.
- Always have respect for God, and remember to be grateful at all times.



#### **Basic Philosophy**

#### [Respect for the Law]

Toyota Industries is determined to comply with the letter and spirit of the law, in Japan and overseas, and to be fair and transparent in all its dealings.

#### [Respect for Others]

Toyota Industries is respectful of the people, culture, and traditions of each region and country in which it operates. It also works to promote economic growth and prosperity in those regions and countries.

#### [Respect for the Natural Environment]

Through its corporate activities. Toyota Industries works to contribute to regional living conditions and social prosperity and also strives to offer products and services that are clean, safe, and of high quality.

#### [Respect for Customers]

Toyota Industries conducts intensive product research and forwardlooking development activities to create new value for its customers. [Respect for Employees]

Toyota Industries nurtures the inventiveness and other abilities of its employees. It seeks to create a climate of cooperation, so that employees and the Company can realize their full potential.

**Toyota Industries' CSR Activities** 

Contribution as a corporate citize Ethical responsibility /

Compliance

conservation

Economic responsibility (business responsibility)

Society (company's raison d'etre)







Continuous provision of products and services that contribute to society Contribution in non-business areas Foundation of

business activities

Corporate social responsibility

Contributions through business activities





# **Materials Handling Equipment / Logistics**

The smooth flow of goods, money and information links the world and enriches the lives of people and society. Toyota Industries meets diverse customer needs in logistics by providing a diverse range of materials handling equipment such as lift trucks and offering advanced and highly efficient logistics services. Through these businesses, Toyota Industries helps bring smiles to the faces of people the world over.

The Materials Handling Equipment Segment develops, produces, sells and provides services for a broad range of products, from industrial vehicles centered around a full lineup of lift trucks (0.5- to 43-ton capacities) to materials handling systems.

Lift trucks, which capture the top global market share\*, are delivered to customers around the world under the TOYOTA, BT, RAYMOND and CESAB brands. Toyota Industries also strives to provide finely tuned after-sales services so that customers can always use our products in the best possible condition. While raising the level of after-sales services for developed countries, we are reinforcing our sales and service networks as well as enhancing service training for emerging countries.

\* Survey by Toyota Industries Corporation

Materials Handling Equipment Logistics



Net Sales

GENEO-B electric lift truck

Internal-combustion lift truck

Reach truck

Low lift truck

Aerial work platform

Automated storage and retrieval system

Simple AGV (automatic guided vehicle)

Toyota Industries Report 2015 6

Warehouse logistics



Toyota Industries is building its own unique business model that pursues optimal flows of goods, money and information from producers to consumers, thereby contributing to the overall optimization of customers' logistics. The Logistics Segment is composed of three business pillars: planning, design and operation of distribution centers to help customers reduce their logistics costs; land transportation services that primarily focus on cargo deliveries via trucks; and high value-added services such as cash collection and delivery and cash proceeds management services and data storage and management services.





Cash collection and delivery and cash proceeds management services



Data storage, management, collection and delivery services

#### Outline of Businesses

## **Automobile**

Get behind the wheel with a solid, reassuring feel and enjoy comfortable driving. Besides vehicle assembly, Toyota Industries produces various automobile-related components such as engines and compressors, the latter of which comprises the heart of car air conditioners, as well as car electronics. We are there for you to create a comfortable vehicle interior.

From vehicle assembly to parts production, the Automobile Segment engages in a wide range of car-related businesses, leveraging synergies among its business divisions in development and production.

Vehicle —	- With its strengths as an industry leader in safety, the environment, quality, cost and delivery, the Vehicle
	Business produces compact to midsize automobiles.
Engine ———	- In addition to diesel engines produced under a comprehensive structure ranging from planning and
	development to production, we also produce gasoline engines.
Car Air-Conditioning Compressor	<ul> <li>Toyota Industries' car air-conditioning compressors are highly acclaimed in terms of their reliability at high operating speeds and guiet operation in addition to such excellent environmental performance features as</li> </ul>
	compactness, weight reduction and fuel efficiency. The Car Air-Conditioning Compressor Business
	captures the world-leading market share in unit sales".
Car Electronics	<ul> <li>The Car Electronics Business develops and produces electronics products</li> </ul>
	primarily for electric-powered vehicles such as hybrid vehicles.
* Survey by Toyota Industries Corporation	

RAVA

RAV

RAV4

Vitz (Yaris outside Japan)

Electric compressor

Variable-displacement type compressor

Fixed-displacement type compressor

Diesel engine

Gasoline engine

(¥ Billion) 1,200 1,000 800 600 400 200 (FY) 13 14

15

8



Net Sales







Oxygen-supplying air compressor for fuel cell vehicles



Hydrogen circulation pump for fuel cell vehicles



DC-DC converter

# **Textile Machinery**

A soft texture caressing your skin and gently enveloping your body. Toyota Industries produces spinning machinery that spins high-quality yarns and high-speed, energy-saving weaving machinery that produces fabrics. We deliver textile machinery to customers around the world that incorporates advanced technologies and is imbued with our dedication to quality, bringing smiles to everyone's daily lives.

The Textile Machinery Division, our original business, began with the invention of the automatic loom by founder Sakichi Toyoda. Presently, we undertake fully integrated operations from development and production to sales and after-sales services for spinning machines that spin twisted fiber bundles into yarn and weaving machines that weave spun yarn into fabrics. Our textile machinery is supplied to markets worldwide.

Thanks to superb reliability and high productivity, our air-jet looms have won extensive acclaim from customers around the globe, capturing the world-leading market share in terms of unit sales\*. \* Survey by Toyota Industries Corporation



Ring spinning frame

JATOIO

TOYOTA





-----

Roving frame

Net Sales









Cotton classing instrument



Yarn testing instrument

# **Financial Highlights**

Toyota Industries Corporation Years ended March 31

Millions of yen vs 2014 2015 2014 2013 2012 2011 % change For the Year Net sales 2,166,661 7.9% 2,007,856 1,615,244 1,543,352 1,479,839 Operating income 117,574 9.2 107,691 77,098 70,092 68,798 Ordinary income 170,827 23.7 138,133 86,836 80,866 73,911 Net income 115,263 25.7 91,705 53,119 58,594 47,205 Research and development expenses 47,785 3.1 46,326 39,057 32,070 27,788 Cash dividends per share (yen) 110.00 29.4 85.00 55.00 50.00 50.00 At Year-End Total assets 4,650,896 3,799,010 3,243,779 22.4% 2,656,984 2,481,452 2,425,929 Total net assets 32.6 1,829,326 1,524,933 1,197,841 1,075,939 Number of employees 52,523 6.5 49,333 47,412 43,516 40,825

## Net Sales (¥ Billion) 2,500 2,000 1 500 1.000 500 12 13 14 15 (FY) 11





## Operating Income (¥ Billion) 120 (FY) 11 12 13 14 15

#### Total Net Assets



#### Net Income



#### Cash Dividends per Share



## **Top Interview**

# **Accelerating Our Transformation with** the Aim of Realizing a Comfortable **Society and Enriched Lifestyles**

## Akira Onishi President







#### First of all, could you provide an overview of Toyota Industries' business results in fiscal 2015?

During fiscal 2015, although the Chinese economy decelerated, the world economy achieved a moderate recovery on the whole underpinned by solid growth in the U.S. economy. Under these economic conditions, in addition to ongoing activities to strengthen our foundation, Toyota Industries accelerated initiatives for attaining growth during the third year of its Medium-Term Management Plan.

In the core Materials Handling Equipment Business, we benefited from favorable markets in such regions as Japan, North America, Europe and China and posted growth in unit sales by introducing new products with enhanced environmental performance and undertaking sales expansion activities utilizing our global sales network.

Additionally, Aichi Corporation, a top manufacturer of aerial work platforms, and Cascade Corporation, a U.S.-based manufacturer of lift truck attachments, also recorded solid business results.

Turning to automobile-related businesses, the Vehicle Business maintained strong sales of the RAV4, but overall unit sales declined from the previous fiscal year. The Engine Business posted a decrease in unit sales mainly of KD diesel engines and AR gasoline engines. Alternatively, the Car Air-Conditioning Compressor Business posted growth in sales in North America and China, achieving an all-time high in unit sales. The Car Electronics Business attained an increase in sales, mainly to Toyota Motor Corporation (TMC).

The Logistics Business recorded growth in its business results, driven by increases in logistics services and land transportation services for automotive-related parts.

The Textile Machinery Business posted lower sales of its mainstay air-jet looms amid continued stagnant demand in China and other markets. Nevertheless, this business achieved higher sales in the field of yarn quality measurement instruments, which have been a new business domain since 2012.

As a result of these developments, in fiscal 2015 Toyota Industries posted net sales of ¥2,166.6 billion and operating income of ¥117.5 billion, both representing record highs. Taking into consideration an array of factors such as our business results, future demand for funds and the payout ratio, Toyota Industries raised cash dividends per share by ¥25 from the previous fiscal year to ¥110.

## Could you explain the future direction of your business operations?

Basically, we will continue executing the same business policies implemented to realize Vision 2020. However, our business activities now span the entire globe, including emerging countries, while our business domains are also expanding. With this in mind, we believe that Toyota Industries must take additional steps to prepare for various risks and further solidify our foundation. On this basis, we plan to accelerate the development of various themes we have implemented for future growth.

Among these themes, we have positioned human resources development and strengthening monozukuri (manufacturing) as crucial elements of efforts to further solidify our foundation.

#### Human Resources Development

We believe the key word in human resources development is "global." Presently, more than half the employees in the Toyota Industries Group are non-Japanese, and local employees serve as top management at more than 80% of the Group's 176 overseas consolidated subsidiaries.

As we operate in various countries with different cultures and values, it is absolutely essential that all employees share a source of inspiration as we move in the same direction on a global scale. Acting on this belief, Toyota Industries provides various opportunities to promote a global sharing of the spirit of "respect

for humanity" and "challenge" advocated by the Toyoda Precepts, which embody the spirit of founder Sakichi Tovoda.

As our business activities become increasingly globalized, the diversity of our employees continues to advance. As such, we believe diversity is not something to which we must respond, but something we should naturally embrace and fully utilize.

Besides the number of employees, more than half of the Toyota Industries Group's sales are also generated outside Japan. As a global company, we remain committed to respecting diversity, leveraging this as our strength for growth while linking diversity to initiatives for attaining Vision 2020.

#### Strengthening Monozukuri (Manufacturing)

As a manufacturing-based company, Toyota Industries will further strengthen its manufacturing capabilities in Japan and push forward with initiatives to share them globally.

We will not only work to develop products based on the 3Es (Energy, Environmental protection and Ecological thinking) and raise manufacturing quality and productivity but also promote the development of new production engineering technologies and methods with the overarching aim of differentiating ourselves from competitors in terms of manufacturing.

As part of these efforts, our plants in Japan will strengthen our foundation as mother plants by undertaking a variety of key tasks, including developing human resources, passing on various skills and augmenting the Toyota Production System (TPS) and overall production engineering. Using these areas as our basis, we will make Company-wide efforts to build a structure that can support our plants outside Japan while at the same time working to raise quality and productivity on a global basis. Ultimately, our plan is for each production base to become autonomous, to mutually learn the various good gualities from each other across business divisions and national boundaries and to maximize synergies among these production bases. As a specific example, in the Car Air-Conditioning Compressor Business a mother plant in Japan is accepting key human resources from production bases outside Japan, continuously providing them with education that not only covers proprietary skills but also places emphasis on instilling the thinking and spirit of manufacturing. Employees who learn at the mother plant then steadily spread the knowledge and skills

they acquired in Japan in their own countries.

Through this process, we aim to raise the level of manufacturing at each production base around the world.

Also, in the Materials Handling Equipment Business, when a new plant in Brazil was established and began operations in 2013, a U.S.-based production team that previously learned at another mother plant in Japan in turn played the role of mother plant and provided essential support for the startup.

Going forward, our policy is to have mother plants in Japan continue functioning





Global human resources conference

Teaching an employee from outside Japan

as the core of each business while promoting initiatives that transcend business divisions and regions as we further increase the level of our manufacturing capabilities globally.

While we firmly solidify our foundation, we will steadily execute initiatives for further growth.

#### Growing Each Business Unit Based on Vision 2020

The basis of our efforts will be to grow each business unit based on Vision 2020, which articulates Toyota Industries' aspired shape over the medium and long terms.

The first measure in these strategies is spurring technological innovation in environment and energy areas based on the keywords of the 3Es. We aim to contribute to realizing a society with minimum environmental impact by developing products in energy conservation and electrification fields. For the second measure, which is the expansion of our value chain, in businesses such as Materials Handling Equipment, we will not only offer products but also support our customers by providing enhanced aftersales services that allow them to use our products with a sense of reassurance for many years to come. In terms of the third measure of pursuing business development in world markets, we will focus closely on the needs of customers in each region and provide them with products and services they truly need.

By promoting these initiatives, we intend to grow each business unit. At the same time, we will strive to broaden the base of our business domains, focus attention on overlapping areas and utilize our strengths derived from operating diverse businesses to achieve sustained growth and realize Vision 2020.

#### Vision 2020

Support industries and social foundations around the world by continuously supplying products/services that anticipate customers' needs in order to contribute to a comfortable society and enriched lifestyles



\* Safety, the environment, quality, cost and delivery

#### Responding Flexibly to Changes and Accelerating Our Transformation

In recent years, the business environment has become increasingly uncertain and complex while the speed of change is accelerating along with the advance of globalization. To respond flexibly to such changes and realize our vision, we must accelerate our transformation in addition to further strengthening our foundation.

Since 2000, Toyota Industries has implemented several initiatives for transformation and has strengthened its structure and competitiveness as well as progressed with globalization of business bases, sales regions, employees and other areas of its operations.

#### **Principal Initiatives for Transformation to the Present**

- Made BT Industries AB, a Europe-based manufacturer of materials handling equipment, into a subsidiary
- Took over TMC's Industrial Equipment Sales Division (integrated manufacturing and sales)
- of Lehman Brothers
- Made Cascade Corporation, a U.S.-based manufacturer of lift truck attachments, into a subsidiary
- Made Yantai Shougang TD Automotive Compressor Co., Ltd. (YST), a production base for car air-conditioning compressors in China, into a subsidiary

We also implemented various initiatives for transformation in each business during fiscal 2015. Each of these is based on the three broad strategies of Vision 2020, namely the 3Es, expansion of our value chain and business development in world markets. Some of the main measures we executed are as follows.

#### **Principal Initiatives for Transformation Implemented in Fiscal 2015**

In the Materials Handling Equipment Business, we launched a new lift truck in Japan, Europe and other markets following the introduction of this model in North America in 2013. This lift truck realizes a dramatic increase in environmental performance by incorporating not only an internally developed engine but also our first-ever turbocharger that we developed by leveraging our accumulated technologies in the Engine and Car Air-Conditioning

Compressor businesses.

We are also making important strides in the development of fuel cell lift trucks as next-generation products. Currently, we are promoting initiatives for commercializing fuel cell lift trucks such as undertaking a feasibility test at Kansai International Airport. [3Es] In sales finance for the



equipped with turbocharger

Materials Handling Equipment Business, we concluded an agreement with Toyota Motor Credit Corporation (TMCC), a U.S. finance subsidiary of TMC and one of the world's top-class sales finance companies, to acquire its materials handling equipment sales finance operations. By acquiring these operations, we will expand our structure capable of responding to a variety of customer demands with integrated sales, service and finance functions. [Expansion of value chain]

An increasingly important task on the sales front is to expand sales in rapidly growing emerging countries. As one measure for attaining this objective, Toyota Industries reached an agreement to acquire the lift truck business of Tailift Co.,

Created a thoroughly lean business structure following the global recession triggered by the collapse

New internal-combustion lift truck



Fuel cell lift truck undergoing feasibility test



Expanding the value chain by strengthening sales finance

Ltd., a Taiwan-based lift truck manufacturer with noted strengths in undertaking business operations in emerging countries, and made it into a consolidated subsidiary in August 2015. Going forward, we will enhance its lineup of mid- and low-priced lift trucks and strive to realize synergies. [Business development in world markets]

In automobile-related businesses, we leveraged the technologies nurtured in the Car Air-Conditioning Compressor Business to develop an oxygen-supplying air compressor and a hydrogen circulation pump, both of which are core components of fuel cell vehicles. These have been fitted on TMC's MIRAI, the world's first mass-produced fuel cell vehicles launched in 2014.

As the Japanese government and business community team up to begin full-fledged initiatives toward the building of a hydrogen-oriented society, Toyota Industries will make important contributions to these efforts by fully utilizing its technologies and know-how in this field. [3Es]



Lift truck from Tailift Co., Ltd., which is strong in capturing business in emerging countries



Oxygen-supplying air compressor for fuel cell vehicles

In the Vehicle Business, we are implementing ViRA activities targeting the Vitz (Yaris outside Japan) and RAV4, which are being manufactured by Toyota Industries. The ViRA activities aim at making proactive

proposals in anticipation of changes in customer expectations based on the concept of "Taking the Lead in Making Our Cars More Attractive." In fiscal 2015, we commenced production of a special-edition RAV4, which reflects the design created through collaboration with sales companies outside Japan. [Expansion of value chain]

In the Engine Business, in June 2015 we began producing a new diesel engine that is being fitted on TMC's Land Cruiser Prado and other vehicles. This engine raises power performance while at the same time significantly improves fuel economy and other environmental performance features. A turbocharger, for which we participated in the development project and commenced production in-house, plays a major role in supporting this engine performance. This turbocharger was developed by drawing on not only the technologies accumulated in the development of engines but also our compression and machining technologies for car airconditioning compressors. We believe the development of this turbocharger clearly demonstrates one example of how we are able to take advantage of the benefits derived from operating a diversity of businesses.

Diesel engines are widely used in Europe and demand for them is now rising in emerging nations and other countries. In view of this situation, with the aim of strengthening the competitiveness of diesel engines for the entire Toyota Group, Toyota Industries and TMC have agreed to consolidate diesel engine development and production functions, which have been undertaken jointly by both companies, into the operations of Toyota Industries. Through the implementation of these



New diesel engine



New turbocharger

measures. Toyota Industries aims to further raise the expertise of the Engine Business and develop and produce more competitive diesel engines for automobiles and build an efficient business structure. Additionally, we will strive to expand the scale of our business and enhance development efficiency by applying technologies for automobile-use diesel engines to engines for Toyota Industries' own lift trucks and

industrial machinery products. [3Es]

In the **Textile Machinery Business**, we have consolidated production bases for spinning frames in India. This consolidation was decided in keeping with the concept of local production for local consumption given that more than 70% of our customers for spinning frames are concentrated in India as well as neighboring South and Southeast Asian countries. Looking ahead, we will promote cost reductions through such initiatives as undertaking optimal parts procurement and maximizing the benefits of mass production while working to raise quality and productivity. [Business development in world markets]

As illustrated by these examples, the various transformations implemented thus far are beginning to achieve results in fiscal 2015. Promoting further efforts to steadily grow these initiatives for transformation will be crucial for achieving sustainable growth toward the realization of Vision 2020. For this reason, we intend to continue to proactively allocate management resources.



First of all, I would like to thank our stakeholders for their loyal patronage and ongoing support.

Toyota Industries' business activities are based on supporting the industrial and social foundations around the world through our sustainable corporate growth, thereby contributing to a comfortable society and enriched lifestyles. We consider the actual undertaking of business as being integral to taking an important role in society.

In line with this basic stance, we will carry out business activities by keeping in mind that our company is built on the support of all our stakeholders, including customers, business partners, shareholders and investors, members of local and global communities and Toyota Industries Group employees.

Going forward, the Toyota Industries Group will continue to work in unison to meet the expectations of our stakeholders.



## **Corporate Governance**

As a global company operating in various countries and regions, Toyota Industries seeks efficient management while maintaining and enhancing the fairness and transparency of its corporate activities.

#### **Basic Perspective of Corporate Governance**

Toyota Industries strives to enhance the long-term stability of its corporate value and maintains society's trust by earnestly fulfilling its social responsibilities in accordance with its Basic Philosophy. To that end, Toyota Industries strives to further enhance its corporate governance in its efforts to maintain and improve management efficiency and the fairness and transparency of its corporate activities.

#### **Corporate Governance Structure**

#### **Implementation Structure**

Toyota Industries convenes monthly meetings of the Board of Directors to resolve important management matters and monitor the execution of duties by directors. We also appoint outside directors who have a wealth of experience and knowledge concerning business management. They attend meetings of the Board of Directors and give opinions and ask questions as deemed necessary. Through this supervisory function of outside directors, we ensure the legality and validity of the Board's decisions as well as directors' execution of duties from an objective perspective. The Management Committee, which is composed of directors above the executive vice president level as well as relevant directors, managing officers and audit & supervisory board members, deliberates on a variety of issues concerning important management matters such as our corporate vision, management policies, medium-term business strategies and major investments.

Toyota Industries has a divisional organization system, with significant authority delegated to each business division. For especially crucial matters, however, we have established the Business Operation Committee to enable the president to meet with the heads of each business division regularly to monitor and follow the status of their business execution. At meetings of the Management Council, directors, managing officers and audit & supervisory board members convene to report and confirm the monthly status of business operations and share overall deliberations at Board of Directors meetings and other management-related information.

In addition, issues pertaining to human resources, quality, production, procurement and technologies are discussed at the corresponding functional meetings. We have also put in place committees to deliberate on more specific matters, such as CSR, the environment and export transaction controls. These functional meetings and committees discuss important matters and action themes in respective areas.

#### Audit & Supervisory Board System

Toyota Industries has adopted an audit & supervisory board system. Two full-time audit & supervisory board members and three outside audit & supervisory board members attend meetings of the Board of Directors to monitor the execution of duties by directors. At the same time, meetings of the Audit & Supervisory Board are held once a month to discuss and make decisions on important matters related to auditing. The full-time audit & supervisory board members carry out auditing by attending primary meetings and



#### (As of June 11, 2015)

Toyota Industries' Corporate Governance Reports are available at: http://toyota-shokki.co.jp (in Japanese)

receiving reports directly from directors. Additionally, we have assigned dedicated personnel, while audit & supervisory board members monitor the legality and efficiency of management through collaboration with independent auditors and the Audit Department.

#### Appointment of Independent Director and Audit & Supervisory Board Members

As a publicly listed company, Toyota Industries strives to ensure the fairness and transparency of management. Following the Securities Listing Regulations stipulated by the Tokyo Stock Exchange and Nagoya Stock Exchange, respectively, to further enhance our corporate governance Toyota Industries has appointed as independent members of management two outside directors and two outside audit & supervisory board members who are deemed to have no conflicts of interest with our shareholders.

#### **Internal Control System**

In accordance with the Corporation Law of Japan, in May 2006 Toyota Industries' Board of Directors adopted the Basic Policies for the Establishment of an Internal Control System (Basic Policies) to ensure compliance, risk management as well as the effectiveness and efficiency of business operations by incorporating these policies into each business segment's annual policies and day-to-day routine management. The CSR Committee, at its meeting held in March, assesses the progress made in implementing the Basic Policies in the year under review and determines actions for the coming year, including reviewing the implementation structure and enhancing day-to-day operational management.

A revision was made to the Corporation Law of Japan in fiscal 2015 (enforced in May 2015), further requiring companies to set up and upgrade a system to ensure the fairness of their operations and effectiveness of auditor duties. Accordingly, we reviewed our Basic Policies, and the revised policies have been adopted by the Board of Directors.

Furthermore, based on the Financial Instruments and Exchange Law (so-called Japanese Sarbanes-Oxley Act

#### Internal Control Assessment System (Based on J-SOX)



(J-SOX)), we have established and appropriately operated an internal control system to maintain the reliability of financial reporting. The system's status and progress are reviewed by the Audit Department and audited by independent auditors. We determine which Toyota Industries Group companies fall within the scope of J-SOX based on the degree of impact on the reliability of financial reporting.

We determined that our internal controls over financial reporting as of the end of fiscal 2015 were effective, and accordingly, submitted an Internal Control Report in June 2015. The report was reviewed by independent auditors and judged fair in their Independent Auditors' Report.

## Compliance

#### **Four Pillars of Compliance Activities**

We believe that compliance means both adhering to laws and regulations and observing ethics and social norms. In order to ensure compliance, it is vital that each and every employee has an awareness of compliance.

Under the strong leadership of top management, we promote compliance throughout the Toyota Industries Group, including consolidated subsidiaries in and outside Japan, by formulating a Code of Conduct and thoroughly informing employees together with checking and monitoring compliance.





## **Establishment and Reinforcement of Implementation Organization**

To promote compliance throughout the Toyota Industries Group, we have established the Compliance Subcommittee (led by head manager of the corporate headquarters\*) as a subordinate organization to the CSR Committee. Every year, the subcommittee formulates an action policy and conducts a follow-up check on the progress of corresponding activities twice during that year.

In fiscal 2015, we held Compliance Officer Conferences at each region across the world in an effort to further enhance compliance within the Toyota Industries Group. \*As of March 31, 2015

#### Organization for Promoting Compliance



#### **Activities in North America and Europe**

We held Compliance Officer Conferences in North America and Europe, with participation of compliance officers from 18 bases and 32 bases, respectively, in each region. At both conferences, participants deliberated on preventive measures to two significant risks of bribery and cartel formation, as an increasing number of companies have recently been charged with being involved in such practices. They also exchanged opinions on the structure and operation of external hotlines planned to be introduced in North America and Europe, taking into account the actual conditions at respective bases.



Participants of Compliance Officer Conference held in Europe

#### **Activities in China**

In China, we held a Presidents Conference, in which presidents from all bases in the country attended. They confirmed the anti-bribery regulations and the introduction of the leniency system under antitrust laws.

We also held a Compliance Officer Conference in China, with the participation of compliance officers from five bases. They shared information on the progress of their respective compliance-related activities and exchanged opinions concerning the revision to the Corporate Code of Conduct, which is used as conduct guidelines across all bases in China.



Participants of Presidents Conference in China

#### Formulation of Code of Conduct and Dissemination

Toyota Industries has formulated and distributed to executives and all employees the Toyota Industries Corporation Employee Code of Conduct, which serves as conduct guidelines that should be observed by employees, and has been providing familiarization training. At subsidiaries in and outside Japan, compliance officers (outside Japan) and compliance committees (in Japan) are taking a leading role in the formulation of their own Code of Conduct matched to their respective business lines and corporate cultures. Toyota Industries' 33 consolidated subsidiaries in Japan and 71 consolidated subsidiaries outside Japan have already created their own Code of



#### Employee Code of Conduct

Conduct and have been working to instill an awareness among their employees.

Simultaneously, to prevent significant risks of bribery and violations of antitrust laws, we have formulated corresponding regulations and been undertaking activities to familiarize employees with these regulations.

#### Response to bribery risk

In fiscal 2015, Toyota Industries formulated the Global Guidelines on Bribery Prevention applicable to Toyota Industries itself and its Group companies. Particularly, in countries with a high risk of bribery, each base has developed internal rules in accordance with the applicable laws in respective countries and been conducting activities to familiarize employees with them.

#### Response to risk concerning antitrust laws

We have put in place a system to conduct a check and review before and after employees of Toyota Industries contact competitors. We are also familiarizing all employees that they are prohibited from any acts that may possibly constitute a violation of antitrust laws and monitoring employees' awareness and behavior on a periodic basis.

#### **Thoroughly Informing Employees about Applicable Laws and Regulations**

Toyota Industries provides required legal knowledge to employees according to their job ranks or positions, familiarizing them with the initial responses that should be followed upon the occurrence of a problem and educating them on risk management. To new or young employees, in particular, we provide easy-to-understand guidance on "what to do" and "what not to do" in order to improve their compliance awareness based on laws and corporate ethics, using the Toyota Industries Corporation Employee Code of Conduct as an instructional material.

Since fiscal 2014, we have been disseminating e-learning materials on one specific theme every month in order to cultivate a deeper understanding of compliance

#### Compliance Education Provided (As of March 31, 2015)

	FY2013	FY2014	FY2015	FY2016
Toyota Industries Executive training	Conducted training for net	wly appointed executives and leg	al seminars for executives	Ongoing initiative
Rank-based (clerical, technical) training Training by function	Promoted training on confidential information	quality, safety, the environment, n, export transactions, subcontra <b>*12,000 employees participated</b>	labor, management of cting and antitrust laws	Ongoing initiative
Training for affiliated companies	Promoted group training training and public re \$2,400 employees participated	via executive training seminars, elations division training, and thro \$2,800 employees participated	subcontractor safe work bugh visits to dealers ★2,400 employees participated	Ongoing initiative
Consolidated subsidiaries in Japan	Conducted	training on the Code of Conduct	, safety, etc. ★20,200 employees participated	Ongoing initiative

among employees and create an environment in which employees foster compliance consciousness on their own.

	Compliance
	Environment (water quality and waste)
Courses started up to	Traffic safety
1130al 2014	Japan's Personal Information Protection Law
	Compliance hotline
	Prevention of bribery
	Insider trading regulations
Courses established	Copyrights
in fiscal 2015	Japan's subcontracting law
	Sexual harassment
	Abuse of power in the workplace, etc.
_	

#### Example Topics of e-Learning Materials

† Provided to all employees. Additional courses are under consideration.

#### **Checking and Monitoring Compliance**

In order to monitor the status of compliance, we request internal departments and Toyota Industries Group companies in and outside Japan to perform a compliance self-assessment. If any items are found to be insufficient in a self-assessment, Toyota Industries' responsible department in charge of legal compliance will provide support for improvement through auditing and other activities.

We also operate a compliance hotline that allows employees and their families to seek advice on compliancerelated matters without being exposed to negative consequences, as well as to ensure early discovery and the prevention of issues. This compliance hotline is cited in the Toyota Industries Corporation Employee Code of Conduct, and we also create leaflets and posters to inform our employees of the service.

## Management of Confidential Information

#### **Basic Perspective**

We recognize that the personal information of customers, employees and business partners as well as information concerning our technologies and sales activities are assets that need to be protected. Accordingly, we are making our utmost efforts to safeguard confidential information and strengthen its management as one of the CSR areas.

#### **Implementation Structure**

Toyota Industries has set up the Information Security Subcommittee (led by a director in charge of general administration<sup>\*1</sup>) as a subordinate organization to the CSR Committee to promote proper management of confidential information, taking appropriate actions against the leakage of confidential information and complying with the Unfair Competition Prevention Act and the Act on the Protection of Personal Information.

To thoroughly implement the initiatives adopted by the subcommittee, we appoint information security managers<sup>\*2</sup> and information security administrators<sup>\*3</sup> at each department. We strive to raise awareness about information security among their staff by holding workplace meetings and conducting self-checks regarding their information security practices.

#### Activity Examples

#### Activities up to fiscal 2014

#### Activities by Toyota Industries

- Reviewing rules for management of confidential information
- Rank-based group education
- Restrictions on taking photographs on company premises
  Attaching a security cable with a lock to all PCs to prevent unauthorized removal off the premises
- Restricting the copying of electronic data on recording media
- Monitoring email correspondence
- Activities in collaboration with other Toyota Group companies
- "All Toyota Information Security Awareness Month" activities in May and October to raise employee awareness and conduct auditing by checking off-the-premises removal of personal computers and recording media

#### New activities in fiscal 2015

- Requiring employees to sign a confidentiality agreement upon retirement
- Reinforcing checks on the history of electronic data being taken off the premises upon retirement, etc.

Our consolidated subsidiaries in and outside Japan also appoint respective information security managers and information security administrators. We have also developed common guidelines concerning management of confidential information and follow up on their activities on a periodic basis.

\*1: As of March 31, 2015 \*2: Head of each department

\*3: A person within the department, appointed by the head

#### Risk Management

#### **Basic Perspective**

Based on the Basic Policies for the Establishment of an Internal Control System in compliance with the Corporation Law of Japan, Toyota Industries is working to strengthen regulations and a structure to promote risk management. We regard the following aspects as the basics of risk management and implement initiatives accordingly.

- Incorporating measures to prevent and reduce potential risks into daily routines and following up on the progress of implementation
- (2) Ensuring quick and precise actions to minimize the impact on business and society when a risk becomes apparent

#### **Implementation Structure**

Business divisions and other departments at the Head Office develop and promote annual action policies that integrate measures to prevent and control risks related to quality, safety, the environment, personnel, export transactions, disasters and information security. Progress is assessed and followed up by each functional management entity such as the CSR Committee and the Environmental Committee. At the same time, functional departments at the Head Office such as those responsible for quality, safety and the environment formulate rules and regulations and manuals from a Group-wide perspective, including consolidated subsidiaries. By confirming and following up on the progress through operational audits and workplace inspections, they provide support for raising the level of risk management at each business division and consolidated subsidiary.

We have also formulated the Crisis Response Manual, which defines our initial response to a problem or a crisis. This manual lays out basic rules to be followed when a risk becomes evident and a problem or crisis occurs. The aim is to ensure quick reporting to top management, perform an accurate assessment of the impact on society and business activities and minimize damage through appropriate actions.

During fiscal 2015, we conducted a review of the manual to enforce more Group-wide efforts. Specifically, the review included clarifying responsibility and authority between Toyota Industries and its Group companies based on the assumption that a problem or crisis occurred at a Group company.

#### **Response to Possible Major Earthquake**

We consider the occurrence of a major earthquake in Japan as one of the most significant risks. Since fiscal 2011, we have been implementing disaster prevention measures that focus on three basic policies, namely placing maximum priority on human life; placing top priority on the recovery of local communities; and ensuring the quickest possible recovery. Furthermore, we divide these measures into the three categories of "precautionary, pre-disaster mitigation," "initial response to be followed immediately after the disaster" and "restoration of production," and are respectively making Company-wide efforts.

In fiscal 2015, based on the results of a review of our efforts in the previous fiscal year, we conducted disaster drills in more realistic settings. We intend to continuously upgrade our activities.

#### **Disaster Prevention Structure**

We have been reinforcing our disaster prevention structure to enable smooth transition from the initial response stage to the production restoration stage.

The Disaster Prevention Response Headquarters, led by the executive vice president and consisting of representatives from the functional departments at the Head Office, is responsible for collecting information from plants and other relevant parties and making Company-wide decisions based on the information collected.

#### Disaster Prevention Structure



## Efforts to Cultivate Human Resources through Training

#### 1. Training at Disaster Prevention Response Headquarters

We conduct simulation training in which employees collect information on damages to both inside and outside the company premises, swiftly make decisions and disseminate these decisions throughout Toyota Industries.

During fiscal 2015, assuming the occurrence of a

disaster during nighttime and on a weekend or holiday, we provided training to members selected from the functional departments who live close to the Head Office.



Disaster response meeting

2. Training at Plant Response Headquartersa) Walk-Through DrillBased on the standard response procedures formulated by

each plant, we conduct genchi genbutsu (go and see for

yourself) drills to confirm supply storage locations and usage procedures.

Members of each Plant Response Headquarters work to enhance our response to disasters by identifying points that require improvement or particular attention.



Confirming procedures to activate an emergency power generator

#### b) Tabletop Exercise

We provide training to the head (plant manager) and members of each Plant Response Headquarters to ensure that we promptly make an initial response and offer support to local communities in case of a disaster. In fiscal 2015, in

addition to drills for enabling quick disaster response, we held discussion sessions on the theme of "thinking on your own" to raise awareness of each member for disaster prevention.



Checking internal disaster damage information

#### 3. Training for Restoration a) Power Restoration Drill

Each plant has developed procedures to restore power supplies, including electricity and gas, which are essential in restoring production activities. Starting from fiscal 2015,

each plant conducts genchi genbutsu training on a periodic basis. Through the training we are identifying problems and making improvements to step up our efforts to ensure quick restoration activities.



Drill to restore a primary power source

#### b) System Restoration Drill

The e-Lab, responsible for managing Toyota Industries' data servers, has created procedures to restore critical data after a disaster. We conduct restoration drills jointly with Toyoda High System, Incorporated, a consolidated subsidiary engaged in development and operation of information infrastructures and systems, and work to improve our readiness for quick restoration.

#### 4. Training for Identifying Disaster Damage

Starting from fiscal 2014, we repeatedly conduct drills jointly with our affiliated companies and suppliers in order to familiarize them with the use of IT tools to quickly identify the damage status during a disaster. 02000 0 00 00

# **Our Efforts toward the Creation of a Hydrogen-Based Society**

Energy demand and consumption are expected to increase on a global scale as the world economy continues to grow, driven by economic expansion in emerging countries. This will entail greater consumption of petroleum and other fossil fuels, and reducing the resulting greenhouse gas (GHG) emissions is becoming an issue of increasing significance.

One promising solution to this issue is hydrogen. Hydrogen is present on earth in virtually inexhaustible quantities and can be produced in many ways. We can expect a sustainable, stable supply of hydrogen into the future.

Hydrogen can also compensate for certain drawbacks of electricity as it can be transported and stored in a gaseous, liquid or solid form. As such, the Japanese government, local governments and industry work jointly and extensively to utilize and spread the use of hydrogen.

Toyota Industries, in promoting innovations of environmental and energy technologies based on the 3Es (Energy, Environmental protection and Ecological thinking), has been focusing on hydrogen energy and accelerating the development of fuel cell technology.

This special feature highlights our efforts to date in creating a hydrogen-based society.

.........

ITTEREFERE .......... ..........

3

..........

Electric ca

air-conditionin

compresso

### **Our Products to Support "MIRAI,"** the World's First Mass-Produced **Fuel Cell Vehicle**

The MIRAI is the world's first mass-produced fuel cell vehicle (FCV) released by Toyota Motor Corporation (TMC). It has drawn much public attention as an ultimate eco car that emits only water and no CO<sub>2</sub> while in motion. At its core are components developed by Toyota Industries, such as an oxygen-supplying air compressor and a hydrogen circulation pump, playing crucial roles and supporting the driving performance of this next-generation vehicle. (See page 28 for details.)



0 0

verter for



### **Use of Fuel Cell Technology in** Lift Trucks

Many lift trucks operate at various logistics sites across the world, including factories, airports, seaports, warehouses and market sites. Now, these trucks are also required to demonstrate greater environmental performance along with improved functionality and operability. Our fuel cell (FC) lift trucks currently under development hold great promise as next-generation lift trucks that can satisfy both of these requirements. (See page 29 for details.)

Use hydrog

LNG

Transport hydrod

Fuel cell vehicle

Store hvdroaer

Produce hydroae

00

### Notional Image of a Future Hydrogen-Based Society





FC lift truck operating outdoors at Kansai International Airport (feasibility test)

#### Oxygen-Supplying Air Compressor and Other Toyota Industries Products Used in the MIRAI

#### **Development of Crucial Components to Support the Fuel Cell System, an FCV Core**

The Toyota FCV MIRAI runs on electricity generated from hydrogen and oxygen and produces no exhaust emissions or CO<sub>2</sub> when driven. This next-generation vehicle, which delivers both superior environmental performance and the pleasure of driving, has been equipped with crucial components developed by Toyota Industries.

#### **Oxygen-Supplying Air Compressor to Support Driving Pleasure**

The MIRAI offers smooth driving performance, excellent acceleration from startup and a cruising range of approximately 650 km in one hydrogen charge. These features are supported by our oxygen-supplying air compressor, which takes in and compresses air and feeds oxygen required to generate electricity into the fuel cell. Based on a range of technologies we have cultivated in the development of car air-conditioning compressors, we adopted the world's first six-lobe helical root-type rotor and attained high air compression efficiency in the idling period and during acceleration.

An FCV is a type of electric vehicle that runs on electricity generated using hydrogen as fuel, and a high level of operational quietness is required for its components when the vehicle is in motion. Our development efforts thus concentrated on achieving exceptionally high operational quietness while at the same time creating sound that evokes the stirring takeoff of acceleration. We have contributed to the delivery of driving exhilaration, going a step beyond simply offering an environmentally excellent vehicle.



Electricity + wate

C stack

Electricity + wate

FC stack

(electricity

neration unit

as the water generated in the FC stack. However, increasing the amount of water to be circulated by the pump means a larger quantity of water remains within the pump when the vehicle comes to a stop. This water freezes at extremely low temperatures and hinders the start of the electricity generation process. We modified the internal structure of the pump to improve the system's ability to start operation at lower temperatures and contributed to the elimination of a humidifier.

supplies air into the fuel cell

Water discharge (H2O)



Oxygen-supplying air compressor

#### **Newly Developed Hydrogen Circulation Pump to** Help Reduce Size and Weight of the Fuel Cell **System**

Toyota Industries' hydrogen circulation pump contributes to the reduced size and weight and greater efficiency of the fuel cell system.

The FC stack, a unit to generate electricity, produces electricity more efficiently in a wet condition. For this reason, a humidifier was installed in a conventional fuel cell system, making size reduction difficult. In order to remove the humidifier from the system, we decided to shift its role to a hydrogen circulation pump, which circulates a portion of hydrogen that did not undergo a chemical reaction as well



Hydrogen circulation pump

#### For Achieving Even Greater FCV Performance

Our excellence stems from our compression-related expertise accumulated in the Car Air-Conditioning Compressor Business and from our technological capabilities for size and weight reductions, fuel savings and machining. Based on this technical superiority and our total strengths resulting from our involvement in a diverse range of businesses, we closely collaborated with the Electronics Division and succeeded in developing crucial components for FCVs.

Looking ahead, we will accelerate development of fuel cell technology to contribute to the enhancement of the product appeal of FCVs.

#### Accelerating Development of FC Lift Trucks to Enable Eco-Friendly Logistics Operations

Circulates a portion of hydrogen

that did not undergo a chemical reaction and the water generated

Hydrogen

circulation pump

Hydrogen tank

the FC stack

## Initiatives for Achieving Practical Application of Fuel Cell Technology in Lift Trucks

In the Materials Handling Equipment Business as well, we are engaging in development of next-generation lift trucks that can simultaneously offer high environmental and economic performance, while continuing to seek higher environmental performance in internal-combustion and electric lift trucks.



Hydrogen

Lift trucks are used not only outdoors but also in such indoor logistics sites as warehouses and factories. Their indoor use makes superior environmental performance and quieter operation all the more important. Leveraging the technologies and know-how accumulated in the field of lift trucks, we are carrying out R&D of FC lift trucks that offer high environmental as well as economic performance.

(H2)

We believe that such FC lift trucks have the potential to generate a range of benefits as follows.

- 1) FC lift trucks realize excellent environmental performance, as their operation only generates water but emits no CO<sub>2</sub> or substances of concern, thereby contributing to a cleaner and more comfortable logistics environment.
- 2) Hydrogen refueling just takes about three minutes. allowing longer continuous uptime without battery charging or replacement and thus enabling a significant improvement in operational efficiency.
- 3) Not having to replace the battery eliminates the need for a storage space and charging equipment, thereby saving indoor space.
- 4) Equipped with external power supply functionality, FC lift trucks can be used as a mobile electricity generator to power electric tools during ordinary times and as an emergency power source in case of a disaster-induced power outages.

Accelerating Efforts for the Creation of a Hydrogen-Based Society As a technology to reduce CO<sub>2</sub> emissions and respond to energy diversification, the use of fuel cells has been expanding in automobiles as well as for residential applications (ENE-FARM fuel cell system). However, there are still a number of issues to overcome before their practical use can spread on a full-fledged basis, which include reducing costs, improving reliability, establishing an infrastructure and lowering retail prices of hydrogen fuel.

Toyota Industries, with its total strengths spanning diverse business fields, will accelerate its efforts toward the creation of a hydrogen-based society by making maximum use of resources available within the Toyota Industries Group and capitalizing on a pool of technology and experience accumulated to date.

#### Improving Reliability of FC Lift Trucks through **Feasibility Tests**

We have been conducting feasibility tests in order to raise the reliability of FC lift trucks and achieve their early application in practical fields.

We participated in the Kitakvushu Smart Community Project jointly undertaken by the Ministry of Economy. Trade and Industry and Kitakyushu City and carried out a feasibility test of our FC lift trucks for two years from 2012. During the test, we operated FC lift trucks equipped with a compact and highly efficient lift truck fuel cell system jointly developed with TMC at the Kitakvushu Plant of Tovoda Gosei Co., Ltd. and worked to reduce CO<sub>2</sub> emissions and attain the leveling of energy consumption.

In addition, we have been participating in the "Hydrogen Grid Project" taking place at Kansai International Airport. In 2015, we started collecting data on the operations and effectiveness of "Well to Wheel\*" CO<sub>2</sub> emissions reduction by operating the same FC lift truck used in the Kitakyushu project under different usage conditions. Moreover, we have developed a new practical use lift truck model fitted with the same fuel cell used in the Toyota MIRAI FCV as a means to achieve better reliability and durability as well as lower costs.



FC lift truck operating in a warehouse (feasibility test)



\* From extraction of fuel raw materials to operation of lift trucks

Refueling with hydrogen

#### Working from Indoor Logistics toward the **Creation of a Hydrogen-Based Society**

Creating a hydrogen-based society requires an appropriate infrastructure, including hydrogen stations. Such an infrastructure is easier to set up for lift trucks than FCVs because lift trucks usually operate within a limited area, such as in a factory. Through the development and use of FC lift trucks, we aim to promote the establishment of the required infrastructure within an airport or a factory and contribute to the creation of a hydrogen-based society by capitalizing on our experience in the field of indoor logistics.

## Special Feature 2

# Offering New Clean Diesel Engines with Significantly Enhanced Environmental Performance to Customers around the World

Sustainable growth of the global automobile market is expected to continue primarily in emerging countries. At the same time, environmental regulations are increasingly becoming more stringent in both developed and emerging countries. In response, there is a growing demand for diesel engines that feature superior fuel efficiency and emit less CO<sub>2</sub>. Amid such conditions, Toyota Industries' Engine Division has worked closely with Toyota Motor Corporation (TMC) in the diesel engine business in various areas, including development, production engineering and production.

In this special feature, we introduce the initiatives undertaken for the development and production of a new diesel engine, which simultaneously realizes superior power performance and environmental performance, as well as a turbocharger (hereafter, turbo) that plays a significant role in the enhancement of these performances.



#### Participating in the Launch of TMC's New **Environment-Conscious Diesel Engines from** the Development Stage

Leveraging long-accumulated diesel engine technologies, we participated in the development of the GD diesel engines (1GD-FTV and 2GD-FTV), successor models of TMC's mainstay KD engine. In June 2015, our Higashichita Plant in Aichi Prefecture commenced production of the 1GD-FTV, a 2.8L direct-injection turbo diesel engine fitted on the Land Cruiser Prado and the Hilux that are marketed in Japan and Thailand, respectively.

The GD diesel engine, together with the 2GD-FTV 2.4L direct-injection turbo diesel engine, is fitted on approximately 70% of TMC's diesel-powered vehicles, and was developed in response to needs for cleaner engines both in developed countries where more stringent emissions standards are being enforced and in emerging countries where emissions standards are expected to be strengthened. The newly developed GD diesel engine adopted next-generation advanced thermal insulation diesel combustion that uses Thermo Swing Wall Insulation Technology (TSWIN)\*1 for the first time in the world as well as the turbo for which we participated in the development. Together, these two features enable maximum thermal efficiency of 44%, one of the highest in the world. Compared with the KD diesel engine, the GD model offers significantly enhanced environmental performance, such as an approximately 15% reduction in CO<sub>2</sub> emissions at maximum. In terms of power performance, the starting torque and acceleration response have been dramatically improved. Further, the adoption of the urea Selective Catalytic Reduction (SCR)\*2 system, a TMC first, and other features clear Euro 6, the world's most stringent emissions standard, as well as Japan's 2010 emissions standards and other regulations.

\*1: Combustion improvement technology to reduce cooling losses during combustion \*2: Technology to neutralize nitrogen oxides in emission gases using urea

#### **Toyota Industries' Engine Business Possessing a History of Innovation and** Challenges

Toyota Industries entered the Engine Business in 1953. Production expanded from automotive gasoline engines to automotive diesel engines and subsequently to engines for industrial use, including lift trucks, by applying the technologies for automotive engines. We have thus steadily broadened our scope of the Engine Business.

At present, we produce such automotive engines as KD diesel engines, which are fitted in TMC's Innovative International Multi-purpose Vehicle (IMV) series; VD diesel engines adopted in the Land Cruiser and other vehicles; and AR gasoline engines installed in the RAV4 and other vehicles. For industrial use, we also produce Toyota 1KD diesel engines, Y gas/gasoline engines and other engines and fit them in our lift trucks and other industrial vehicles.

Among these, we play a particularly major role in the development and production of TMC's diesel engines, contributing to their production of appealing diesel-powered vehicles by tapping our strengths in terms of development and production aspects such as the development of clean, fuel-efficient and high-performance engines as well as highmix low-volume production through flexible production lines.

#### **New Engine Meeting the Globally Rising Expectations for Clean Diesel Engines**

While automobiles are becoming increasingly electrified, as exemplified by hybrid vehicles and electric vehicles, in Europe diesel-powered vehicles have long been highly appreciated for their effectiveness in countering global warming because they are fuel efficient and produce less CO<sub>2</sub> emissions compared with gasoline-powered vehicles. Also, in terms of power performance, diesel engines could

(Thousand units) 800 Gasoline Diesel 700 600 500 400 300 200 100 (FY) 54 61 66 71 76 81 86 91 96 01 06 11 15

\*Including lift truck engines and excluding CKD



Newly developed GD diesel engine

be regarded as a power train that can meet the high standards required for installation in TMC's Land Cruiser and IMV vehicles.

For the development of the GD diesel engine, we drastically revolutionized the engine structure not only to respond to emissions standards in Europe, Japan, Asia, South America, Oceania and other regions but also to realize superior performance in such properties as fuel efficiency, low speed torque, quiet operation and reliability. As for the turbo fitted on the engine, respective members of the engine and turbo development projects shared targets and undertook tasks through close communication on each other's development status.

Primary concerns regarding diesel engines include noise and vibration as well as particulate matter (PM) and other substances of concern included in emissions. The GD diesel engine, however, not only offers a powerful driving experience representative of diesel-powered vehicles but also features improved environmental performance, and we expect this engine will demonstrate excellent competitiveness in the future global market.

#### **Applying Our Strengths Such as Technologies** and Know-How Cultivated in the Compressor Business to the Development of the Turbo, a Key Component

More often than not, an engine's power performance and environmental performance are determined by the capabilities of the turbo installed inside the engine. For this

#### Comments from Engine Developers (Engineering Dept., Engine Div.)



Taku Ishikawa Working leader

We set a technically challenging goal for the development of the GD diesel engine in order to significantly improve performance, with all relevant departments such as development, quality assurance and production engineering working together as one team.

For example, we aimed to reduce the number of bolts to tighten one cylinder from six to four in order to realize the optimum design of the port, but that entailed the problem of inadequate sealing of the cylinder head. Also, improving engine performance gave rise to such issues as thermal load and stress on the cylinder head, requiring a review of the structure and materials as well.

With the difficultly of such challenges, all the related departments on the same floor gathered across boundaries and worked closely to surmount these issues, which gave us tremendous confidence in ourselves.

#### **Toyota Industries' Engine Production**



#### Comparison of GD Engine and KD Engine

reason, improvements in turbos are indispensable as emissions standards become ever more stringent worldwide. Naturally, our endeavor to develop the world's best diesel engines entailed the development of the world's best turbo.

However, four leading turbo manufacturers already account for more than 80% of the global market, and it was considered that there was no room for new entrants. Undaunted by this disadvantage, we participated in TMC's project to develop diesel engine turbos for automobiles and successfully commenced production in February 2015.

For the launch of the turbo, we drew upon the strengths of each of our diverse businesses, including close cooperation with the GD diesel engine development team, know-how cultivated in the Car Air-Conditioning Compressor Business as well as the experience in 2013 to install a new internal-combustion lift truck with our first industrial turbo developed and produced in-house.

In the turbo development, a particular focus was placed on realizing lighter weight and a more compact size while achieving high efficiency at the same time. In order to efficiently reroute exhaust energy back into the engine, we reviewed the basic framework and materials, changed production methods and incorporated various ingenuities. In addition, since the pleasure of driving is an essential element



of passenger cars, we undertook development while seeking advice from the engine development team how to "spice up" the turbo, which enabled us to gain yet another invaluable experience and knowledge.

Our development team was responsible primarily for improving the variable nozzle vane, which significantly contributes to better performance of the turbo, and reviewing the aerodynamic design. These achievements made it possible to realize the world's top level in terms of compact size, high efficiency and wider flow range of the turbo. In the commercialization stage of the turbo, we launched a Company-wide project and leveraged our broad-ranging technologies and know-how, including those of the Engine Business as well as compression and machining technologies of the Car Air-Conditioning Compressor Business. In addition, we applied technologies accumulated by the Engine Business and completed an optimum turbo that provides superior cost performance for the GD diesel engine.

An even more meticulous machining precision is required for the production of turbos compared with engines. As such, we sought the cooperation of our Production Engineering Development Center to enable in-house production. The center has been responsible for the development of production equipment for car airconditioning compressors, which requires extremely precise machining technologies, and the collaboration enabled mass production of high-quality, high-performance turbos.



We spent enormous efforts in the design of the variable nozzle, which affects the basic performance of the new turbo. The nozzle plays a major role in adjusting the flow of emissions to the rotating wing depending on the operating condition of the engine and in realizing high efficiency of the turbo. However, optimizing the nozzle for the engine itself was a big challenge. While changes in the turbo design would have an impact on the engine system, changes in the engine would affect the turbo structure. To address this issue, we exhaustively discussed matters by leveraging the advantage of developing both the engine and turbo, so we all had a great sense of accomplishment when we were able to come up with the best possible solution. Building on this experience and knowledge, we will aim for the development of next-generation turbos, including those for materials handling equipment.



Comments from Turbo Production Engineer

The most difficult challenge in the production of the new turbo was balancing high quality and low cost in addition downsizing. To provide products whose quality is competitive with leading turbo manufacturers, we established a production line by utilizing our manufacturing expertise and incorporating new ideas. Particularly crucial was the machining of the wing, for which members from such departments as development, production engineering, production and quality assurance worked as a team to achieve high machining precision. By leveraging our past experience in the production of lift truck turbos, we repeatedly discussed with members of the development department how to balance machining precision with production efficiency, thus successfully establishing a more efficient production line.

#### Creating a Structure to Deliver Appealing **Diesel Engines to Customers around the World**

In November 2014, we announced the agreement of the gradual integration of development and production of diesel engines, which have been carried out jointly with TMC. The aim was to efficiently strengthen the competitiveness of diesel engines by consolidating functions undertaken by both companies and optimally allocating resources.

We will strive to offer appealing automotive and industrial diesel engines that possess even more superior quality, including higher environmental performance, by promoting development efficiency, bolstering cost competitiveness, further enhancing specialization of the Engine Business and honing 3E (Energy, Environmental protection and Ecological thinking) technologies.

We will aim for the growth of our Engine Business by solidifying the development and production foundations built by the launch of new diesel engines and turbos, thereby contributing to the realization of an environmentally friendly society.

Assignment of Automotive Diesel Engine Production in the Toyota Group



\* TMIP Joint venture in Poland established by TMC and Toyota Industries



Materials Handling Equipment

Materials Handling Equipment

Logistics

Automobile

Vehicle / Engine / Car Air-Conditioning Co

**Textile Machinery** 

/ Logistics	<b>⊳36-43</b>
	⊳ 36-41
	<b>⊳ 42-43</b>
ompressor / Car Electronics	<b>⊳ 44-49</b>
	⊳ <b>50</b>

## **Materials Handling Equipment / Logistics**

## Materials Handling Equipment

As a market leader with extensive knowledge of global logistics needs, Toyota Industries provides a range of materials handling equipment, mainly lift trucks, and logistics solutions to customers.



#### Business Overview in Fiscal 2015

Materials Handling Equipment Sales

In the materials handling equipment market, growth continued globally on the back of strong sales in Japan as well as in North America, Europe and China. Based on the conditions of respective markets, Toyota Industries augmented its production and sales activities and launched new products. Sales of our mainstay lift trucks expanded in Japan, North America and Europe. As a result, unit sales for fiscal 2015 increased 23,000 units, or 12%, to a total of 222,000 units over the previous fiscal year. The increase in unit sales of lift trucks, coupled with steady sales of lift truck attachments and aerial work platforms, pushed up net sales by ¥115.7 billion, or 14%, to ¥924.9 billion.

#### **Global Business Development Led by Toyota** Material Handling Group (TMHG)

As a market leader in the materials handling equipment and logistics fields, Toyota Industries assists customers worldwide in attaining greater logistics efficiencies by delivering logistics solutions optimally tailored to their specific needs.

Under the TMHG management structure, we engage in business under the TOYOTA, BT, RAYMOND and CESAB brands. Mutually utilizing the sales and development strengths of each brand, TMHG is promoting business expansion on a global scale.

#### **Business Activities in Fiscal 2015**

The lift truck market in 2014 posted strong sales mainly in Japan, North America, Europe and China, In Japan, we worked to expand sales in the manufacturing industry, in which there has been an upswing in capital investment, as well as in such industries as transportation, warehousing and construction. In North America and Europe, we sought to respond to diverse customer needs by offering new products and services in addition to implementing a range of sales promotion initiatives. Regarding emerging countries, we strived to reinforce our sales structures in China, ASEAN countries and the Middle East, where growth remains strong, while seeking to increase the competitiveness of our locally manufactured lift trucks.

As one response to the expected continued growth in markets in emerging countries, Toyota Industries reached an agreement to acquire the lift truck business of Tailift Co., Ltd., a Taiwanese developer and manufacturer of lift trucks, and made it into a consolidated subsidiary in August 2015. Tailift mainly handles products matched to needs in emerging countries, and the two companies complement each other in terms of sales territory and product range. Capitalizing on Tailift's strengths, we aim to achieve further growth in emerging countries where market expansion is expected.

In addition, with the aim of strengthening our sales finance operations for materials handling equipment, we concluded an agreement in October 2014 to acquire the materials handling equipment sales finance operations of Toyota Motor Credit Corporation (TMCC), a U.S. finance subsidiary of Toyota Motor Corporation (TMC).

TMCC has long-accumulated expertise in sales finance for materials handling equipment, an excellent management and operational system and structure covering credit and residual value risks, and a broad lineup of financial products. We will leverage these strengths in bolstering our sales finance business and extend our reach globally in the future.

As for the Materials Handling Engineering Business, which is represented by automated storage and retrieval systems and automatic guided vehicles, we are working to meet a wide range of needs by providing consulting services for customers' logistics-related issues as well as assisting them with installation and operation of equipment. In the e-commerce industry, which has been growing rapidly reflecting recent changes in people's lifestyles, we have been proactively making various proposals and successfully acquiring new orders.

In the field of aerial work platforms, sales of Aichi Corporation, which possesses the top brand in this field in Japan, were negatively affected by a cutback in capital investment by principal customers in the country such as the electric power and telecommunication industries. On the other hand, sales in the leasing industry grew in line with rises in construction demand as well as demand for social infrastructure maintenance work. On the whole, sales of

aerial work platforms increased, and Aichi posted sales exceeding the previous fiscal year's level. The company's profits also increased year-on-year as a result of its cost-cutting efforts and profit improvements at its subsidiaries in China.



Aichi Corporation's aerial work platform



#### Toyota Material Handling Group Brands



Toyota Industries Report 2015

36

Handling Equipment / Logistics

#### Launching New GENEO Mainstay Lift Trucks

In 2014, the Japanese lift truck market showed steady growth. Toyota Industries sought to increase sales in the manufacturing industry, in which there has been an upswing in capital investment, including manufacturers of transportation equipment. At the same time, we proactively promoted sales of the new GENEO internal-combustion lift trucks released in July 2014. As a result, unit sales in fiscal 2015 increased 5% year-on-year to 39,000 units. Toyota Industries achieved a record-high share of 47.0% in the Japanese market, topping the previous year's record for the third consecutive year in 2014, and maintained its top position\*2 for the 49th consecutive year.

\*2: Surveys by Japan Industrial Vehicles Association and Toyota Industries Corporation,



New GENEO (released in July 2014) Received a 2014 Good Design Award, German Design Award 2015 Special Mention, iF Design Award and 2014 Best 10 New Products Award (sponsored by The Nikkan Kogyo Shimbun, Ltd.)

#### **Demonstrating Product Appeal through an** Exhibition

Toyota Industries participated in Logis-Tech Tokyo 2014 held in September 2014 to showcase its advanced environmental technology and extensive product range, including the new GENEO lift trucks, fuel cell (FC) lift trucks and lithium-ion lift trucks, of which the latter two are under development. On the main stage, we presented case examples of logistics solutions to offer suggestions for increasing logistics efficiency.



Toyota Industries booth at Logis-Tech Tokyo 2014

## Initiative to Achieve Greater Customer Satisfaction

To further upgrade services to customers, we held the 3rd Service Skills Contest in November 2014, in which a service representative from the 40 dealers across Japan participated. Through this contest, we aim to improve our servicing capabilities and raise awareness among service staff in order to provide services that bring even greater satisfaction to customers.



Service Skills Contest

#### **Starting Feasibility Test of FC Lift Truck**

In February 2015, Toyota Industries started a feasibility test of its FC lift truck in the international cargo area of Kansai International Airport. This test is conducted as part of the "Hydrogen Grid Project," a pilot project undertaken by New Kansai International Airport Co., Ltd. It aims to become Japan's first airport to make extensive use of hydrogen energy at airport facilities. By participating in this feasibility project, we will promote the development of practical applications of FC lift trucks to facilitate their broader use. (See Special Feature 1 on pages 26–29 for details.)



FC lift truck

#### **North American Market**

#### **Maintaining Top Market Share**

The North American lift truck market expanded in 2014 on the back of a strong economy. Toyota Industries remained the market share leader\* in 2014 with combined unit sales of TOYOTA and RAYMOND brands of approximately 73,000 units, up 10% from the previous fiscal year.

Toyota, as a full-line supplier of lift trucks, remained the market share leader\* for the 13th consecutive year, and Raymond continued to hold its number one\* market share position in narrow aisle electric lift trucks.

#### **Proactively Launching New Products**

Toyota expanded its product offering with its 8-Series Stand-Up Rider delivering improved performance, reliability and ergonomics with significantly less frequent service intervals. Toyota also unveiled an extended hand pallet truck line with specialty models to provide one of the most comprehensive offerings of pallet jacks in the industry.



8-Series Stand-Up Rider

Raymond also introduced the Raymond Courier Model 3010 center rider pallet truck and the Raymond Courier Model 3020 tow tractor automated lift truck. These automated lift trucks offer the flexibility to operate manually as a standard Raymond lift truck or scheduled to perform on their own depending on the customer's needs.



Center rider pallet truck

## Earning Recognition for TOYOTA and RAYMOND Brands

In fiscal 2015, Toyota Industrial Equipment Mfg., Inc. (TIEM/ Columbus, Indiana), a consolidated subsidiary that has manufactured TOYOTA-brand lift trucks since 1990, marked a manufacturing milestone with the cumulative production of its 500,000th lift truck.



500,000th lift truck celebration

For the fourth consecutive year, Toyota ranked number one in such areas as fewest safety-related incidents and most affordable to maintain in terms of safety in a study conducted by the Peerless Research Group on Lift Truck Safety. In another study by the same group, Toyota lift trucks ranked number one for the 10th year in a row for quality, value and lowest cost of ownership.

Raymond has adopted the Toyota Production System (TPS) and continuously carried out improvement activities taking a proactive approach. In fiscal 2015, in recognition of these activities, *IndustryWeek* named Raymond a 2014 Best Plant Award winner for the plant and headquarters in Greene, New York. In addition, Raymond received a number of recognitions from various organizations for its efforts in job creation, human resources development, environmental commitment and other areas.

#### Aiming for Industry-Leading Product Offerings and Customer-Oriented Solutions

The North American lift truck market is expected to show continued growth in 2015. We aim to maintain our leadership position in North America by continuing to provide customer-oriented solutions and offer leading TOYOTA- and RAYMOND-brand products that balance environmental performance and productivity and contribute to raising customers' logistics efficiency.



Raymond celebrated the 75th anniversary since obtaining the patent in 1939 for innovative products such as a hydraulic hand pallet truck. These innovations revolutionized the materials handling industry at that time. Raymond continues to this day to develop products under the banner of "innovation."

#### **European Market**

## Steadily Increasing Unit Sales in a Solid Market

Although European economies registered mild growth, the lift truck market expanded from the previous year. Amid these conditions, Toyota Industries posted sales of 68,000 units, up 16% from the previous fiscal year, and improved its market share.

#### Actively Introducing More New Products

Toyota Industries proactively launched a series of new products to meet various customer needs. In 2014, we introduced the Toyota Tonero, a 3.5- to 8.0-ton capacity diesel engine lift truck boasting high environmental performance thanks to its new engine. In addition to the conventional torque converter transmission, we added an electronically controlled hydrostatic transmission (HST) to our lineup. The Tonero HST, which makes the simultaneous operations of materials handling and driving easy, received a positive response from the market. As for the BT brand, we launched the BT Levio P-series of powered pallet trucks with exceptional operational and energy efficiency as well as the BT Reflex RRE B-series of entry-level reach trucks specifically designed for straight forward applications. In the solutions area, a new edition of the Toyota I\_Site system for



Tovota Tonero

truck and fleet management, which has earned high acclaim from customers, was released. The upgraded system enables distributors and customers to ascertain and manage themselves the operational status of each truck in real time using tablets and similar devices. We also provide the Toyota Service Concept (TSC) for unique, forwardthinking lifetime support, including dispatching service personnel and receiving orders for replacement parts online underpinned by our reliable technologies.



#### **Sales Promotion Initiatives**

Toyota Industries proactively attends various exhibitions to pitch its full-line products and excellent servicing capabilities directly to customers. In June 2014, we exhibited our rich lineup of products and logistics solutions at CeMAT Hannover in Germany.

Despite an unstable market situation in 2014. Tovota Material Handling Russia (TMH RUS), Toyota Industries' wholly owned sales subsidiary, carried out an array of customer-oriented sales expansion activities, which culminated in receiving a large order from a leading food retailer in Russia.

In the Czech Republic, we held a demonstration event and welcomed numerous participants, directly appealing our broad-ranging product lineup and logistics solutions. In this way, we carried out various local sales and marketing activities.



Product demonstration event in the Czech Republic

#### **Further Expanding Market Share in Europe**

Toyota Industries is committed to delivering high-guality materials handling products and services. At the same time, we will strive to further expand our market share in Europe by making proposals for logistics solutions closely optimized for each customer.

#### OPIC Т

#### **Receiving High Praise from External Organizations**

Our Toyota I\_Site and Toyota Traigo 80 were the big winners of the International Forklift Truck of the Year (IFOY) Award. The Toyota I\_Site is an intelligent fleet management system that provides support for improving the machine availability rate and facilitating safety- and environment-conscious operations, and the Toyota Traigo 80 is an electric lift truck reputed for reliable and energy-efficient performance. These products were comprehensively and highly evaluated in terms of innovative quality, technology, design, ergonomics, handling, safety, cost effectiveness, sustainability and other factors.

#### **ALOMA\*** and Chinese Markets

#### **Increasing Unit Sales through Proactive Sales** and Marketing Activities

Toyota Industries covers the ALOMA markets of Asia, Latin America, Oceania, the Middle East and Africa as well as the Chinese market. We are serving these markets with a lineup consisting of TOYOTA, BT and RAYMOND brands.

Even though there were disparities among countries and regions in 2014, unit sales in the ALOMA lift truck market as a whole were on par with the previous year. The Chinese lift truck market, however, registered growth. Through our efforts in implementing sales and marketing activities, annual sales in fiscal 2015 reached 42,000 units, an increase of 17% compared with the previous fiscal year.

\* ALOMA is a Toyota Industries term for Asia, Latin America, Oceania, Middle East and Africa

#### **Initiatives in Growing Markets**

In January 2015, to create added value for our Asian customers, the Asia Regional Office in Singapore, which had engaged in market surveys and supported marketing activities for distributors in Asia, was replaced with an officially established company, Toyota Material Handling Marketing Asia Pacific Pte. Ltd. (TMH-MAP). TMH-MAP will continue the functions of the regional office but also reinforce sales and marketing support to distributors in Asia, for example, by holding product training, supporting global key account business and helping with value chain enhancement.

In the Middle East, the regional office in Dubai has been supporting distributors in Africa and the Middle East from a warehouse truck perspective. In April 2014, the regional office began providing support for counterbalanced lift trucks as well. Through this expansion of functions, the regional office will serve as a stronger hub for distributors in the region, carrying out various tasks such as collecting market information and organizing regional conferences and training programs.



Regional conference in Dubai

In Brazil, Toyota Material Handling Mercosur Indústria e Comércio de Equipamentos Ltda (TMHM) commenced production of electric lift trucks from April 2015 to complement the already existing production of internalcombustion lift trucks. The enhancement of the product lineup will be a major enabler for responding broadly to customer demand while facilitating a greater presence in the Brazilian market.

In Australia, Toyota Material Handling Australia Ptv Limited (TMHA) is striving to ramp up sales activities. TMHA completed the project to cover the entire Australian region with fully captive sales, service and rentals branch operations in 2014. In addition, TMHA has started a rental finance service. TMHA will continually make efforts to meet customer needs not only by providing equipment but also by enhancing the value chain.

In China, Toyota Industry (Kunshan) Co., Ltd. (TIK) commenced production of 3.5- to 8.0-ton capacity 8-Series lift trucks in June 2014. These new internal-combustion lift trucks are not only sold in China but also exported to the ALOMA and European markets. TIK will further expand its role as a crucial supply base of TOYOTA-brand lift trucks. On the sales side, Toyota Industries will continue to enhance the sales structure of Toyota Material Handling (Shanghai) Co., Ltd. (TMHS) in its efforts to further strengthen sales and service networks in key regions.

#### **Carrying Out Sales Expansion Activities in** Markets with Potential for Sustainable Growth

The ALOMA and Chinese markets are expected to sustain growth for the foreseeable future. In this market climate. we will continue to promote sales expansion activities by providing products closely matched to local market needs, further improving after-sales services, creating an even more enhanced sales network and pursuing economic competitiveness in terms of product lifecycle.

In May 2014, Toyota Industries held a Sales & Marketing Conference in Hannover, Germany, with 88 representatives from Toyota, BT and Raymond distributors spanning 39 countries in attendance. The conference signified the launch of two new models, the BT Reflex S-series and BT Levio P-series. In addition, seminars and workshops were held to share the latest developments in products, services and technology solutions offered in the ALOMA markets. The conference attendees also received a guided tour of our exhibit at the CeMAT fair, confirming products and services through genchi genbutsu (go and see for vourself).



Sales & Marketing Conference

## Materials Handling Equipment / Logistics

## Logistics

Toyota Industries offers customers highly advanced, efficient logistics services to respond to their diverse needs, including consigned operation of distribution centers; land transportation services; cash collection and delivery and cash proceeds management services; and data storage, management, collection and delivery services.



#### **Business Overview in Fiscal 2015**

Both the logistics services business and the land transportation services business for automotive parts increased. As a result, net sales in fiscal 2015 increased ¥2.7 billion, or 3%, over the previous fiscal year to ¥98.0 billion.

#### Planning, Design and Operation of Distribution Centers

Toyota Industries operates distribution centers for various industries and customers. During fiscal 2015, operation of existing distribution centers generated a relatively steady logistics volume. In this environment, we strived to strengthen our profit structure through cost improvement activities undertaken at logistics sites based on the thinking embodied in TPS and simultaneously worked to enhance the level of services to customers.

With an aim of optimizing the entire supply chain of each customer's logistics, we continue our proactive sales activities by making proposals that leverage the maximum use of the Toyota Industries Group's resources in collaboration with the Materials Handling Engineering Business. In fiscal 2015, we started operating five additional distribution centers for customers mainly in the medical and pharmaceutical industries. In total, we now operate 18 distribution centers under consignment.

Looking ahead, we will continue to facilitate our proactive sales activities for both increasing orders from existing customers and acquiring new customers in industries having high growth potential.

#### **Land Transportation Services**

The Taikoh Transportation Group provides land transportation services under consignment from many automotive parts manufacturers. The group collects finished parts from manufacturers, compiles them by their



Taikoh Transportation Co., Ltd.'s land transportation services

destination and delivers to automakers "what is needed, when it is needed and in the quantity needed."

During fiscal 2015, favorable business conditions in the automobile industry, our principal customer, primarily generated a steady logistics volume in the transportation of automotive parts.

Under these circumstances, we continued to conduct various profit improvement activities, including the promotion of efficient cargo transport, while at the same time aggressively undertaking activities to ensure safe and environment-conscious operations.

We will continue to further reinforce our sales activities to capture new customers and, ultimately, to expand business operations.

#### High Value-Added Services Including Cash Collection and Delivery and Cash Proceeds Management and Data Storage, Management, Collection and Delivery

#### Cash Collection and Delivery and Cash Proceeds Management

Asahi Security Co., Ltd. provides cash collection and delivery and cash proceeds management services throughout Japan on a 24/7 basis to about 2,900 customers mainly in the retail sector, service industries, post offices and financial institutions.

In addition to cash collection and delivery services tailored to each customer's specific needs, Asahi Security offers comprehensive services that include management of gift certificates and accounting operations at customers' retail outlets. Furthermore, the company provides security services integrating the monitoring by security devices and dispatch of security guards on a 24/7 basis. By providing these comprehensive services, Asahi Security aims to become a unique, distinctive company in the primary field of cash collection and delivery and cash proceeds management services.

Asahi Security operates 19 cash collection and delivery centers and 14 logistics sites from Hokkaido to Okinawa Prefecture, thereby setting up a system to respond to customer needs throughout Japan. In fiscal 2015, the company reinforced its network by establishing new logistics



Asahi Security Co., Ltd.'s cash collection and delivery and cash proceeds management services

sites in Yamagata, Fukushima, Shiga and Wakayama prefectures.

At each business base, Asahi Security conducts regular training on its own as well as emergency training jointly with local police departments in order to provide safe and trusted services to customers.

#### Data Storage, Management, Collection and Delivery

Wanbishi Archives Co., Ltd. provides support to about 4,000 companies and organizations, including large financial institutions and government agencies, to ensure the security and efficient use of their information assets. Under its robust security structure, Wanbishi Archives offers a comprehensive range of services covering the entire lifecycle of critical information assets in electronic, paper or other forms, from storage and utilization to destruction. These services allow customers to reduce risks, achieve higher business efficiency, and ultimately, to focus on their core businesses.

In the wake of the Great East Japan Earthquake, there has been an ever increasing awareness toward placing importance on effective business continuity management (BCM), and Wanbishi Archives has undertaken various initiatives tailored to such needs. With the use of so-called big data beginning to become more pervasive and companies and organizations now becoming more conscious in terms of compliance and litigation, the volume of data handled by them has been growing at an explosive pace. While cloud services are gaining impetus owing to low initial costs, ease of use and flexibility as a means to protect such data, there has been a renewed interest in the use of fault-tolerant, cost-effective magnetic tapes for long-term data storage. Wanbishi Archives is responding to the need for ensuring the security of their information assets by adopting various data storage forms and technologies.

Outside Japan, Wanbishi Archives' subsidiary in China provides services to local companies as well as Japanese companies doing business in China. Capitalizing on its experience and know-how accumulated in Japan, Wanbishi Archives will continue to accelerate its efforts to capture business opportunities in growth markets.



Wanbishi Archives Co., Ltd.'s data storage, management, collection and delivery services

## **Automobile**

In the fields ranging from vehicle assembly to engines, car air-conditioning compressors and car electronics, Toyota Industries continues to meet the expectations and trust of its customers.



#### **Vehicle**

#### **Business Overview in Fiscal 2015**

In the automobile industry, despite the sluggish Japanese market, increased sales in China and North America and a recovery in Europe served to drive continued growth in the global market.

In fiscal 2015, an increase in sales of the RAV4 was offset by a drop in sales of the Vitz (Yaris outside Japan), and unit sales declined by 20,000 units, or 6%, from the previous fiscal year to 308,000 units. Net sales were down ¥8.0 billion, or 2%, to ¥459.0 billion.

#### Vehicle Sales



#### Highest-Level SEQCD to Contribute to Production of Attractive Toyota Cars

In recognition of Toyota Industries' comprehensive strengths in vehicle quality, delivery, cost and safety as the highest among all Toyota-affiliated automobile body manufacturers, from Toyota Motor Corporation (TMC) we have received an award for excellence under the Toyota Quality Control Award program for three consecutive years. In the face of the shrinking automobile market in Japan, we are further strengthening our already superior level of safety, the environment, quality, cost and delivery (SEQCD). We also are working to leverage our ability to quickly start up production and a flexible structure in terms of vehicle models and production volume to contribute to production in Japan of Toyota vehicles.

#### Plastic Glazing Panoramic Roof for the Prius $\alpha$ (Prius v in North America and Prius + in Europe)

Toyota Industries engages in production of a panoramic roof made of plastic glazing for the Prius  $\alpha$ , a hybrid vehicle released by TMC in May 2011. The roof is currently a standard feature of Prius + vehicles marketed in Europe.

This product retains the beautiful surface quality typical of a glass roof yet is approximately 40%\* lighter than its glass counterpart, improving vehicle fuel efficiency and thus contributing to the reduction of CO<sub>2</sub> emissions.

Toyota Industries will continue to develop attractive new products that leverage the distinctive characteristics of plastic glazing.

\* Survey by Toyota Industries Corporation

#### "Our Vitz and RAV4" Initiative for Enhancing Appeal of the Two Car Models

As the sole producer of the Vitz in Japan and with the aim of turning the vehicle into a long-selling series, Toyota Industries collaborates with TMC and its dealers to make various suggestions under the banner "Taking the Lead in Making Our Cars More Attractive." Similarly, to boost the appeal of the RAV4, we plan and develop special-edition vehicles that directly reflect the voice of our customers.



Overall victory in the Japanese Rally Championship

Through these endeavors, we seek ways to create more appealing and satisfying vehicles for customers worldwide.

At the same time, we also undertake activities to expand our customer base by enhancing the appeal of the Vitz through our support to motorsports events.

#### Development of Electric Vehicles (EVs) Integrating Energy-Saving, Electrification and Lighter-Weight Technologies

Toyota Industries also undertakes development of nextgeneration EVs based on the 3Es (Energy, Environmental protection and Ecological thinking). Rather than converting internal-combustion vehicles into EVs, which has been a widespread practice among automakers, we have created a dedicated platform that makes the most of the distinctive characteristics of EVs and have been conducting feasibility tests on prototype vehicles.

In the future, we will accelerate the development of EVs and propose new, EV-specific vehicle packages.

#### Engine

#### **Business Overview in Fiscal 2015**

Unit sales in fiscal 2015 declined 58,000 units, or 9%, from the previous fiscal year to 568,000 units due mainly to decreases in sales of KD diesel engines and AR gasoline engines. Net sales dropped ¥10.5 billion, or 5%, from the previous fiscal year to ¥192.0 billion.

#### Engine Sales



# **Business Activities**

#### Toyota Industries' Diesel Engines Highly Acclaimed by Customers Worldwide

Toyota Industries' diesel engines, fitted in a variety of Toyota vehicles sold around the world, have gained high market recognition for their cleaner emissions, greater fuel efficiency and higher performance. The V-type 8-cylinder VD diesel engine is installed in the Land Cruiser selling particularly well in Australia, Russia and the Middle East. As a successor model of KD diesel engines, we commenced production of GD diesel engines in June 2015. These engines, which are installed in TMC's Land Cruiser Prado and other vehicles, are equipped with a turbocharger, for which we participated in the development and started production in-house, and boast significantly higher performance.

(See Special Feature 2 on pages 30-34 for details.)



GD diesel engine

#### Developing Competitive Diesel and Gas/ Gasoline Engines in Non-Automotive Fields

Toyota Industries' engines are highly renowned for their excellent environmental performance in non-automotive fields as well. These engines are used for a wide variety of applications, including our lift trucks, and adopted by GHP\*1 manufacturers in Japan and CHP\*2 manufacturers worldwide.

We expanded our lineup of industrial engines with the addition of the Toyota 1KD industrial diesel engine, which is equipped with a turbocharger developed in-house, and the Toyota 1FS gas/gasoline engine in March 2013, followed in December 2013 by the Toyota 1ZS also equipped with a turbocharger developed in-house.

These three new engines offer downsized displacement compared with conventional models with equivalent output, which results in higher fuel efficiency, cleaner emissions and a reduction in size.

In June 2014, the Toyota 1KD received a Logistics

Environmental Technology Development Award in the 15th Logistics Environmental Awards program\*<sup>3</sup> sponsored by the Japan Federation of Freight Industries. In January 2015, GENEO lift trucks equipped with either the Toyota 1KD or Toyota 1ZS engine won a Best 10 New Products Award for 2014 sponsored by The Nikkan Kogyo Shimbun, Ltd.. These awards reflect the high recognition given to the environmental performance of our engines.

\*1: Short for gas heat pump; air conditioner driven by a gas engine

- \*2: Short for combined heat and power; co-generation system
- \*3: Award program to promote environmental conservation and environmental awareness in the freight industry and recognize organizations/companies and individuals which/ who have contributed to achieving sound industrial growth



Toyota 1KD industrial diesel engine

#### **Aiming to Bring Satisfaction to More Customers**

In November 2014, TMC and Toyota Industries agreed to gradually consolidate diesel engine development and production functions into the operations of Toyota Industries.

Prior to this decision, Toyota Industries has been carrying out development of next-generation automobile engines that can clear Euro 6 and other stringent emission standards, as well as engines for materials handling equipment and general purposes featuring greater fuel efficiency and lower costs. Taking this opportunity, we will step up our efforts to achieve shorter development cycles with improved efficiency in order to develop and produce diesel engines with greater competitiveness.

For our general-purpose engines, we will plan, develop and produce a lineup of products matched to customers' needs while actively promoting sales activities.

#### **Car Air-Conditioning Compressor**

#### **Business Overview in Fiscal 2015**

In fiscal 2015, unit sales of car air-conditioning compressors rose 3.84 million units, or 15%, over the previous fiscal year to 29.32 million units as a result of an increase in sales in North America and China despite a decline in sales in Japan. In January 2015, cumulative production in Japan exceeded 300 million units. Net sales rose ¥48.9 billion, or 18%, over the previous fiscal vear to ¥324.6 billion.



#### **Development Efforts Based on 3Es** (Energy, Environmental Protection and **Ecological Thinking**)

More stringent fuel efficiency standards have been enforced in North America, Europe, Japan and China, requiring automobiles to provide extremely high fuel efficiency performance.

Against this backdrop, in the field of car air-conditioning compressors to be fitted in internal-combustion vehicles, the need for fuel-efficient models is growing for both fixed- and variable-displacement type compressors. In North America, in particular, the shift from a fixed-displacement type to a variable-displacement type gained further momentum.

In response, we are concentrating on development of a variable-displacement type compressor with considerably greater fuel efficiency while also focusing on an optimum balance between performance and prices of fixed-

displacement type products targeting emerging countries. In the field of variabledisplacement type compressors, we developed the SES series that



6SES14 compressor (variable-displacement type)

simultaneously offers greater fuel efficiency and a reduction in weight, and it has been adopted by TMC in its Corolla, as well as by Daimler AG, General Motors Company (GM), Volkswagen AG and Hyundai Motor Company.

As for fixed-displacement type scroll compressors for light and compact vehicles, we developed the SCSE series and started supplying the product to Daihatsu Motor Co., Ltd. and GM. We reduced the number of parts used and increased the precision of functional components, thereby successfully attaining lighter weight and quieter operation.



SCSE06 compressor (fixed-displacement scroll type)

Since initially being installed in the second-generation Prius, our electric compressors for hybrid vehicles (HVs) and EVs have been fitted in all of TMC's HVs from the thirdgeneration Prius to the LS600h.

To offer attractive products to the growing number of automakers worldwide now actively engaged in the development of HVs, we developed the ESA series, which is even more compact and fuel efficient. In addition, a change in its structure makes it easier to mount on vehicles. The ESA series has been installed in HVs of Ford Motor



Toyota Industries' car air-conditioning compressors are widely adopted by automakers around the world, garnering the No. 1\* position in global sales. \* Survey by Toyota Industries Corporation

Company, Volkswagen and Honda Motor Co., Ltd. Looking ahead, we will accelerate our efforts to expand sales to automakers in Japan, the United States and Europe.



ESA34 compressor (electric type)

#### **Creating Experimental Facilities In-House That Replicate More Realistic Vehicle** Environment

In the conventional way of simply developing and evaluating car air-conditioning compressors alone, we can only capture certain properties and may not be able to meet customer needs sufficiently. To counter the situation, we started creating our own experimental facilities in-house that can replicate a more realistic vehicle environment. By doing so, we can respond to customer needs more precisely and guickly while clearly clarifying our outstanding product strengths through more accurate product evaluation. The creation of experimental facilities internally also enables us to place our original technologies in a "black box" and prevent external leaks of our know-how and expertise. To further

increase our competitive edge, we will launch this initiative on a full scale at our bases in and outside Japan.

#### **Augmenting Technical Support Capabilities**

We station our sales engineers in the United States, Germany, Italy, China and Brazil and provide technical support locally. Through these technical support efforts, we promote sales expansion and activities to prevent quality issues from occurring.

In fiscal 2014, two of our consolidated subsidiaries, namely, Michigan Automotive Compressor, Inc. (MACI) in the United States and TD Deutsche Klimakompressor GmbH (TDDK) in Germany, began to conduct design operations locally. By designing products locally, we help automakers reduce development lead time.



Local design operations at MACI

## Establishing Optimum Global Production and Supply Structures

To respond to growing demand for variable-displacement type compressors triggered by the anticipated enforcement of more stringent fuel efficiency standards, we are proceeding with augmentation of corresponding production capacities and commenced local production of key functional parts at our production bases in North America.

In Europe, the ASEAN countries and China as well, we are expanding production capacities and increasing the ratio of locally procured parts to accommodate growing demand for car air-conditioning compressors.

In increasing our production capacities at these bases, we have introduced more compact production lines and established an efficient production structure that can flexibly respond to production volume fluctuations. In the future, we will use these compact production lines as a model and gradually install them in other production bases in and outside Japan.

#### **Car Electronics**

#### **Business Overview in Fiscal 2015**

Net sales of car electronics products grew steadily due primarily to solid sales of products for the Toyota Prius, Aqua (Prius c in North America and Yaris Hybrid in Europe) and other HVs.

#### Expanding Experience and Role in Electric-Powered Vehicle Field

Toyota Industries develops and produces electronic components and devices for electric-powered vehicles, including HVs, plug-in hybrid vehicles (PHVs), EVs and fuel cell vehicles (FCVs). In addition to TMC, we are pursuing business expansion to other automakers in and outside Japan.

#### **Auxiliary Power Source Devices**

A DC-DC converter converts the high voltage of HV batteries to a lower voltage level suitable for operating lights, wipers, horns and other auxiliary devices. Since being first fitted in the first-generation Prius, we have been constantly working to reduce the product size and weight.



DC-DC converter fitted in the Aqua

Leveraging our technologies accumulated in the field of DC-DC converters for HVs, we successfully developed and commenced sales of a DC-DC converter for use with startstop systems, which can suppress a voltage drop at the time of engine restart, and have been promoting its sales to automakers.

A DC-AC inverter is equipped to use home electric appliances in a vehicle, and has drawn a great deal of public recognition for its use as an emergency power source following the Great East Japan Earthquake. Since commencing production in 1995, we have achieved cumulative production of 14 million units in March 2015.

We have developed an on-board charger based on our technologies and cultivated know-how regarding EV chargers developed since the 1990s. The resulting on-board charger is fitted in the Prius Plug-in Hybrid.

In addition, we develop and produce inverters for electric car air-conditioning compressors for HVs and other electricpowered vehicles. These inverters have been contributing to increasing the product appeal of our car air-conditioning compressors.

We have also leveraged our inverter technologies related to electric car air-conditioning compressors and successfully developed a highly efficient, low-cost inverter for hydrogen circulation pumps. The new inverter has been adopted in TMC's MIRAI FCV.

(See Special Feature 1 on pages 26-29 for details.)

#### **Core Components for Drive Systems**

Since 1967, we have been providing inverters for materials handling equipment and accumulating a pool of power electronics technologies.

Utilizing such technologies, Toyota Industries applied its proprietary direct-cooling method to develop a device with significantly higher cooling performance in 2009. We have entered the field of core components for drive systems such as power control units (PCUs) for the third-generation Prius.

In addition to inverters for drive systems utilizing this direct-cooling method, we have developed a powertrain unit for EVs and other core components. For the powertrain unit for EVs, we integrated designs of functional components, such as an inverter, motor and reduction gears, into one package and successfully reduced the size and weight. By integrating hardware with an electronic control unit (ECU), including control software, we are working to increase the added value as an entire system.



Powertrain unit for EVs

#### **Charging Infrastructure**

Jointly with Nitto Kogyo Corporation, we developed publicuse charging stands and home-use charging units for PHVs and EVs. These chargers are being sold in the market.

In May 2015, we announced the release of a new publicuse charging stand and exhibited the product at Automotive Engineering Exposition 2015. The new charging stand consists of one parent unit that offers charging functionality as well as such features as communication, IC card-based user authentication and billing, and multiple low-cost, charging-only child units. Besides the existing model's features, the parent unit has an additional capability to control up to 10 child units, thereby reducing the initial costs of installing multiple charging stands.

We are positioning this new charging stand as a standard model of the charging infrastructure and will strive to enhance its functionality and our service lineup to ensure that we continue to satisfy customer needs.



New charging stand for PHVs and EVs

#### Accelerating Development Activities to Contribute to Low-Carbon Society

As many countries adopt regulations requiring high energy efficiency, electrification is expected to become more widespread not only for automobiles but also for materials handling equipment and other non-automotive products. Targeting the high-growth, electric-powered vehicle market, we will accelerate our development efforts to enhance our products in the fields of HVs, EVs, PHVs and FCVs while working to reinforce our production structure, thereby contributing to a low-carbon society.

## **Textile Machinery**

Based on the philosophy of founder Sakichi Toyoda, which reflects his strong commitment to manufacturing, Toyota Industries responds to a broad range of needs with its extensive product lineup, from air-jet looms, for which we enjoy the world-leading market share\*<sup>1</sup> in unit sales, to ring spinning frames and roving frames.

\*1: Survey by Toyota Industries Corporation



#### **Business Overview in Fiscal 2015**

The textile machinery market remained stagnant as economic growth slowed down in China and emerging countries in Asia. Despite an increase in sales of yarn quality measurement instruments, unit sales of air-jet looms declined 3,500 units, or 38% year-on-year, to 5,800 units. Net sales were down ¥5.0 billion, or 7%, from the previous fiscal year to ¥68.1 billion.



## Business Development of Weaving and Spinning Machinery

In the field of weaving machinery, we introduced an improved electronic shedding device to our JAT810 air-jet loom, for which we enjoy the world's top market share. This shedding device serves to increase textile variations by enabling the weaving of fabrics with complex patterns.

In the field of spinning machinery, Kirloskar Toyota Textile Machinery Pvt. Ltd. (KTTM), a consolidated subsidiary in India, commenced in October 2014 production of the RX300 ring spinning frame to be exported throughout the world. Producing the RX300 in India, which is one of the two largest spinning machinery markets in the world, enables us to be closer to our customers, thereby contributing to enhancing our services and improving logistics efficiency.

#### Participation in ITMA ASIA + CITME 2014

In June 2014, Toyota Industries participated in ITMA ASIA + CITME 2014, one of the largest textile machinery trade shows in Asia. The event was held in Shanghai, China, one of the world's largest textile markets, with 1,556 companies participating from 28 countries, including China, India and Bangladesh, and the attendance of more than 100,000 visitors. At this exhibition, we displayed our JAT810 air-jet loom, the TCO12 comber and various other products and appealed the excellence of these products' basic performance and reliability. We also demonstrated the capability of the RX300 high-speed ring spinning frame to produce a new spun yarn called mosaic yarn\*<sup>2</sup> and received favorable feedback from many visitors.

Through participation in these exhibitions, we will continue to appeal our excellent technological capabilities and environmental performance in our efforts to earn a higher level of customer trust. We also aim to meet customer expectations by developing textile machinery that produces even higher value-added textile products through the pursuit of advanced technologies and continuous

creativity and ingenuity as well as by providing meticulous after-sales services via an enhanced service structure.

\*2: A new type of yarn developed by Toyota Industries, which is made by joining normal roving yarns and chopped roving yarns, offering a considerable degree of freedom in colo and design choices



ITMA ASIA + CITME 2014

# **Relationship with Stakeholders**



Relationship with Our Custome Relationship with Our Business Relationship with Our Sharehol Relationship with Our Associat Relationship with Our Local Co

#### Acquisition of Jossi Systems AG to Reinforce Product Appeal

Uster Technologies AG, a Swiss-based consolidated subsidiary producing yarn quality measurement instruments, acquired Jossi Systems AG, a Swiss company developing and producing systems for cleaning cotton and removing contaminating materials in the spinning process. By making Jossi Systems into its subsidiary, USTER has become the world's only manufacturer capable of managing cotton cleaning and contaminant removal throughout the entire spinning process. In the future, USTER will leverage the strengths of Jossi Systems to further strengthen its position as the world-leading manufacturer of yarn quality measurement instruments.

ers	P <b>52</b> -53
s Partners	<b>⊳ 54</b>
Iders and Investors	⊳ 55
es	⊳ <b>56</b> -58
ommunities	⊳ <b>59</b> -60

## **Relationship with Our Customers**

Adhering to a quality first approach, Toyota Industries strives to realize *monozukuri* (manufacturing) that quickly responds to the diverse, ever-changing needs of customers.

#### "A product should never be sold unless it has been carefully manufactured and has been tested thoroughly and satisfactorily."

Carrying on the spirit of founder Sakichi Toyoda, Toyota Industries strongly believes that quality is the lifeblood of a company. Focusing on quality first and ensuring customer safety and reassurance are our most important responsibilities to our customers and form the basis of our approach to corporate social responsibility (CSR).

Toyota Industries strives to maintain and improve the total quality of our corporate activities, which encompasses not only "product quality" but also "marketing quality" and "management quality." "Product quality" is embodied in the safety, eco-friendliness, durability, ease of use and workmanship of our products, while "marketing quality" entails excellent sales and service in addition to these attributes and "management quality" further enhances our overall corporate image and brand strength in terms of all of these attributes.

#### Types of Quality Sought by Toyota Industries



#### "We should express our gratitude to our customers by providing them our best quality products." (from Toyota Industries' Quality Guidelines)

Placing top priority on our "Customer First" philosophy, Toyota Industries undertakes product development that meets customer expectations.

At Toyota Industries, development of a new product entails defining specific goals to incorporate quality in every stage from product planning and design to production preparation, production, sales and after-sales services. We perform a design review (DR), which allows a product to proceed to the next stage only when a responsible business division head examines and approves whether the product has reached the target quality level.

Should a defect occur after the product launch, the

quality assurance departments of each business division immediately devise necessary measures. At the same time, a probable cause is identified from both technical and structural aspects, and if deemed necessary, the new product development system itself is reviewed to prevent a recurrence in the successor model.

#### **Activities Based on the Quality Guidelines**

Quality forms the basis of our operations and is essential in attaining the goals of our Vision 2020. As such, we formulated our Quality Vision 2020, which defines our philosophy in ensuring quality.

#### **Quality Vision 2020**

All members in the Toyota Industries Group place utmost emphasis on quality first and continuously supply attractive products/services that anticipate global customers' needs.

To achieve the goal of this vision, we issue the Quality Guidelines, which identify priority quality-related issues to be implemented in each fiscal year, to all production bases in and outside Japan. The implementation status of these guidelines is reviewed by top management at the Quality Functional Meeting and the Quality Confirmation and Defect Prevention Meeting, both chaired by the head of the Production Headquarters\*, for identifying additional issues and devising countermeasures. Issues raised are followed up at meetings of the Company-wide Council of Heads of Quality Assurance Departments chaired by a quality control department head\*. The president also checks on the outcome of these activities through *genchi genbutsu* (go



Quality inspection by top management

and see for yourself) inspections.

For critical quality issues, we enforce Company-wide, horizontally aligned activities to prevent both recurrence in the responsible business divisions and occurrence in other business divisions. Under these efforts, we have standardized procedures to ensure the specified level of quality and formulated related guidelines. \* As of March 31, 2015

#### Company-Wide, Horizontally Aligned Quality Assurance Activities



#### **Initiatives to Ensure Product Safety**

In order to meet customers' expectations for safety and reassurance, we have been promoting activities to minimize risks at the development and design stage based on the assumption that customers make use of our products in diverse ways, including foreseeable misuse and use under malfunctioning conditions.

We seek to raise the level of our Company-wide activities by sharing each business division's best practices at the Product Safety Promotion Committee comprising representatives from the engineering and quality assurance departments.

Functional safety, in particular, has recently been gaining increased significance as electronic control devices mounted on automobiles and other vehicles are becoming more advanced and complex. Functional safety reduces the risk of hazards caused by these control systems to an acceptable level by adopting appropriate functions or devices.

We have been placing greater emphasis on functional safety as part of our efforts to strengthen our software development capabilities. In addition to external certifications obtained previously, our functional safety software development process is now certified under ISO 26262, an international standard for functional safety management for automotive applications. Our process has been recognized as meeting the highest level of safety stipulated under the standard.

#### Acquired Certification for Software Development Process

Jul. 2012	Automotive SPICE <sup>*1</sup> , Capability Level 3 Car air-conditioning compressors sector
Mar. 2014	Automotive SPICE, Capability Level 3 Automotive electric/electronic systems sector
Dec. 2014	ISO 26262, ASIL*2-D (highest safety level) Certification for functional safety software development process

\*1: Short for Software Process Improvement and Capability dEtermination, SPICE is a standard process for automotive software development.

\*2: Short for Automotive Safety Integrity Level

#### **Providing Support to Business Partners**

Improving the quality of our products requires joint quality improvement activities with our business partners in and outside Japan. For this reason, we collaborate with our major business partners in upgrading their quality assurance efforts. Specifically, we conduct an annual quality audit to identify deficiencies and ensure effective improvement, and provide quality-related education.

Responsible executives of Toyota Industries verify the outcome of these activities through *genchi genbutsu* inspections.

These activities enable our business partners to attain the required level of quality assurance and establish a culture to foster quality assurance on their own.

#### **Promoting Human Resources Development**

Toyota Industries provides systematic quality education to all employees to help them acquire quality assurance skills needed in actual operations. In the basic education program, employees gain a perspective and learn the concepts of quality control (QC), basic *kaizen* (improvement) techniques and how to proceed with *kaizen* activities by utilizing our originally developed textbook that describes the quality assurance approach of Toyota Industries. After completing the basic program, they move on to practical training tailored to the specific needs of their respective workplaces.

Our production bases in China and India as well as those in North America and Europe also promote *kaizen* efforts and development of human resources through QC circle activities.

We are

working to reinforce our foundation for quality assurance based on the belief that manufacturing starts with nurturing excellent personnel.



QC circle activities at Kirloskar Toyota Textile Machinery Pvt. Ltd. (KTTM) in India

## **Relationship with Our Business Partners**

Toyota Industries encourages open procurement and seeks co-existence and co-prosperity with our business partners (suppliers) based on mutual trust. We also facilitate environmentally preferable purchasing, CSR-oriented procurement practices and disaster prevention activities for a possible major earthquake.

#### Fair Business Transactions Based on an Open **Door Policy**

To achieve open procurement, we provide fair and equal opportunities to all potential business partners.

We comprehensively

factors as quality, price and

evaluate our business

partners based on such



Procurement page on our Website

adherence to delivery times. We also assess their initiatives for safety, the environment and compliance as we strive for the timely and stable procurement of excellent products at lower costs based on fair business transactions.

#### **Co-Existence and Co-Prosperity Based on Mutual Trust**

We work hard to realize co-existence and co-prosperity with our business partners based on mutual trust. Throughout the year, we hold procurement policy meetings and quality and technical skills training as well as provide guidance directed toward kaizen at major business partners' production sites.

#### **Reducing Environmental Impact through** Environmentally Preferable Purchasing

In order to create environmentally friendly products, we aim to procure parts, raw materials and equipment from business partners that give sufficient consideration to the environment.

Our Environmentally Preferable Purchasing Guidelines, which we have formulated to enforce "green" purchasing, apply not only to parts, raw materials and equipment but also to packaging materials.

Along with environment-friendly products, we deliver greater safety and reassurance to customers.

#### Localization of Business for Good Corporate Citizenship

In view of increased local production outside Japan, we promote procurement from local business partners in order to contribute to the local community through consolidated subsidiaries.

#### **Promoting Human Resources Development**

We proactively provide (FY) 13 14 procurement education both internally and externally. In fiscal 2015, we provided education to 735 Toyota Industries employees and 276 participants from affiliated companies.

To avoid non-compliance, we also conduct a periodic inspection of procurement-related departments.

Hoeikai, an organization of our business partners, serves as a venue for sharing more useful information and developing human resources through the Toyota Production System (TPS), QC circles and other activities. We provide support to TPS seminars and autonomous study groups for leadership development.



Japanese Subcontracting Law Seminar Participants

(Persons)

1 200

1,000 800.

200 —

Affiliated companies

Toyota Industries



Autonomous study group

#### **Business Continuity Plan (BCP) Activities for Possible Major Earthquake**

We engage in BCP-related activities in anticipation of a major earthquake in Japan. To improve our preparedness for resuming the supply of products to customers at the earliest possible opportunity in the event of a disaster, we are making concerted efforts with business partners to ensure the stable supply of parts and raw materials during the restoration of production.

More specifically, we newly implemented training determining the extent of damage in addition to seminars to

cultivate a deeper understanding on the importance of disaster prevention and disaster mitigation workshops (tabletop exercises) that help business partners formulate and implement their own mitigation plans.



Disaster mitigation workshop

## BCP Activities

Торіс		FY2013	FY2014	FY2015		
Action policy		Determining current status	Reinforcing disa	aster mitigation		
Scope of activities		Hoeikai (business partners)				
			Suppliers of	major parts		
	Supply chain surveys	Improving a	ccuracy through perio	dic surveys		
2011	Earthquake workshops		Tabletop	exercises		
	Disaster mitigation plans		Formulati	on and aggregation		
	Training for determining extent of damage			Periodic training		

## **Relationship with Our Shareholders and Investors**

We aim to obtain an appropriate company valuation in stock markets through timely and appropriate information disclosure while promoting good communications with shareholders and investors.

#### **Basic Perspective**

Toyota Industries continually carries out timely and appropriate information disclosure for shareholders and investors. In this way, we raise management transparency so that we obtain an appropriate company valuation in stock markets. We provide not only information required under disclosure laws and regulations but also information on our management policy and business activities. Also, we engage in various investor relations activities to facilitate productive dialogue with shareholders and investors and feed back their comments to executives and relevant business divisions to reflect them in our business activities.

#### **General Shareholders' Meeting**

We hold our annual general shareholders' meeting early to avoid the date on which many companies hold their respective shareholders' meetings so that more shareholders can attend. We are laying the groundwork for further facilitating the exercise of voting rights of our shareholders by allowing them to exercise such rights via the Internet and by joining the electronic voting platform for institutional investors.

We held our 136th General Shareholders' Meeting on June 13, 2014, in which 348 shareholders participated. To foster a better understanding of our business activities, we invited our shareholders for a lift truck plant tour following the general shareholders' meeting.

#### Number of Participants

	132nd	133rd	134th	135th	136th	
Shareholders' meeting	299	320	363	396	348	
Plant tour	90	112	132	185	144	

#### **Investor Relations Activities**

For institutional investors and securities analysts, our management conducts briefing sessions to explain our guarterly financial results, including business performance, progress achieved at each business division and future initiatives. In addition to accepting individual interviews and making visits to institutional investors, we host plant tours (vehicle assembly, car air-conditioning compressors, etc.) to explain our approach to manufacturing and on-site initiatives and facilitate a deeper understanding of Toyota Industries. To respond to the growing number of institutional investors



from outside Japan requesting a meeting, we visit some of them to

Vehicle assembly plant tour hosted by Tovota Industries (Dec. 2014)

explain our management policies and business overview. We also participate in conferences hosted in Japan by securities companies and hold individual meetings. For individual investors, we have started holding company information sessions to promote an understanding of our business and management policies.

Toyota Industries also provides a variety of information, including financial information as well as an overview of our business and various initiatives, via the company Website. We use RSS feeds (in Japanese) to promptly provide the latest information.

#### Maior IR Activities

#### For institutional investors and securities analysts in Japan

- •Quarterly financial results briefings •Individual interviews/visits
- •Small meetings •Teleconferencing •Company-hosted plant tours Issuing/delivering Toyota Industries Reports

#### For institutional investors from outside Japan

- Individual interviews/visits
   •Teleconferencing
- Participation in conferences hosted by securities companies
- Issuing/delivering Toyota Industries Reports

#### For individual shareholders and investors

- •Company information sessions •Company-hosted plant tours
- Issuing/delivering notice of general shareholders' meeting
- Issuing/delivering business reports

#### **Returning Profits to Shareholders**

Toyota Industries regards ensuring shareholder benefits as one of the most important management policies. Accordingly, we strive to continue paying dividends and meet the expectations of shareholders upon taking into consideration such factors as business results, demand for funds and the consolidated payout ratio. For fiscal 2015, Toyota Industries paid annual cash dividends per share of ¥110.0 (interim cash dividend per share of ¥50.0 and yearend cash dividend per share of ¥60.0).

#### Cash Dividends per Share (Annual) and Consolidated Payout Ratio



ship

ers

## **Relationship with Our Associates**

Our ultimate goal is to create safe and secure workplaces for everyone, where each and every associate can exercise their diverse potentials and play active roles.

## Building a Safety-Oriented Culture That Aims for Zero Industrial Accidents

In accordance with our fundamental policy of "creating people capable of autonomously maintaining occupational safety and health," Toyota Industries strives to prevent industrial accidents and occupational disorders as well as realize better work environments.

Based on the idea of building "a homelike atmosphere at work that is warm and friendly" as stated in the Toyoda Precepts, we clarified "the true meaning of safety" and "the form of safety we seek" and formulated the Safety Vision in fiscal 2014. With the aim of fostering a safety-oriented culture, we have promoted activities to instill the vision throughout the Toyota Industries Group. In September 2014, we held a safety workshop for top management and safety and health officers of our bases in China, thereby completing dissemination of the vision to Group companies throughout the world.





Safety workshop for staff of our bases in China

Instilling and further augmenting a safety culture require leadership and strong awareness among managers and supervisors. In fiscal 2015, we started providing education to all managers and supervisors to enhance their understanding of the Safety Vision and help them recognize the true meaning of "zero industrial accidents," issues to overcome and the required mindset. During fiscal 2016, education to all eligible persons will be completed and a system set up to educate newly appointed managers and supervisors for raising safety awareness on an ongoing basis.



Workshop for managers and supervisors

Our efforts to foster a safety-oriented culture involve such basic practices as pointing and calling on passages within plant sites and prompting activities to each other for mutual enlightenment. We believe that such simple yet repetitive practices will form the foundation for preventing industrial accidents.

In fiscal 2015, we developed e-learning materials for safety education and worked to raise our safety and health levels by using them in workplace meetings.

Steady implementation of these various initiatives resulted in a certain year-on-year improvement in the frequency rate of lost workday injuries in fiscal 2015. We will continue these initiatives to further instill a safety culture among associates.

#### Frequency Rate of Lost Workday Injuries



(Source: Survey on Industrial Accidents, Japan's Ministry of Health, Labour and Welfare)

## Initiatives for Health Management and Improvement

As a task for the medium term, we are promoting associate health improvement programs to counter risks associated with aging and greater stress.

Specifically, we proactively provide health guidance to prevent lifestyle diseases from developing into metabolic syndrome and actively encourage follow-up after annual health checkups. We also conduct periodic age-based health education for all associates to maintain and promote their health and wellness.

In fiscal 2015, the scope of our age-based health education was extended to include trial programs focused on prevention of lifestyle diseases. Moreover, along with specific health guidance required by the Japanese government, we began to provide health promotion guidance to associates below the age of 40 to help them improve lifestyle habits early on.

As part of mental health care activities, we have in place a system to offer early consultation through a health-related hotline. Other activities include upgrading our preventive self-care/line-care education and operation of a return-towork support program for persons on long-term leave for prevention of relapses. We have successfully achieved some positive results through these activities.



Physical fitness measurement conducted during age-based health education

#### Major Health Promotion Activities in Fiscal 2015

Participants of age-based health education	(1,654 persons)		
Persons having completed guidance program on prevention of lifestyle diseases	(507 persons)		
<ul><li>Stop smoking enlightenment events</li><li>World No Tobacco Day: One-day no smoking (May 31)</li><li>No Smoking Days: Half-day no smoking (for three days)</li></ul>			
Participants of stop smoking campaigns (held jointly with health insurance association)	(46 persons)		
Participants of walking events (held jointly with health insurance association)	(1,619 persons)		

#### **Enhancing Team Strength**

Toyota Industries believes that it is essential to enhance team strength so that each associate can work with vitality and the Company can achieve sustainable growth.

We believe that team strength is made up of "technical skills" that form the basis of manufacturing operations, "management skills" to make maximum use of technical skills and "spirit of harmony" that supports both. While further enhancing our team strength, we are striving to extend and hand it down beyond all business domains, generations and geographic regions.



Management Skills TPS, QC, SQC, etc. Ability to identify and resolve issues Ability to merge multiple levels of skill

#### Team Strength Leadership To pursue improvements thoroughly and continuously

Spirit of Harmony Teamwork Well-rounded humanity

#### **Technical Skills**

To develop skills to support manufacturing, the Technical Learning Center, one of our training facilities, plays the central role in associate education, offering basic skills training at the Technical Training School and facilitating efforts to



52nd National Skills Competition (electrical welding category)

enhance the skills of young technical staff through in-house skills contests. We also work to cultivate highly skilled specialists through participation in the national and international skills competitions.

At the 52nd National Skills Competition held in 2014, the Toyota Industries team won one gold medal in the "electrical welding" category and received prizes in various other categories, thereby attaining medals for the 14th consecutive competition.

	lumber	of Medals	Won at	the National	Skills	Competition
--	--------	-----------	--------	--------------	--------	-------------

	FY2013	FY2014	FY2015
Gold medal	—	1	1
Silver medal	1	2	3
Bronze medal	4	3	1
Total	5	6	5

#### Management Skills

We conduct TICO Business Practices (TIBP) training targeting associates in administrative and engineering fields, with the aim of mutually sharing the thinking and values that

# Relationship with Stakeholders

the Company gives importance to, as well as to improve our associates' problem-solving capabilities. To share the thinking and values all across the Toyota Industries Group,

we conduct TIBP training at our bases outside Japan, in parallel with the same training we conduct in Japan. In a similar aim, we hold a global human resources conference of human resources administrators from our bases outside Japan.



Global human resources conference

#### Spirit of Harmony

Toyota Industries is creating a bright, energetic and caring work environment that fosters a dynamic workforce and allows every member to demonstrate his or her capabilities both as an individual and as a team. We are proactively encouraging communication not only during work hours but also through social gatherings, sports days, summer festivals, Group-wide ekiden long-distance relay races and cheer squads for various sports events.

#### **Establishing Work Environments Where Diverse Human Resources Can Play Active** Roles

We are implementing a variety of measures to create work environments where a diverse range of human resources can fully exercise their capabilities. These include promoting active roles of female associates, supporting the employment of persons with disabilities and creating an environment in which older associates can work more actively.

#### **Promoting Active Roles of Female Associates**

We promote active roles of female associates with a focus on "supporting balancing work and family," "supporting their career development" and "reforming our corporate culture and awareness."

We also support and participate in the Toyota Female Engineer Development Foundation established in December 2014. The foundation aims to foster more active participation of female workers in the entire manufacturing industry, including the auto industry. Specifically, it seeks to increase the number of female students majoring in science and engineering by appealing the attractiveness of engineering work and provides career development support to female students in the science track.

Looking ahead, we will promote systematic recruitment and development of female associates while working toward the goal of tripling the number of female associates in managerial positions to 75 by 2020 versus the 2014 level.

#### **Employment of Persons with Disabilities**

We respect the idea of people with and without disabilities working together and sharing life and work values. Under this basic policy, we continue to employ persons with disabilities every year. They are assigned to a variety of sections and work with other members to perform their designated tasks. In fiscal 2015, the ratio of associates with disabilities on a non-consolidated basis was 2.21%.





#### **Creating a Work Environment for Older Associates**

We focus on creating a better work environment for older associates by adjusting the height of jigs in production lines and modifying processes to compensate for deterioration of vision so that they can work with less stress.

Moreover, since the introduction of a re-employment system for associates who reach the mandatory retirement age of 60, the number of associates who choose to continue working has been increasing. In response, we hold "55 Career Training" for associates reaching the age of 55 to give them an opportunity to envision life and work after the age of 60 and think about how they should work during the remaining pre-retirement period.

#### Initiatives for Promoting Active Roles of Female Associates

~ FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
Enhancing support systems for balancing work and family     Extending the period of childcare leave     Introducing a leave system to allow     parental care of children with illnesses							<ul> <li>Introducing a telecommuting system (from Apr. 2014)</li> </ul>
							1
	•Oper	ning a Diversity Navi pa	ge on the intranet •Ho of	olding exchange meetir female associates in b	ngs and lectures to shar alancing work and fam	re experiences ily	
Increasing the ratio of female associates  • Starting to recruit main career track female associates (for engineering positions in 1986 and administrative positions in 1996)  • Starting to recruit main career track female associates (for engineering positions in 1986 and administrative positions in 1996)						Seminars for female students in science track     Increasing recruitment of female associates     from non-engineering university departments	
					Cultivating caree •Individual intervie assistant manage •Formulating indivi	r consciousness ws with female rs and their superiors idual development plan	•Sending trainees overseas IS

\* A system to enable reinstatement under certain preconditions

## **Relationship with Our Local Communities**

our role as a good corporate citizen and actively undertake social contribution activities in every region where we do business.

#### Activities as a Good Corporate Citizen

Based on "Respect for Others" as described in our Basic Philosophy, we strive to fulfill our role as a good corporate citizen in every region where we do business and actively engage in social contribution activities to realize an enriched and healthy society. In our activities that emphasize social welfare, youth development, environmental protection and community contribution, we not only provide cooperation and support through personnel, facilities, funds and knowhow but also strive to closely connect with participants. To foster employees' awareness of their ties to society and raise their interest in contributing to society, we make enlightenment efforts such as sharing information on volunteer activities and providing a venue for volunteer activities that encourage the participation of all employees. Employee associations\* are actively undertaking various activities to contribute to local communities, mainly in the areas of supporting welfare facilities and protecting the natural environment.

\* Voluntary organizations formed by employees at each job level

#### **Structure for Promoting Social Contribution Activities**

The CSR Committee deliberates on policies of our social contribution activities while the Social Contribution Group within the General Administration Department at the Head

## **Activity Example of Toyota Industries (Japan)**

#### **Mini Concerts at Elementary Schools**

Since fiscal 2011, we have been inviting globally active musicians and holding mini concerts at elementary schools located near our plants. In fiscal 2013, we also started organizing such concerts in areas affected by the Great East Japan Earthquake.

These concerts, being held in school gyms and classrooms as part of music class, allow children to listen to and closely see the live performance of first-rate musicians. We plan these concerts with the hope to foster a rich humanity, letting children feel the sounds and resonance of

#### Number of Participants of Elementary School Mini Concerts

Location	2011	2012	2013	2014	2015	Total (Persons)	Total (No. of Elementary Schools)
Obu and Takahama cities, Aichi Pref.	1,170	1,846	1,195	1,865	1,173	7,249	34
Rikuzentakata and Ofunato cities, Iwate Pref.	—	-	243	524	720	1,487	16
Total	1,170	1,846	1,438	2,389	1,893	8,736	50

## With a view toward creating an enriched and healthy society and ensuring its sustainable growth, we fulfill

Office takes the initiative in carrying out activities.

#### Major Social Contribution Activities of Toyota Industries and Group Companies

Theme	Activities
Social welfare	Events to interact with persons with disabilities (e.g., clam digging excursions and harvest festival) Support for welfare facilities (e.g., charity bazaars, facility cleanup/repair/weeding) Collaborative Group-wide fundraising drives Donation of wheel chairs (China) (P.60) Support for the disadvantaged via participation in charity event (U.K.) (P.60) Food donation to a food bank through Christmas charity activities (U.S.A.) Housing construction/repair to assist international support organization (U.S.A.)
Youth development	Support for Youth Invention Clubs (e.g., <i>monozukuri</i> workshops during summer vacations and handmade kite-flying competitions) Providing plant-hosted environmental education to elementary school children Holding mini concerts at elementary schools (P.59) Accepting junior high school students for work experience programs Educational support to a tribal society via support organization (India)
Environmental protection	Tree thinning activities for conservation of prefecture-owned forests and producing and donating benches made of thinned wood Tree-planting activities for reforestation Support for environmental festival through participation and financial assistance (Sweden) <b>Tree-planting activities on Mt. Papandayan (Indonesia) (P.60)</b> Raising awareness for environmental protection and promotion activities for World Environment Day (China)
Community contribution	Participation in local traditional events Road cleanup activities in areas around plants Activities to raise awareness for traffic safety Crime prevention patrols <b>Highway cleanup activities (U.S.A.) (P.60)</b> Holding technical seminar for air conditioner maintenance (Indonesia) Collecting and selling PET bottle caps and donating proceeds to local hospital (Spain) Donating prizes to local sports event as a sponsor (India)
Other	Holding charity concert as a sponsor Support as volunteers for international NGO in collecting spoiled postcards Periodic blood donation drives at each plant

(Activities without country designation were conducted in Japan.)

musical instruments. performers' intake of breath and emotions.



lini concert at elementary schoo

To date, we have held mini concerts at a total of 50 schools for more than 8,000 elementary school children.

#### Voices of Children

- I've only heard the violin on CDs and felt happy to see and listen to the sound of an actual violin
- Each piece made me feel warm inside
- I was touched by the music. I want to work hard and make my dreams come true, etc.

#### Activity Examples of Consolidated Subsidiaries (outside Japan)

## China Donation of Wheelchairs for Persons with Disabilities

Yantai Shougang TD Automotive Compressor Co., Ltd. (YST)

Subsidiary producing car air-conditioning compressors

In observance of International Day of Persons with Disabilities, YST donated wheelchairs to a local welfare center in December 2014. These wheelchairs were purchased with contributions collected from employees. This was the third time since the company's establishment in 2012 to undertake this activity, which is highly regarded locally and was reported on TV and in the newspaper.



Donating wheelchairs to a local welfare center

#### **U.K.** Support for the Disadvantaged

#### Toyota Material Handling UK Limited (TMHUK) Sales subsidiary for materials handling equipment

In March 2015, together with the entire U.K. Toyota Group companies TMHUK took part in Red Nose Day\* hosted by Comic Relief, a U.K.-based major charity organization, to raise money. Its flagship campaign is to wear a red nose and the fun-filled fundraising activity was featured on a special TV program.

 $^{\star}$  Participants purchase a red nose for £1 to take part in the fundraising event. Proceeds are used for support projects for the disadvantaged in the U.K. and Africa.



Employees who took part in fundraising

## Indonesia Planting Trees for Environmental Protection

**P.T. TD Automotive Compressor Indonesia (TACI)** Subsidiary producing car air-conditioning compressors

TACI plants trees to improve the environment every year. On August 17, 2014, which is Indonesia's Independence Day, 50 employees took part in planting trees on the 2,665-meter Mount Papandayan. In addition, TACI donated trees to a junior high and elementary schools in the Bekasi Area where TACI is located.



Employees who took part in tree planting

#### U.S.A. Highway Cleanup Activities

#### Michigan Automotive Compressor, Inc. (MACI) Subsidiary producing car air-conditioning compressors

As part of joint cleanup activities between local citizens and the government, in April and September 2014 MACI participated in picking up trash along the highway running through Jackson County. Approximately 20 participants wore government-issued, bright-colored vests for safety and picked up trash for two hours.



MACI employees engaging in cleanup activity

## **Environmental Initiatives**



Structure to Implement Environ

Fifth Environmental Action Plan

Establishing a Low-Carbon Err

Establishing a Recycling-Base

Reducing Environmental Risk a Establishing a Society in Ha

Environmental Management

Environmental Impact Flow and

ties	P <b>62</b>
nmental Management	P <b>63</b>
ı	P 64-65
ission Society	P 66-67
d Society	P 68-69
and armony with Nature	<b>⊳ 70-71</b>
	₽ <b>72</b> -73
d Environmental Accounting	₽ <b>74</b>

## **Vision for Environmental Activities**

Toyota Industries works with consolidated subsidiaries in and outside Japan to promote environmental activities on a global scale. With regard to our "CO2 Cancel" initiative, we aim to accomplish its targets in fiscal 2016.

#### **Global Environmental Commitment**

As one tenet under our Basic Philosophy, Toyota Industries works to contribute to regional living conditions and social prosperity and also strives to offer products and services that are clean, safe and of high quality. Accordingly, in February 2011, we established the Global Environmental Commitment, a specific environmental action guideline, to be shared and implemented throughout the Toyota Industries Group.

The entire Toyota Industries Group comprising 168 companies in and outside Japan will dedicate concerted efforts to realizing a prosperous life in harmony with the natural environment by carrying out activities aimed at "establishing a low-carbon emission society," "establishing a recycling-based society" and "reducing environmental risk and establishing a society in harmony with nature" as our way of "promoting environmental management."



Working toward "CO<sub>2</sub> Cancel"

#### What Is "CO<sub>2</sub> Cancel"?

We have been promoting initiatives under our original concept called "CO2 Cancel." This refers to our aim to offset CO<sub>2</sub> emissions from production activities by reducing CO<sub>2</sub> emissions via improved product efficiency and other means. We have positioned this approach as a new environmental target under the Fifth Environmental Action Plan and have been yielding steady, positive results.

#### Activities for Accomplishing "CO<sub>2</sub> Cancel"

Aiming to accomplish "CO2 Cancel" in fiscal 2016, we have been undertaking activities accordingly.

Our efforts included the successful development and release of such new products as internal-combustion lift trucks with lower fuel consumption and an air compressor for fuel cell vehicles, which offers lower energy consumption. As a result of concerted and proactive efforts to reduce CO<sub>2</sub> emissions from production activities, we made further progress toward the goal of attaining "CO2 Cancel" in fiscal 2016.

To achieve the goal, we will continue to promote our CO<sub>2</sub> reduction activities both in terms of product development and production activities.





Notional Diagram of "CO2 Cancel"

CO<sub>2</sub> emissions from production activities = Total CO2 emissions from Toyota Industries' plants

Reduction of CO<sub>2</sub> emissions via improved product efficiency = Total reduction in CO2 emissions attained by major products which are manufactured at Toyota Industries' plants

## **Structure to Implement Environmental** Management

Positioning environmental response as one of its most crucial management issues, Toyota Industries is enhancing its environmentally oriented corporate management on a global basis through the promotion of consolidated environmental management.

#### **Promotion of Environmental Management System**

Toyota Industries has positioned environmental response as one of its most crucial management issues. To guickly reflect top management's decisions on business operations. Toyota Industries has established and been operating a Company-wide integrated environmental management system (EMS), with the president at the top.

#### Environmental Management Structure



In fiscal 2015, we provided education to employees to raise the level of our environmental management. These included introductory courses for environmental management and environmental audits, in which the former is for cultivating required knowledge and the latter for gaining knowledge and techniques of internal audits. Proactive participation by department heads and others in managerial positions has enabled us to increase

#### Scope of Group-Wide Environmental Management (As of March 31, 2015)

#### Europe Production companies: 6 BT Products AB (Sweden) Toyota Industrial Equipment, S.A. (France) CESAB Carrelli Elevatori S.p.A. (Italy) L.T.E. Lift Truck Equipment S.p.A. (Italy) TD Deutsche Klimakompressor GmbH (Germany) Uster Technologies AG (Switzerland)

Japan Non-consolidated: 10 plants Production companies: 12 Aichi Corporation (Saitar Nishina Industrial Co., I td. (Nagano HANDA Casting Company (Aichi) Unica Co., Ltd. (Aichi) Tokaiseiki Co., I td. (Shizuoka) Altex Co., Ltd. (Shizuoka) IZUMI MACHINE MEG. CO. LTD. (Aichi Nagao Kogyo Co., Ltd. (Aichi) Miduho Industry Co., Ltd. (Aichi Iwama Loom Works, Ltd. (Aichi) Tokyu Co., I td. (Aichi) Hara Corporation (Gifu)

#### Asia Production companies: 6

Toyota Industrial Equipment Vietnam Co., Ltd. (Vietnam) Kirloskar Toyota Textile Machinery Pvt, Ltd, (India) P.T. TD Automotive Compressor Indonesia (Indonesia) Toyota Industry (Kunshan) Co., Ltd. (China) TD Automotive Compressor Kunshan Co., Ltd. (China) Yantai Shougang TD Automotive Compressor Co., Ltd. (China) understanding of environmental management and develop internal auditors.

#### **Environmental Audits**

Toyota Industries implements annual internal environmental audits as well as external audits carried out by an independent third-party institute.

The external audit conducted in fiscal 2015 revealed one non-conformance. We have already completed measures to correct it and passed on the relevant information to other plants to prevent recurrence.

We continued to conduct internal audits under the mutual, interdivisional audit system introduced in fiscal 2013. In fiscal 2015, we strived to upgrade our auditing capabilities by organizing audit teams with the dual goals of fostering the development of auditors and increasing audit efficiencies. In the area of audits, our focus was placed on reducing environmental risks and improving environmental performance, and we successfully clarified the degree of contribution by each business division's efforts to overall environmental management.



Conducting an introductory course for environmental audits

Non-production companies Japan: 23

Outside Japan<sup>,</sup> 110

#### North America Production companies: 9

Cascade Corporation (U.S.A.) Indiana Hydraulic Equipment, Corp. (U.S.A.) North Vernon Industry Corp. (U.S.A.) Raymond-Muscatine Inc. (U.S.A.) The Raymond Corporation (U.S.A.) Toyota Industrial Equipment Mfg., Inc. (U.S.A.) Michigan Automotive Compressor, Inc. (U.S.A.) TD Automotive Compressor Georgia, LLC (U.S.A.) Toyota Industries Compressor Parts America, Co. (U.S.A.)

#### Latin America Production company: 1

Toyota Material Handling Mercosur Indústria e Comércio de Equipamentos Ltda (Brazil)

Initiati

## **Fifth Environmental Action Plan**

The results of our activities in fiscal 2015 showed steady progress across the board toward achieving respective targets for fiscal 2016.

#### **Progress in the Fifth Environmental Action Plan**

With an eye to realizing a prosperous life in harmony with the natural environment through the establishment of a sustainable society, we have formulated the Fifth Environmental Action Plan for the period from fiscal 2012 to

fiscal 2016, promoting activities according to the plan. Through activities undertaken during fiscal 2015, we made steady progress toward achieving respective targets for fiscal 2016.

#### Product Related

† Targets for FY2016 undisclosed due to confidential information

	Fifth Environmental Action P	EV2015 Achievemente	
Segments	Action Policies	FT2015 Achievements	
	Reduce CO <sub>2</sub> emissions by 10% from major produc the Fifth Plan*1	ts to be developed during the period covered by	
	In the Automobile-Related Business, promote electrification and develop technologies and products that will contribute to reduction of CO <sub>2</sub> emissions	<ul> <li>Improve energy efficiency of car air conditioners</li> <li>Develop technologies to respond to electrification of vehicles</li> <li>Develop technologies to enable weight reduction</li> <li>Reduce energy loss</li> <li>Develop new engines</li> </ul>	<automobile-related business=""> • Developed highly efficient electric car</automobile-related>
Establishing a Low-Carbon Emission Society	blishing a /-Carbon ion Society       In the Materials Handling Equipment Business, develop technologies and products that will contribute to reduction of CO2 emissions       Improve fuel efficiency of internal-combustion lift trucks         In the Textile Machinery Business, develop technologies and products that will contribute to reduction of CO2 emissions       Reduce energy use through lower air consumption         In the Textile Machinery Business, develop technologies and products that will contribute to reduction of CO2 emissions       Reduce energy use through lower air consumption         Reduce power use through lower load from windage loss       Reduce energy loss	<ul> <li></li> <li></li></ul>	
		<ul> <li>Reduce energy use through lower air consumption</li> <li>Reduce power use through lower load from windage loss</li> <li>Reduce energy loss</li> </ul>	concumption
	In the R&D field, develop technologies for energy efficiency	<ul> <li>Develop new technologies that contribute to improved energy efficiency in automobiles</li> </ul>	
Establishing a Recycling-Based Society	Implement initiatives to promote 3R (reduce, reuse and recycle) design for effective resource utilization	<ul> <li>Reduce use of resources through longer product life</li> <li>Reduce use of resources through standardization, modularization and reduction of components</li> <li>Reduce use of resources through weight and size reductions</li> <li>Promote reuse of components and resources</li> </ul>	Developed plastic glazing back window
Reducing Environmental Risk and	Reduce emissions to improve air quality in urban areas in all countries and regions	Develop engines that meet future regulations	Developed lift truck engines compliant with emissions regulations ahead of schedule
Society in Harmony with Nature	Manage chemical substances contained in products	<ul> <li>Investigate chemical substances contained in products and manage switching over of SVHC*2 and other substances of concern to other substances</li> </ul>	<ul> <li>Expanded the scope of substances of concern (investigated substances of concern contained in supplies)</li> </ul>

Production Related

Fifth	Environmental Action Plan Targets		FY20	015 Achievem	ients		FY2016 Targets
Segments	Action Policies/Specific Actions	Subject	Scope	Control Items	Base Year (FY)	Achievements	Targets
	Promote energy reduction and energy conservation	CO2 emissions • Energy-	Non- consolidated	Total emissions	2006	-18%	-18%
Fatabliabing a	through innovative production technologies Reduce greenhouse gas emissions during production processes through energy JIT* <sup>3</sup> Promoting measures to curb global warming	derived CO <sub>2</sub> • 5 gases <sup>*4</sup>	Global	Eco	2006	1.29	1.27
Low-Carbon		CO <sub>2</sub> from logistics	Non- consolidated	efficiency*5	2006	1.42	1.47
Emission Society	Reduce CO <sub>2</sub> emissions through green logistics	CO <sub>2</sub> from	Non-	Total emissions	1991	-35%	-20%
		logistics	consolidated	Eco efficiency	2007	1.54	1.09
	Enhance resource productivity • Reduce use of timber-derived packaging materials • Reduce the volume of discarded materials by taking action at the source, such as improving yields and other measures • Promote internal reuse	Packaging material volume	Non- consolidated	Eco efficiency	2007	3.43	1.09
Recycling-Based Society		Waste generation volume	In Japan	Eco efficiency	0010	1.03	1.01
			Non- consolidated		2013	1.03	1.01
Reducing invironmental Risk and Establishing a ociety in Harmony with Nature	<ul> <li>Further reduce emissions of substances of concern Minimize environmental risks</li> <li>Expand the use of a preliminary review system</li> <li>Reduce risks related to wastewater</li> <li>Appropriately manage chemical substances based on social conditions</li> <li>Enhance risk communication with relevant organizations and local residents</li> </ul>	VOC*6 emissions	Non- consolidated (automobile body)	Emission volume per unit of production	_	24 (g/m²)	24 (g/m²)

#### Promoting Environmental Management

Fifth Environme		
Action Policies	Specific Actions	FY2015 Achievements
Reinforce CO2 reduction activities for "CO2 Cancel"	<ul> <li>Further reduce CO<sub>2</sub> emitted from production activities in plants</li> <li>Aim to cancel out CO<sub>2</sub> emissions of Toyota Industries by reducing CO<sub>2</sub> emissions through improved efficiency in newly developed products</li> </ul>	Conducted activities for achievement of "CO <sub>2</sub> Cancel" (Target: FY2016)
Augment and promote consolidated environmental management	<ul> <li>Build a global environmental management system and promote related activities to:</li> <li>1) Comply with environment-related laws and reduce environmental risks in each country</li> <li>2) Achieve the highest-level environmental performance in each country</li> <li>Aim for efficient and systematic corporate management by integrating and operating environmental management system and quality/safety management systems</li> </ul>	<ul> <li>Visualized environmental performance and environmental risk reduction measures of consolidated subsidiaries in and outside Japan</li> </ul>
Enhance and promote environmental education and enlightenment activities	<ul> <li>Develop environmental specialists to lead internal environment-related activities</li> <li>Strengthen internal environment-related activities and broaden family-friendly initiatives by planning and promoting enlightenment activities that can be carried out at home</li> </ul>	Conducted environmental awareness survey among employees, which scored 3.9 out of 5 points
Improve eco-conscious brand image	<ul> <li>Reinforce environmental activities according to the contents and results of Survey of Environmental Oriented Management Index to pursue higher brand image</li> </ul>	Toyota 1KD industrial diesel engine received a Logistics Environmental Technology Development Award in the 15th Logistics Environmental Awards program
Augment activities related to protection of biodiversity	<ul> <li>Identify the impact of business activities on biodiversity and reinforce initiatives by defining specific goals</li> <li>Contribute to biodiversity through conservation of forests and protection of rare species</li> </ul>	<ul> <li>Conducted maintenance and management activities at Biotope of the East of Obu Station, which were jointly carried out with the local community</li> <li>Held biotope tour for students</li> </ul>
Promote sustainable plant activities	<ul> <li>Promote energy reduction and energy conservation through innovative production engineering, reduce energy loss and build a plant environment in harmony with nature by using renewable energy and other means</li> </ul>	Continually reviewed energy strategy for the medium to long term

\*1: Target products Toyota Industries develops and produces. The CO2 reduction volume is calculated based on the method Toyota Industries determined using FY2011 levels as the baseline. \*2: Substances of Very High Concern

\*3: Just In Time

3: Just in Time 4: Greenhouse gases other than CO<sub>2</sub>, including methane (CH<sub>4</sub>), dinitrogen monoxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>) \*5: Eco-efficiency = Production efficiency in subject year / Production efficiency in base year

Production efficiency = Production indicator (Net sales or production volume, etc.) / Environmental impact of production activities \*6: Volatile Organic Compounds

† Targets for FY2016 undisclosed due to confidential information

## **Establishing a Low-Carbon Emission Society**

We position the establishment of a low-carbon emission society as one of our most crucial environmental tasks. We have been working to reduce CO<sub>2</sub> emissions in our global business activities and at the same time accelerate our efforts to develop more environment-friendly products.

#### Summary

**CO2 Emissions (Production Activities)** 

FY2015 Results

Total emissions (non-consolidated) <b>18%</b> reduction (vs FY06 level)	FY16 target: 18% reduction (vs FY06 level)
Eco-efficiency (global)	FY16 target:
<b>1.29</b> (FY06 = 1.00)	1.27 (FY06 = 1.00)

Under the Fifth Plan, we set out to achieve a target of reducing total non-consolidated CO<sub>2</sub> emissions from production activities by 18% in fiscal 2016 compared with the fiscal 2006 level. In fiscal 2015, we promoted energy-saving measures when installing new equipment and carried out joint activities among the manufacturing, production engineering and environment departments to reduce the amount of air used in production activities.

Our product development activities are based on the keywords of 3Es (Energy, Environmental protection and Ecological thinking), and we focus on developing products that meet the need for increased energy savings, electrification and weight reduction. In this area, we are currently working toward a target of attaining a 10% reduction in CO<sub>2</sub> emissions from primary products by fiscal 2016 compared with the fiscal 2011 level.

#### Initiatives for Establishment of a Low-Carbon **Emission Society**

CO2 Emissions (Non-consolidated/Consolidated subsidiaries in and outside Japan)



#### Saving Energy Used for Air Conditioning by Introducing Coating Dry-Off Oven Exhaust Heat Recovery Equipment

In fiscal 2015, as part of its ongoing activities to reduce CO<sub>2</sub> emissions, the Takahama Plant, a development and production base of materials handling equipment in Aichi Prefecture, undertook a project to reuse exhaust heat from the coating drv-off oven.

Previously, city gas was used to power the product cooling system required in the coating process and for air conditioning in the plant, while exhaust heat from the dry-off oven was being emitted externally.

The project installed exhaust heat recovery equipment suitable for the plant and succeeded in efficiently recovering otherwise wasted exhaust heat and reusing the recovered energy for the product cooling system and air conditioning.

As a result, annual CO2 emissions of the Takahama Plant were reduced by about 200 tons. This project won the Most Outstanding Practice Award in fiscal 2015 under our internal award program to recognize excellent environmental improvement activities.

We will continue to undertake improvement activities to further reduce CO<sub>2</sub> emissions.

#### Reusing Exhaust Heat



#### Certification of Environmentally Friendly Products

Toyota Industries has been proactively promoting development of eco-conscious products. To certify and showcase to the public products that possess exceptionally high environmental performance and meet internal environmental standards, we launched the Toyota Industries Environmentally Friendly Product Certification System in fiscal 2007. With the addition of two types of lift trucks and one textile machine in fiscal 2015, a total of 18 products have obtained certification under this system to date.

For certified environmentally friendly products, see http://www.toyota-industries.com/csr/environment/product/eco5.html



8FD35 - 8FD80 (fitted with the Toyota 1KD) 8FG35 - 8FG50 (fitted with the Toyota 1FS)

Attained a significant reduction in fuel consumption compared with the previous model by installing the Toyota 1KD diesel engine or Toyota 1FS gasoline engine, both certified as environmentally friendly products under our internal certification

svstem † The models fitted with the Toyota 1KD satisfy Japan's 2014 Non-road Special Motor Vehicles emission regulation.

#### GENEO nternal-combustion lift truck

8FD15 - 8FDJ35 (fitted with the Toyota 1ZS)

Attained a significant reduction in fuel consumption compared with the previous model by newly installing the Toyota 1ZS diesel engine certified as an environmentally friendly product under our internal certification system.

+ The model satisfies Japan's 2014 Non-road Special Motor Vehicles emission regulation.

## **JAT810** Air-jet loom

The JAT810 air-jet loom offers a diverse range of originally developed features, including an air-saving system that ensures higher energy-saving performance. Attained significant reductions in both air and power consumption compared with the previous model.



\*1: Compared with the previous model. (The percentage of reduction may vary depending on operating conditions.)

#### Toyota 1KD Industrial Diesel Engine Received Logistics Environmental Technology **Development Award in 15th Logistics Environmental Awards Program**

We developed the Toyota 1KD without using a diesel particulate filter (DPF) and successfully attained both lower fuel consumption and cleaner emissions by improving the fuel efficiency of the engine itself. This approach was highly recognized and received the Logistics Environmental Technology Development Award in the 15th Logistics Environmental Awards program\*<sup>2</sup>. The Toyota 1KD has been fitted in our GENEO internal combustion lift trucks.

\*2: Award program sponsored by the Japan Federation of Freight Industries to promote environmental conservation and environmental awareness in the freight industry and recognize organizations/companies and individuals which/who have contributed to achieving sound industrial growt







Toyota 1KD diesel engine

Ē

So

## **Establishing a Recycling-Based Society**

With a view to establishing a recycling-based society, we have been dedicating considerable efforts to making effective use of resources throughout our entire supply chain.

#### Summary

Waste Generation Volume (Production Activities)

FY2015 Results



Our eco-efficiency targets in the area of waste generation volume under the Fifth Plan are set at 1.01 both on a non-consolidated basis and for Toyota Industries and its consolidated subsidiaries in Japan (fiscal 2013 as the base year). To reduce materials losses, we engage in activities to make effective use of resources throughout the entire supply chain, extending the scope of our activities to our business partners.

#### Initiatives for Establishing a Recycling-Based Society

■ Waste Generation Volume (Non-consolidated/Consolidated subsidiaries in Japan)



#### **Collaborating with Business Partners to Reduce Use of Resources**

The Anjo Plant, a development and production base of electronic devices in Aichi Prefecture, has been undertaking improvement activities jointly with business partners as well as internal departments responsible for development, production engineering and manufacturing. These activities,

aimed at reducing the plant's resource consumption, begin in the product development stage. In fiscal 2015, the plant devised a better way to pack components being delivered from business partners.

Previously, individual components were delivered from business partners in separate cardboard boxes, which were discarded after operators took out components for mounting on a product.

For newly developed products, we collaborated with business partners as early as in the product development stage and came up with simple packing by eliminating the use of cardboard boxes and partially reusing packing materials. The improved method successfully reduced the amount of packing materials discarded as waste.

Moreover, by delivering multiple components as a unit in a roll form, we were able to reduce man-hours required for packing and transporting on the business partner side and those for transporting and unpacking at the Anjo Plant.

We will continue to seek reduced use of resources in our production activities.

#### Packing Method











Joint review session with business partners

#### Effective In-House Utilization of Metal **Resources**

The Higashichita Plant, a production base of foundry parts and engines in Aichi Prefecture, has been reusing metal scrap generated at our other plants as a foundry raw material. In fiscal 2015, the plant's efforts were geared to the reuse of copper scrap.

Previously, we purchased and used copper pellets as a foundry raw material. Among metal scrap generated at our other plants, we verified that the reuse of enameled copper wire scrap as a foundry raw material was possible.

Discarded wires, however, were not readily reusable because they were tangled and it was difficult to remove a required quantity quickly. The issue was resolved by requesting plants generating the wire scrap to break the tangled bulk into convenient quantities.

This initiative has enabled efficient and internal reuse of enameled copper wire scrap, which had otherwise been sold to the market as waste. In the future, we will extend our efforts to other metal resources.

#### ■ State of Enameled Copper Wire Scrap

Before improvement



Tanaled and difficult to remove a required quantity quickly (hard to measure)

#### After improvement



Easy to remove a required quantity quickly and use as foundry raw material

#### **Compiling and Disseminating Waste Disposal Know-How within Toyota Industries**

Employees in charge of waste disposal at our plants in Japan share information on case examples that lead to resource recycling and reduction of waste disposal costs, translating their shared knowledge into Company-wide improvement activities.

In fiscal 2015, they started compiling their know-how on waste disposal into a Waste Disposal Handbook and issued a part of the handbook, the Guide to the Work of Equipment Disposal. It has been disseminated to relevant departments and effectively utilized to ensure proper disposal and compliance with applicable laws and regulations.



Genchi genbutsu (go and see for yourself) confirmation of waste disposa

## OPIC

#### Promoting "Kaizen by Karakuri" Initiatives to Business Partners

We have been promoting initiatives to attain kaizen (improvement) by utilizing Japan's traditional, simple mechanical systems called karakuri, which do not require power generated by motors or other devices.

In fiscal 2015, we held a briefing session to explain our "kaizen by karakuri" initiatives, in which 45 representatives from business partners and other parties participated. Our presentation on a karakuri pump, its structure and usage prompted lively questions and answers. Participants took back case examples to achieve further kaizen in their respective companies.



"Kaizen by karakuri" briefing sessior

## **Reducing Environmental Risk and Establishing** a Society in Harmony with Nature

We work to ensure the prevention of environmental incidents by fully enforcing the management of chemical substances in product development and production activities and systematically monitoring drainage systems.

#### Summary

**VOC Emissions (Production Activities)** 

FY2015 Results

Emissions per unit of production (non-consolidated/automobile body) FY16 target: 24 g/m<sup>2</sup> 24 g/m<sup>2</sup>

Under the Fifth Plan, we set a fiscal 2016 target of attaining emission volume per unit of production below 24 g/m<sup>2</sup> for volatile organic compounds (VOCs) from the automobile body painting process and undertook activities accordingly. In fiscal 2015, we continued our efforts to increase the recovery rate and enhance maintenance and management of thinner, a solvent used for cleaning. Consequently, emission volume per unit of production in fiscal 2015 was 24 g/m<sup>2</sup>.

#### **Soil and Groundwater Pollution Countermeasures**

Toyota Industries carries out surveys and purification of soil and groundwater contaminated from the past use of trichloroethylene. We regularly report the survey results to local government authorities and provide information at local community meetings. As measures to prevent pollution from substances covered by the Soil Contamination Countermeasures Law as well as from grease and oils, we have drilled observation wells at all plants to conduct regular checks.

Trichloroethylene readings are available at: http://www.toyota-industries.com/csr/environment/

#### Installation of a System to Constantly Monitor Rainwater

In our plant sites, rainwater is routed through a pipe, which is separate from the drainage system of wastewater generated in production processes, and released into a sewage system.

In order to enforce strict management of both rainwater and wastewater from production processes, we have installed an oil separation tank and a system to constantly monitor water quality.

If the system detects an indication of deteriorating water

quality, it sends alerts to responsible departments and reroutes the rainwater into an emergency tank. Then, depending on the degree of quality deterioration, we either carry out purification at internal wastewater treatment facilities or consign disposal to an external company to ensure contaminated water is not discharged off the premises.



Rainwater constant monitoring system

#### **Visualizing Risk through Piping Inspections**

We have been promoting visualization of risks caused by the aging of piping to respond to the revision to Japan's Water Pollution Control Act in April 2011 and to prevent groundwater and soil pollution due to defects in drainage systems.

During fiscal 2015, our four production bases in Aichi Prefecture conducted an inspection of buried piping by getting inside the pipes and performing a visual check or, if pipes were inaccessible, by using self-propelled pipe inspection cameras. The state of deterioration revealed in the inspection was marked on the drain system blueprint of each plant. Based on a risk map created from these blueprints, we will implement required measures depending on the degree of urgency.



#### **Thoroughly Enforcing Management of Chemical Substances**

Many of the chemical substances needed for our production activities may cause adverse effects on the environment. Thus, appropriate management of chemical substances based on the safety data sheet (SDS) and other available information is crucial in ensuring safe handling and minimizing potential harmful effects.

Before starting to use a chemical substance, we check our internal system to confirm any applicable laws and regulations and usage conditions, and make sure to disseminate safety, health and environmental precautions to operators. This allows operators to understand safe and appropriate usage, effectively preventing industrial accidents, occupational diseases and environmental abnormalities.

Receiving accurate information from business partners also forms an essential part of our chemical substances management. In fiscal 2015, we concentrated our efforts on renewing awareness among business partners for the

#### ■ Toyota Industries' Chemical Substances Pre-Evaluation System



importance of providing accurate information as well as on keeping our pool of information up to date. We will continue to seek to minimize environmental risk throughout the entire supply chain.



Briefing session for business partners

## **Environmental Management**

Toyota Industries engages in a range of new environmental activities, from the conservation of biodiversity to measuring Scope 3 emissions.

## Calculating Greenhouse Gas (GHG) Emissions in the Supply Chain

We recognize that measuring the three scopes defined by the GHG Protocol and turning the results into specific efforts to reduce CO<sub>2</sub> emissions are important in creating a lowcarbon society. Scopes 1 and 2 are GHG emissions from our business activities, the former being direct emissions from our use of fossil fuels and the latter being indirect emissions from the use of purchased energy resulting from generation of electricity by power plants and other facilities. Scope 3 emissions are indirect emissions associated with each product from the purchase of raw materials to end use by customers and disposal.

In fiscal 2015, we joined the Ministry of the Environment's project to support calculation of supply chain GHG emissions for the establishment of a framework for disclosure of environmental information. We received assistance from NTT Data Institute of Management Consulting, Inc. in calculating our Scope 3 emissions.

In the fiscal 2015 results, combined Scope 1 and 2 emissions accounted for 1.8% of the total emissions, with Scope 3 emissions reaching 98.2%. The largest source of emissions, which accounted for 93.0%, was Category 11 (Use of sold products) under Scope 3. This was because the figure included an estimate of future GHG emissions of our products (lift trucks, vehicles, engines, etc.) throughout their lifecycle (during use until disposal).

Going forward, we will continue to monitor GHG emissions within the entire supply chain and accordingly promote CO<sub>2</sub> emissions reduction activities.

#### GHG Emissions in Supply Chain (FY2015)



Scope 3 Emissions by Category (FY2015)



#### Hosting a Biotope Tour for University Students

In April 2014, we conducted a tour for university students who are members of the Life Relay Project\* of our biotope, which we have developed and completed on Companyowned idle land in Obu City, Aichi Prefecture. During the tour, we explained the concept of our biotope and living organisms found there and exchanged opinions on how to turn it into an even better habitat for these living organisms. \* A project jointly carried out by Aichi Prefecture, NPOs, companies and students with the aim of forming ecological networks by leveraging corporate green zones of the Chita Peninsula as well as developing young environmental leaders



Participants of the biotope tour

#### Activity Examples of Consolidated Subsidiaries (Outside Japan)

#### Germany

Improving Consolidated Management of Energy Consumption

#### **TD Deutsche Klimakompressor GmbH (TDDK)**

Subsidiary producing car air-conditioning compressors

In fiscal 2015, TDDK installed a new system that allows the automatic collection of energy consumption data of all production lines. With the new software, TDDK is able to raise the reliability of data and reduce man-hours for collecting data. In addition, automatic visualization of data to understand the trends in energy consumption make it possible to further improve the level of consolidated management.



By accumulating more data and streamlining management of energy consumption, TDDK is aiming for more effective environmental activities.



Members who made improvements

# Environmental Management

#### U.S.A.

Introduction of Potentiometers on Electric Induction Furnaces

#### North Vernon Industry Corp. (NVIC)

Subsidiary producing materials handling equipment parts

NVIC has been using an electric induction furnace to melt scrap iron, which drives up monthly electricity consumption. To address this issue, NVIC introduced potentiometers on the electric induction furnaces to limit the application of power to 75% of the maximum amount. At this rate, iron can still be melted in time to meet production schedules, but CO<sub>2</sub> emissions can be reduced while also decreasing electricity consumption.

As a result, NVIC has achieved a 5.1% reduction in electricity used per ton of iron melted in fiscal 2015 compared with fiscal 2014, reducing CO<sub>2</sub> emissions by 3,650 tons.

NVIC is examining adding another furnace to Plant 2, which will require modification of the power controls.

#### OPIC

## TDDK Obtains ISO 50001 Certification in March 2015

ISO 50001 is an international standard that establishes systems and processes for various organizations to improve energy performance on an ongoing basis and aims at reducing the emissions volume of greenhouse gases and lowering energy costs. As a result of obtaining this certification, TDDK will aim for more effective environmental activities.

# **Environmental Impact Flow and Environmental Accounting**

In this section, we provide an overall picture of environmental impact resulting from our global business activities and report the results of environmental accounting (environmental conservation cost, environmental conservation benefits and economic benefits of environmental conservation initiatives).

#### **Environmental Impact Flow**

INPUT		Environmental Impact Flow	OUTPUT
Energy [consolidated]	10.852 TJ*1	B&D/Design	Into the Air [consolidated] CO2
Electricity City gas	1,159,847 MWh 62,108 km <sup>3</sup> N 4 989 t	Procurement	Greenhouse gases other than CO <sub>2</sub> CO <sub>2</sub> from logistics
Petroleum products	5,568 kl 6,489 t	Production	NOx (Nitrogen oxides) VOC (Volatile organic compounds)
*1: Terajoule is a unit used to measure heat. 1 Raw Materials [consolidated]	TJ = $10^{12}$ joules	Transportation/Sales	Cnemical Substances [Japan col Emissions/transfers of PRTR law designated substances.
Raw material consumption	700,628 t	Usage	Waste generation
Water [consolidated] Water consumption Chemical Substances [Japan cons	4,087 km <sup>3</sup> olidated]	Recovery/Recycling	Into Waterways [Japan consolida Water pollutants
PRTR law*2 designated substances	1.340 t		Discharge of treated wastewater

(Millions of ven)

\*2: Short for Pollutant Release and Transfer Register, the PRTR law is a scheme whereby businesses measure the release and transfer of PRTR designated pollutants and report their performance to the government. The government then compiles this data and releases it to the public.

## Environmental Accounting and On-Site Verification

#### Fiscal 2015 Environmental Accounting\*3

Scope of data collection: Toyota Industries Corporation Period of data collection: April 1, 2014 – March 31, 2015

\*3: Environmental accounting data is collected in compliance with the Ministry of the Environment's *Environmental Accounting Guidelines 2005 Edition*.

#### Environmental Conservation Cost

Category		FY2	015	FY2	014
		Investment	Expenses	Investment	Expenses
	Pollution prevention costs	944	189	585	427
Business area costs	Global environmental conservation costs	528	4,301	325	3,192
	Resource recycling costs	132	160	144	639
Upstream/c	ostream/downstream costs		142	0	343
Management costs		3	221	5	1,219
Research and development costs		28	1,437	28	1,943
Social contribution activity costs		2	628	0	456
Environmental remediation costs		24	6	0	43
Total	Tatal		7,084	1,087	8,262
IUldi		07	16	0.0	40

Environmental	<b>Conservation Benefits</b>
---------------	------------------------------

Environmental Impact	Comparison with Previous Fiscal Year
CO <sub>2</sub>	15,105 t decrease
Generation of waste products	4,930 t decrease
Water	141,841 m <sup>3</sup> decrease

#### Economic Benefits of Environmental Conservation Initiatives

		(MINIONS OF YEAR)
Item	Details	Amount
Revenue	Returns from sale of recycled waste products	4,919
	Energy cost reductions	617
Cost reduction	Cost reduction by resource savings (including reductions in amount of water use and wastewater treatment costs)	63
Total		5,599

#### **On-Site Verification**

Every year, Toyota Industries Head Office's Plant Engineering & Environment Department takes the initiative in conducting on-site verification of the accuracy and consistency of environmental data included in the Toyota Industries Report. The results for fiscal 2015 are as follows.

826,437 t-CO2 1,936 t-CO2 35,975 t-CO2 413 kg 134 t 1,662 t solidated]

463 t

90,775 t 28 t 2,029 km<sup>3</sup>

#### **On-Site Verification Sites**

Toyota Industries Corporation
Obu Plant, Hekinan Plant, Morioka Works, Anjo Plant
Consolidated subsidiaries in Japan

 IZUMI MACHINE MFG. CO., LTD., Tokyu Co., Ltd., Aichi Corporation

#### Items to be Verified

- 1. Adequacy of the scope of data collection; validity of data collection and calculation methods; validity of internal verification
- Trustworthiness and accuracy of collected/calculated data as well as data reported to the Head Office; accuracy of methods of reporting to the Head Office

#### Results

- The verified sites retained original data (evidence) for all statistics, which were confirmed to be valid as was the method of data collection.
- 2. All discrepancies found during verification have been corrected after respective causes have been identified.
- Considerations of improvements will be made for data collected using complex collection methods that may result in calculation errors.

# **Financial Section / Corporate Information**



#### Financial Section

Consolidated Eleven-Year Sun

Consolidated Balance Sheets

Consolidated Statements of In

Consolidated Statements of Co

Consolidated Statements of C

Consolidated Statements of C

#### Corporate Information

Board of Directors, Audit & Su and Managing Officers

Major Consolidated Subsidiarie

Major Production Bases

Investor Information

#### Note:

For details on the consolidated financial statements, please refer to the separate publication, which is also posted on the following Website: www.toyota-industries.com

	₽ 76-84
nmary	₽ <b>76-77</b>
	P <b>78</b> -79
come	P <b>80</b>
omprehensive Income	P <b>81</b>
hanges in Net Assets	P <b>82</b> -83
ash Flows	P <b>84</b>

	P <b>85-89</b>
pervisory Board Members	P <b>85</b>
es	P <b>86</b> -87
	P <b>88</b>
	₽ <b>89</b>

## **Consolidated Eleven-Year Summary**

Toyota Industries Corporation Years ended March 31

					Milli	ons of yen					
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
For The Year											
Net sales	¥2,166,661	¥2,007,856	¥1,615,244	¥1,543,352	¥1,479,839	¥1,377,769	¥1,584,252	¥2,000,536	¥1,878,398	¥1,505,955	¥1,241,538
Operating income (loss)	117,574	107,691	77,098	70,092	68,798	22,002	(6,621)	96,853	89,954	64,040	53,120
Ordinary income	170,827	138,133	86,836	80,866	73,911	31,756	14,343	126,488	108,484	80,635	70,912
Net income (loss)	115,263	91,705	53,119	58,594	47,205	(26,273)	(32,767)	80,460	59,468	47,077	43,357
Investment in tangible assets	¥ 126,395	¥ 109,479	¥ 89,459	¥ 58,404	¥ 38,254	¥ 26,963	¥ 104,495	¥ 104,205	¥ 129,023	¥ 130,121	¥ 111,321
Depreciation	70,782	64,153	57,954	59,830	62,372	73,238	87,219	83,744	74,449	64,423	51,277
Research and development expenses	47,785	46,326	39,057	32,070	27,788	26,826	33,646	36,750	34,548	31,166	30,051
Per share of common stock (yen):											
Net income (loss) per share—basic	¥ 367.06	¥ 292.76	¥ 170.36	¥ 188.02	¥ 151.51	¥ (84.33)	¥ (105.16)	¥ 257.50	¥ 189.88	¥ 146.16	¥ 135.09
Net income per share-diluted	366.99	292.57	170.35	_	_	_	_	257.43	189.66	146.02	135.03
Total net assets per share	7,500.16	5,640.08	4,719.66	3,662.26	3,300.17	3,390.02	2,987.16	4,483.32	5,612.11	5,044.45	3,504.80
Cash dividends per share	110.00	85.00	55.00	50.00	50.00	30.00	40.00	60.00	50.00	38.00	32.00
At Year-End											
Total assets	¥4,650,896	¥3,799,010	¥3,243,779	¥2,656,984	¥2,481,452	¥2,589,246	¥2,327,432	¥2,965,585	¥3,585,857	¥3,245,341	¥2,326,824
Total net assets	2,425,929	1,829,326	1,524,933	1,197,841	1,075,939	1,104,929	977,670	1,453,996	1,810,483	1,611,227	1,115,747
Common stock	80,462	80,462	80,462	80,462	80,462	80,462	80,462	80,462	80,462	80,462	80,462
Number of shares outstanding (excluding treasury stock) (thousands)	314,155	313,730	312,207	311,687	311,564	311,570	311,577	311,589	312,075	319,320	318,237
Cash Flows											
Net cash provided by operating activities	¥ 182,191	¥ 155,059	¥ 151,299	¥ 101,718	¥ 153,661	¥ 203,452	¥ 65,768	¥ 188,805	¥ 177,467	¥ 131,784	¥ 100,095
Net cash used in investing activities	(160,769)	(118,483)	(274,210)	(9,403)	(187,574)	(36,855)	(114,217)	(138,789)	(164,446)	(205,013)	(128,230)
Net cash provided by (used in) financing activities	(8,918)	6,183	7,050	10,279	(85,728)	(38,230)	120,971	(33,992)	(19,749)	85,172	50,020
Cash and cash equivalents at end of year	248,706	226,406	179,359	296,811	195,566	317,590	188,011	121,284	108,569	112,596	100,535
Indices											
Return on equity (ROE) (%)	5.6	5.7	4.1	5.4	4.5	(2.6)	(2.8)	5.1	3.5	3.5	4.1
Return on assets (ROA) (%)	2.7	2.6	1.8	2.3	1.9	(1.1)	(1.2)	2.5	1.7	1.7	2.0
Operating profit margin (%)	5.4	5.4	4.8	4.5	4.6	1.6	(0.4)	4.8	4.8	4.3	4.3
Equity ratio (%)	50.7	46.6	45.4	43.0	41.4	40.8	40.0	47.1	48.8	49.7	48.0
EBITDA (millions of yen)	¥ 248,854	¥ 216,175	¥ 155,234	¥ 161,876	¥ 150,481	¥ 90,521	¥ 71,608	¥ 222,125	¥ 191,007	¥ 150,674	¥ 128,381
Number of employees	52,523	49,333	47,412	43,516	40,825	38,903	39,916	39,528	36,096	32,977	30,990

1. Investment in tangible assets and depreciation apply to property, plant and equipment. They do not, however, include materials handling equipment leased

under operating leases.

Net income (loss) per share is computed based on the average number of shares for each year.
 ROE and ROA are computed based on the average total net assets and total assets, respectively, for each year.

Investment securities are stated at market value.

4. Operating profit margin = Operating income (loss) / Net sales

5. Equity ratio = (Total net assets – Subscription rights to shares – Minority interests) / Total assets
6. EBITDA = Income before income taxes + Interest expenses – Interest and dividends income + Depreciation and amortization

## **Consolidated Balance Sheets**

Toyota Industries Corporation As of March 31, 2015 and 2014

	Millions	s of yen
	2015	2014
Assets		
Current assets:		
Cash and deposits	¥ 247,273	¥ 226,383
Cash deposits for cash collection and deposit services	58,250	50,765
Trade notes and accounts receivable	265,504	246,676
Lease investment assets	55,868	50,122
Short-term investments	34,085	46,012
Merchandise and finished goods	86,865	77,989
Work in process	43,320	38,782
Raw materials and supplies	64,651	53,470
Deferred tax assets	24,234	25,961
Other current assets	68,603	59,727
Allowance for doubtful accounts	(3,756)	(3,832)
Total current assets	944.901	872.058
Fixed assets:	01,001	012,000
Property, plant and equipment:		
Buildings and structures	423.670	395.692
Accumulated depreciation	(250,488)	(238.697)
Buildings and structures, net	173.181	156.995
Machinery, equipment and vehicles	1.068.628	976.511
Accumulated depreciation	(747.732)	(703.217)
Machinery, equipment and vehicles, net	320.895	273.294
Tools, furniture and fixtures	159.660	149,580
Accumulated depreciation	(120.309)	(114,281)
Tools, furniture and fixtures, net	39.351	35.298
Land	120.652	119,107
Construction in progress	53,451	41,418
Total property, plant and equipment	707,532	626,114
Intangible assets:		
Goodwill	95,985	100,814
Other intangible assets	96,716	90,068
Total intangible assets	192,702	190,882
Investments and other assets:		
Investment securities	2,593,522	1,926,353
Deferred tax assets	18,228	15,285
Lease investment assets	135,958	118,849
Net defined benefit assets	28,289	21,501
Other investments and other assets	30,622	28,291
Allowance for doubtful accounts	(860)	(328)
Total investments and other assets	2,805.760	2,109.954
Total fixed assets	3,705.995	2,926.951
Total assets	¥4.650.896	¥3.799.010

Liabilities	
Current	liabilities:
Trade	e notes and accounts pavable
Shor	t-term loans payable
Com	imercial paper
Curre	ent portion of bonds
Leas	e obligations
Acco	ounts pavable-other
Accr	ued income taxes
Defe	rred tax liabilities
Allov	vance for bonuses to directors
Othe	er current obligations
Tota	I current liabilities
Long-te	erm liabilities:
Bond	ds payable
Long	j-term loans payable
Leas	e obligations
Defe	rred tax liabilities
Net	defined benefit liabilities
Othe	r long-term liabilities
<b>T</b>	Line of Annual Park Parks
Iota Total lie	I long-term liabilities
	biittes
Net Asset	S
Shareho	olders' equity:
Capi	tal stock
A	uthorized – 1,100,000,000 shares
ls	ssued — 325,840,640 shares as of March 31, 201
	325,840,640 shares as of March 31, 201
Capi	tal surplus
Reta	ined earnings
Treas	sury stock
1	1,684,749 shares as of March 31, 2015
1	2,109,864 shares as of March 31, 2014
<b>T</b>	lakanska lda og la sovika
lota	
Accum	lated other comprehensive income:
Valua	ation difference on available-for-sale securities
Defe	rred gains or losses on hedges
Fore	ign currency translation adjustment

Defined benefit plan adjustments

Subscription rights to shares

Minority interests Total net assets Total liabilities and net assets

Total accumulated other comprehensive income

	Millions	s of yen
	2015	2014
	¥ 205,816	¥ 196,904
	99,736	120,058
	-	20,524
	47,053	29,139
	45,665	47,644
	29,245	29,138
	13,686	25,962
	636	1,458
	626	619
	210,721	191,903
	653,187	663,353
	185,998	212,128
	421,154	323,400
	117,185	122,151
	737,268	567,859
	86,766	63,854
	23,404	16,936
	1,571,779	1,306,330
	2,224,967	1,969,684
15	80,462	80,462
	105,592	105,654
	644,165	563,957
	(41,509)	(43,012
	788,711	707,062
	1,523,393	1,022,525
	(19)	(139
	55,598	44,649
	(11,463)	(4,629
	1.567.509	1.062 404
	72	330
	69.636	59.528
	2,425,929	1,829,326
	¥4.650.896	¥3,799,010

Financial Section / Corporate Informatior

## **Consolidated Statements of Income**

Toyota Industries Corporation

For the years ended March 31, 2015 and 2014

	Millions of yen	
	2015	2014
Net sales	¥2,166,661	¥2,007,856
Cost of sales	1,765,861	1,651,573
Gross profit	400,799	356,282
Selling, general and administrative expenses:		
Sales commissions	16,291	13,832
Salaries and allowances	97,038	85,831
Retirement benefit expenses	4,176	3,788
Depreciation	13,968	11,125
Research and development expenses	41,930	39,363
Others	109,819	94,647
Total selling, general and administrative expenses	283,224	248,590
Operating income	117,574	107,691
Non-operating income:		
Interest income	12,357	11,205
Dividends income	52,955	38,602
Gain on sales of marketable securities	735	1,106
Equity in net earnings of affiliated companies	1,790	2,294
Other non-operating income	10,878	7,319
Total non-operating income	78,717	60,527
Non-operating expenses:		
Interest expenses	15,876	16,023
Loss on disposal of fixed assets	1,665	1,345
Other non-operating expenses	7,922	12,718
Total non-operating expenses	25,465	30,086
Ordinary income	170,827	138,133
Income before income taxes and minority interests	170,827	138,133
Income taxes—current	41,181	40,670
Income taxes-deferred	7,971	3,263
Total income taxes	49,153	43,934
Income before minority interests	121,674	94,198
Minority interests in income	6 / 10	2 4 9 3
	0,410	2,100

	Yer	n
Net income per share—basic	¥ 367.06	¥ 292.76
Net income per share—diluted	366.99	292.57
Net assets per share	7,500.16	5,640.08
Cash dividends per share	110.00	85.00

## **Consolidated Statements of Comprehensive Income**

Toyota Industries Corporation For the years ended March 31, 2015 and 2014

	Millions	s of yen
	2015	2014
Income before minority interests	¥121,674	¥ 94,198
Other comprehensive income:		
Valuation difference on available-for-sale securities	501,084	192,795
Deferred gains or losses on hedges	120	97
Foreign currency translation adjustment	13,362	33,588
Defined benefit plan adjustments	(6,725)	_
Share of other comprehensive income of associates accounted for using equity method	109	526
Total other comprehensive income	507,952	227,007
Comprehensive income	629,626	321,206
Profit attributable to:		
Owners of the parent	620,368	315,759
Minority interests	9,258	5,447

Financial Section / Corporate Information

## **Consolidated Statements of Changes in Net Assets**

Toyota Industries Corporation For the year ended March 31, 2015

		Millions of yen						
		Sh	areholders' equ	ity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity			
Balance at March 31, 2014	¥80,462	¥105,654	¥563,957	¥(43,012)	¥707,062			
Cumulative effects of changes in accounting policies			(3,668)		(3,668)			
Restated balance	80,462	105,654	560,288	(43,012)	703,393			
Changes of items during the period								
Dividends from surplus			(31,386)		(31,386)			
Net income			115,263		115,263			
Repurchase of treasury stock				(20)	(20)			
Disposal of treasury stock		(61)		1,523	1,461			
Net changes of items other than shareholders' equity								
Total changes of items during the period	-	(61)	83,876	1,502	85,317			
Balance at March 31, 2015	¥80,462	¥105,592	¥644,165	¥(41,509)	¥788,711			

		Millions of yen						
		Accumulated	other comprehe	ensive income				
	Valuation difference on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Defined benefit plan adjustments	Total accumulated other comprehensive income	Subscription rights to shares	Minority interests	Total net assets
Balance at March 31, 2014	¥1,022,525	¥(139)	¥44,649	¥ (4,629)	¥1,062,404	¥ 330	¥59,528	¥1,829,326
Cumulative effects of changes in accounting policies							256	(3,412)
Restated balance	1,022,525	(139)	44,649	(4,629)	1,062,404	330	59,784	1,825,914
Changes of items during the period								
Dividends from surplus								(31,386)
Net income								115,263
Repurchase of treasury stock								(20)
Disposal of treasury stock								1,461
Net changes of items other than shareholders' equity	500,868	120	10,949	(6,833)	505,105	(258)	9,852	514,698
Total changes of items during the period	500,868	120	10,949	(6,833)	505,105	(258)	9,852	600,015
Balance at March 31, 2015	¥1,523,393	¥ (19)	¥55,598	¥(11,463)	¥1,567,509	¥ 72	¥69,636	¥2,425,929

Toyota Industries Corporation For the year ended March 31, 2014

			Millions of yen		
		Sh	areholders' equ	ity	
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at March 31, 2013	¥80,462	¥105,898	¥492,578	¥(48,405)	¥630,534
Changes of items during the period					
Dividends from surplus			(20,326)		(20,326)
Net income			91,705		91,705
Repurchase of treasury stock				(96)	(96)
Disposal of treasury stock		(244)		5,489	5,245
Net changes of items other than shareholders' equity					
Total changes of items during the period	_	(244)	71,378	5,393	76,527
Balance at March 31, 2014	¥80,462	¥105,654	¥563,957	¥(43,012)	¥707,062

		Millions of yen						
		Accumulated	other comprehe	nsive income				
	Valuation difference on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Defined benefit plan adjustments	Total accumulated other comprehensive income	Subscription rights to shares	Minority interests	Total net assets
Balance at March 31, 2013	¥ 830,054	¥(237)	¥13,163	¥ —	¥ 842,980	¥ 1,478	¥49,939	¥1,524,933
Changes of items during the period								
Dividends from surplus								(20,326)
Net income								91,705
Repurchase of treasury stock								(96)
Disposal of treasury stock								5,245
Net changes of items other than shareholders' equity	192,470	97	31,485	(4,629)	219,423	(1,147)	9,588	227,865
Total changes of items during the period	192,470	97	31,485	(4,629)	219,423	(1,147)	9,588	304,392
Balance at March 31, 2014	¥1,022,525	¥(139)	¥44,649	¥(4,629)	¥1,062,404	¥ 330	¥59,528	¥1,829,326

## **Consolidated Statements of Cash Flows**

Toyota Industries Corporation For the years ended March 31, 2015 and 2014

	Millions	of yen
	2015	2014
Cash flows from operating activities:		
Income before income taxes and minority interests	¥ 170,827	¥ 138,133
Depreciation and amortization	127,463	111,826
Increase (decrease) in allowance for doubtful accounts	663	504
Interest and dividends income	(65,312)	(49,807)
Interest expenses	15,876	16,023
Equity in net (earnings) losses of affiliates	(1,790)	(2,294)
(Increase) decrease in receivables-trade	(16,129)	(13,469)
(Increase) decrease in inventories	(20,142)	(15,459)
Increase (decrease) in payables—trade	5,100	6,305
Others, net	(30,048)	(32,107)
Subtotal	186,507	159,655
Interest and dividends income received	65,077	49,782
Interest expenses paid	(15,622)	(15,517)
Income taxes (paid) refunded	(53,770)	(38,861)
Net cash provided by operating activities	182,191	155,059
Cash flows from investing activities:		
Payments for purchases of property, plant and equipment	(169,842)	(131,672)
Proceeds from sales of property, plant and equipment	11,244	12,879
Payments for purchases of investment securities	(6,713)	(32,015)
Proceeds from sales of investment securities	1,158	2,211
Payments for acquisition of subsidiaries' stock resulting in change in scope of consolidation	(947)	(1,137)
Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation	·	265
Payments for loans made	(783)	(867)
Proceeds from collections of loans	711	640
Net (increase) decrease in time deposits	12,896	38,390
Others, net	(8,495)	(7,177)
Net cash used in investing activities	(160,769)	(118,483)
Cash flows from financing activities:	(,,	( - ) /
Increase (decrease) in short-term loans payable	(24.861)	(59,236)
Proceeds from long-term loans pavable	119.053	128.203
Repayments of long-term loans payable	(40,478)	(60,721)
Proceeds from issuance of bonds	20.000	26.660
Repayments of bonds	(29,284)	(4,505)
Payments for repurchase of treasury stocks	(20)	(96)
Cash dividends paid	(31,386)	(20,326)
Cash dividends paid to minority shareholders	(516)	(454)
Proceeds from payment by minority shareholders	36	270
Others, net	(21,460)	(3 609)
Net cash provided by (used in) financing activities	(21,400)	6 183
Translation adjustments of cash and cash equivalents	0,310)	1 286
Net increase (decrease) in cash and cash equivalents	22 200	4,200
Cash and cash equivalents at beginning of period	22,000	170 250
Cash and cash equivalents at end of period	¥ 248 706	¥ 226 /06

# Board of Directors, Audit & Supervisory Board Members and Managing Officers (As of June 11, 2015)

#### **Board of Directors**





Chairman Tetsuro Toyoda



Executive Vice President Kazue Sasaki

Takaki Ogawa Kan Otsuka Taku Yamamoto Keiichi Fukunaga

#### **Audit & Supervisory Board Members**

Full-Time Audit & Supervisory Board Members

```
Kakuo Ishikawa
```

Toshifumi Ogawa

Toshifumi Onishi

Takuo Sasaki

Kohei Nozaki

#### **Managing Officers**

Senior Managing Officers Hiroaki Asai Hirooki Fujiwara Yukihisa Tsuchimoto Takashi Ito

Junichi Harada Mikihiko Okamoto Yasuhiro Murata Yojiro Mizuno Susumu Toyoda Yuji Ishizaki Keizo Hara Kiyotsugu Kurimoto Masafumi Kunito

```
Senior Managing Directors
 Masaharu Suzuki
 Norio Sasaki
```

Directors



President Akira Onishi



Executive Vice President Hirotaka Morishita



Executive Vice President Shinya Furukawa

Shuzo Sumi Kenichiro Yamanishi Mitsuhisa Kato

Audit & Supervisory Board Members

Toshio Mita Hans-Juergen Marx Takahiko ljichi

#### Managing Officers

Toshiya Yamagishi Masahiro Kawaguchi Toshihiko Shimizu Koichi Ito Yasushi Kawai Hiroaki Kayukawa Kazuyuki Yamaguchi Toru Inagawa Hiroshi Matsumoto Kota Otoshi Norio Wakabayashi Kazunari Masuoka

Sol

## Major Consolidated Subsidiaries (As of March 31, 2015)

			*Including indirect ir	nvestment
Segment	Company Name	Location	Business Activities	Ownership Ratio* (%)
Japan				
	TOYOTA L&F Akita Co., Ltd.	Akita-shi, Akita	Sales and servicing of materials handling equipment	100.0
	Aichi Corporation	Ageo-shi, Saitama	Production of aerial work platforms	52.2
	TOYOTA L&F Fukui Co., Ltd.	Fukui-shi, Fukui	Sales and servicing of materials handling equipment	100.0
	TOYOTA L&F Tokyo Co., Ltd.	Shinagawa-ku, Tokyo	Sales and servicing of materials handling equipment	100.0
Materials	Nishina Industrial Co., Ltd.	Nagano-shi, Nagano	Production of parts for materials handling equipment and construction machinery	97.5
Handling	TOYOTA L&F Shizuoka Co., Ltd.	Shizuoka-shi, Shizuoka	Sales and servicing of materials handling equipment	100.0
Equipment	Takeuchi Industrial Equipment Manufacturing Co., Ltd.	Taketoyo-cho, Chita-gun, Aichi	Production of materials handling equipment parts	100.0
	HANDA Casting Company	Handa-shi, Aichi	Production of foundry parts	100.0
	Unica Co., Ltd.	Kiyosu-shi, Aichi	Production of in-house transporters	100.0
	TOYOTA L&F Hyogo Co., Ltd.	Nishinomiya-shi, Hyogo	Sales and servicing of materials handling equipment	100.0
	KTL Co., Ltd.	Koto-ku, Tokyo	Management and operation of distribution centers	50.5
	Wanbishi Archives Co., Ltd.	Minato-ku, Tokyo	Data storage, management, collection and delivery services	100.0
Logistics A	Asahi Security Co., Ltd.	Minato-ku, Tokyo	Cash collection and delivery and cash proceeds management	100.0
	Taikoh Transportation Co., Ltd.	Kariya-shi, Aichi	Land transportation services	53.1
	Advanced Logistics Solutions Co., Ltd.	Takahama-shi, Aichi	Planning, design and operation of distribution centers	100.0
	Tokaiseiki Co., Ltd.	Iwata-shi, Shizuoka	Production of parts for compressors and engines	100.0
	Altex Co., Ltd.	Hamamatsu-shi, Shizuoka	Production of compressor parts	100.0
	IZUMI MACHINE MFG. CO., LTD.	Obu-shi, Aichi	Production of specialized machine tools, friction welding machines and automotive parts	100.0
Automobile	Nagao Kogyo Co., Ltd.	Nagoya-shi, Aichi	Production of parts for compressors, materials handling equipment and textile machinery	100.0
	Miduho Industry Co., Ltd.	Nagoya-shi, Aichi	Production of parts for automobiles, compressors and materials handling equipment	100.0
	Iwama Loom Works, Ltd.	Oguchi-cho, Niwa-gun, Aichi	Production of compressor parts	100.0
	Tokyu Co., Ltd.	Oguchi-cho, Niwa-gun, Aichi	Production of compressor parts and industrial machinery	100.0
Textile Machinery	Hara Corporation	lkeda-cho, Ibi-gun, Gifu	Production of parts for textile machinery and materials handling equipment	100.0
	SKM CORPORATION	Kariya-shi, Aichi	Total construction management, security management, civil engineering/construction design work and real estate management	100.0
	Sun Staff, Inc.	Kariya-shi, Aichi	Personnel placement and contract office staffing	100.0
	Sun Valley Inc.	Kariya-shi, Aichi	Sales of goods, travel agency, organizing and running of events	100.0
Uthers	Shine's Co., Ltd.	Kariya-shi, Aichi	Management and operation of employee clubs	100.0
	Toyota Industries Well Support Corporation	Kariya-shi, Aichi	Planning and operation of benefit programs, administrative processing services for payroll accounting, etc.	100.0
	Toyoda High System, Incorporated	Kariya-shi, Aichi	Planning, development, formulation and operation of information infrastructure and systems	100.0
	Sun River Co., Ltd.	Suita-shi, Osaka	Sports facilities, real estate lease and restaurant management	100.0

\*Including indirect investment

Segment	Country	Company Name	Location	Business Activities	Ownershi Ratio* (%
North America			· · · · · · · · · · · · · · · · · · ·		
		Cascade Corporation	Portland, Oregon	Production of materials handling equipment parts	100.0
		Indiana Hydraulic Equipment, Corp.	Franklin, Indiana	Production of materials handling equipment parts	100.0
		Industrial Components and Attachments, Inc.	Portland, Oregon	Holding company for materials handling equipment business in the U.S.A.	100.0
		North Vernon Industry Corp.	North Vernon, Indiana	Production of materials handling equipment parts	100.0
Materials	U.S.A.	Raymond-Muscatine Inc.	Muscatine, Iowa	Production of materials handling equipment	100.0
Fauinment		The Raymond Corporation	Greene, New York	Production of materials handling equipment	100.0
_4-6		Toyota Industrial Equipment Mfg., Inc.	Columbus, Indiana	Production of materials handling equipment	100.0
		Toyota Material Handling North America, Inc.	Columbus, Indiana	North American headquarters for materials handling equipment business	100.0
		Toyota Material Handling, U.S.A., Inc.	Columbus, Indiana	Sales of materials handling equipment	100.0
	Canada	G. N. Johnston Equipment Co., Ltd.	Mississauga, Ontario	Sales and servicing of materials handling equipment	100.0
		Michigan Automotive Compressor, Inc.	Parma, Michigan	Production of compressors	60.0
Automobilo		TD Automotive Compressor Georgia, LLC	Pendergrass, Georgia	Production of compressors	77.4
Automobile	U.S.A.	Toyota Industries Compressor Parts America, Co.	Pendergrass, Georgia	Production of compressor parts	100.0
		Toyota Industries Electric Systems North America, Inc.	Novi, Michigan	Development and sales of electronics products	90.0
Textile Machinery	U.S.A.	Toyoda Textile Machinery, Inc.	Charlotte, North Carolina	Sales and servicing of textile machinery	100.0
Others	U.S.A.	Toyota Industries North America, Inc.	Columbus, Indiana	North American headquarters	100.0

				*Including inc	lirect investmer
Segment	Country	Company Name	Location	Business Activities	Ownersh Ratio* (%
Europe					
		BT Products AB	Mjölby	Production of materials handling equipment	100.0
		Toyota Industries Europe AB	Mjölby	Holding company for materials handling equipment business in Europe	100.0
	Sweden	Toyota Material Handling Europe AB	Mjölby	European headquarters for materials handling equipment business	100.0
		Toyota Material Handling Sweden AB	Bromma	Sales and servicing of materials handling equipment	100.0
N	Norway	Toyota Material Handling Norway AS	Trondheim	Sales and servicing of materials handling equipment	100.0
	Finland	Toyota Material Handling Finland Oy	Vantaa	Sales and servicing of materials handling equipment	100.0
	Denmark	Toyota Material Handling Danmark A/S	Slangerup	Sales and servicing of materials handling equipment	100.0
	Latvia	Toyota Material Handling Baltic SIA.	Riga	Sales and servicing of materials handling equipment	100.0
	Poland	Toyota Material Handling Polska Sp. z o.o.	Pruszków	Sales and servicing of materials handling equipment	100.0
	Czech Republic	Toyota Material Handling CZ s.r.o.	Rudna	Sales and servicing of materials handling equipment	100.0
	Slovakia	Toyota Material Handling Slovensko s.r.o.	Bratislava	Sales and servicing of materials handling equipment	100.0
	Hungary	Toyota Material Handling Hungary Ltd.	Budapest	Sales and servicing of materials handling equipment	100.0
Matariala	Romania	Tovota Material Handling Romania s.r.l.	Bucharest	Sales and servicing of materials handling equipment	100.0
Handling	Russia	000 Toyota Material Handling RUS	Moscow	Sales and servicing of materials handling equipment	100.0
Equipment	Switzerland	Tovota Material Handling Schweiz AG	Zürich	Sales and servicing of materials handling equipment	50.0
	Austria	Tovota Material Handling Austria GmbH	Wiener Neudorf	Sales and servicing of materials handling equipment	100.0
		Toyota Material Handling Europe Brussels NV/SA	Brussels	Sales and marketing of materials handling equipment	100.0
	Belgium	Toyota Material Handling Belgium NV/SA	Wilriik	Sales and servicing of materials handling equipment	100.0
	Netherlands	Toyota Material Handling Nederland B V	Fde	Sales and servicing of materials handling equipment	100.0
	II K	Toyota Material Handling LIK Limited	Slough Berkshire	Sales and servicing of materials handling equipment	100.0
-	Germany	Toyota Material Handling Deutschland GmbH	Isemhagen	Sales and servicing of materials handling equipment	100.0
	France	Toyota Industrial Equipment S.A.	Ancenis	Production of materials handling equipment	100.0
		Toyota Material Handling France SAS	Marne La Vallée	Sales and servicing of materials handling equipment	100.0
	Snain	Toyota Material Handling France one	Barberá del Vallés	Sales and servicing of materials handling equipment	100.0
	opun	CESAB Carrelli Elevatori S n A	Bologna	Production of materials handling equipment	100.0
	Italy	Toyota Material Handling Italia S r I	Bologna	Sales and servicing of materials handling equipment	100.0
	Greece	Toyota Material Handling Greece SA	Markopoulo Attica	Sales and servicing of materials handling equipment	100.0
	arcooc	TD Deutsche Klimakompressor GmbH	Bernsdorf	Production of compressors	65.0
Automobile	Germany	Touete Industrice Electric Susteme Europe CmbH	München	Production of compressors	00.0
		Toyota Industries Electric Systems Europe Gribh	Inter	Seles and envising of textile mechanics	100.0
Textile Machinery	Switzerland		Uster	Sales and servicing of texture machinery	100.0
Othora	Guadan	Taueta Industrias Finance International AD	Uslei	Froduction of yarn testing instruments and collon classing instruments	100.0
Othore	Sweuell	Toyota industries Finance international Ab	Ινιjoiby		100.0
otilers	India	Toyota Material Handling India Pyt 1 td	Delhi	Sales and servicing of materials handling equipment	02.0
	Viotnam	Toyota Material Fauinment Vietnam Co. 1 td	Hung Von	Draduction of materials handling equipment	00.0
	Australia	Toyota Industrial Equipment Vietnam Co., Etu.	Now South Waloc	Saloc and convicing of matorials handling equipment	100.0
Materials	Australia	BT Manufacturing (Eosban) Co. 1 td	Foshan Guandong	Production of materials handling equipment	100.0
Handling	China	Toyota Material Handling (Shandhai) Co. Ltd.	Shanghai	Saloc of materials handling equipment	75.0
Equipment	Brazil	Toyota Material Handling Mercosur Indústria e	São Paulo	Production, sales and servicing of materials handling equipment	100.0
	Mexico	Toyota Material Handling Capital S.A.P.I. de C.V., SOFOM E N B	Santiago de Querétaro	Rental and leasing of materials handling equipment	100.0
l oaistics	China	Toyota Industries Management (China) Co. Ltd	Shanohai	Logistics-related services for China-based companies	100 0
	India	Kirloskar Tovota Textile Machinery Pvt 1 td	Bangalore	Production of automotive parts and textile machinery	98.9
	Indonesia	PT TD Automotive Compressor Indonesia	Bekasi	Production of compressors	50.0
Automobile	muonosia	Toyota Industry (Kunshan) Co. Ltd	Kunshan Jianosu	Production of automotive parts and materials handling equipment etc	62.4
A GLOTHODIIG	China	TD Automotive Compressor Kunshan Co. Ltd	Kunshan lianneu	Production of compressors	77 6
	onna	Vantai Shourann TD Automotive Compressor Co. Ltd.	Vantai Shandono	Production of compressors	50.1
		rama chougung ib natomotive oumpressor 60., Etc.	i anu, onunuony		1 00.1

#### Affiliates Accounted for by the Equity Method

Automobile Poland Toyota Motor Industries Poland Sp. z o.o. Jelcz-Laskowice

Production of diesel engines	40.0

## Major Production Bases (As of March 31, 2015)

#### Major Plants (Parent Company)

Plant	Location	Main Products	Start of Operations
Kanina Diant		T. 41	1007
Kariya Plant	Kariya-shi, Alchi	Textile machinery, compressors	1927
Obu Plant	Obu-shi, Aichi	Compressor parts	1944
Kyowa Plant	Obu-shi, Aichi	Electronic equipment, automotive press dies, production facilities, engine parts	1953
Nagakusa Plant	Obu-shi, Aichi	Vehicles	1967
Takahama Plant	Takahama-shi, Aichi	Materials handling equipment, materials handling systems	1970
Hekinan Plant	Hekinan-shi, Aichi	Diesel engines, gasoline engines	1982
Higashichita Plant	Handa-shi, Aichi	Foundry parts, diesel engines	2000
Higashiura Plant	Higashiura-cho, Chita-gun, Aichi	Compressor parts	2002
Anjo Plant	Anjo-shi, Aichi	Electronic equipment	2007

#### Major Plants (Outside Japan)



Company Name	Country	Location	Main Products	Year of Foundation
1 Toyota Industrial Equipment Mfg., Inc.	U.S.A.	Columbus, Indiana	Materials handling equipment	1988
2 The Raymond Corporation	U.S.A.	Greene, New York	Materials handling equipment	1922
3 Michigan Automotive Compressor, Inc.	U.S.A.	Parma, Michigan	Compressors	1989
4 TD Automotive Compressor Georgia, LLC	U.S.A.	Pendergrass, Georgia	Compressors	2004
5 BT Products AB	Sweden	Mjölby	Materials handling equipment	1946
6 CESAB Carrelli Elevatori S.p.A.	Italy	Bologna	Materials handling equipment	1942
7 Toyota Industrial Equipment, S.A.	France	Ancenis	Materials handling equipment	1995
8 TD Deutsche Klimakompressor GmbH	Germany	Bernsdorf	Compressors	1998
9 Toyota Motor Industries Poland Sp. z o.o.	Poland	Jelcz-Laskowice	Diesel engines	2002
10 Kirloskar Toyota Textile Machinery Pvt. Ltd.	India	Bangalore	Automotive parts, textile machinery	1995
11 Toyota Industry (Kunshan) Co., Ltd.	China	Kunshan, Jiangsu	Automotive parts, materials handling equipment, etc.	1994
12 TD Automotive Compressor Kunshan Co., Ltd.	China	Kunshan, Jiangsu	Compressors	2005
13 Yantai Shougang TD Automotive Compressor Co., Ltd.	China	Yantai, Shandong	Compressors	2012
14 P.T. TD Automotive Compressor Indonesia	Indonesia	Bekasi	Compressors	2011
Toyota Material Handling Mercosur Indústria e Comércio de Equipamentos Ltda	Brazil	São Paulo	Materials handling equipment	2004

## Investor Information (As of March 31, 2015)

#### **Corporate Head Office**

TOYOTA INDUSTRIES CORPORATION 2-1, Toyoda-cho, Kariya-shi, Aichi, 448-8671, Japan Telephone: +81-(0)566-22-2511 Facsimile: +81-(0)566-27-5650

#### Date of Establishment

November 18, 1926

#### Common Stock

No par value Authorized: 1,100,000,000 shares Issued: 325,840,640 shares (including treasury stock)

#### Capital Stock

80,462 million yen

#### Major Shareholders (Top 10)

Name	Number of Shares Held (Thousands)	Percentage of Total Shares in Issue (%)			
Toyota Motor Corporation	76,600	23.51			
DENSO Corporation	29,647	9.10			
Towa Real Estate Co., Ltd.	15,697	4.82			
Toyota Tsusho Corporation	15,294	4.69			
The Master Trust Bank of Japan, Ltd. < Trust Account>	10,138	3.11			
Japan Trustee Services Bank, Ltd. < Trust Account>	7,584	2.33			
Nippon Life Insurance Company	6,580	2.02			
Aisin Seiki Co., Ltd.	6,578	2.02			
Aioi Nissay Dowa Insurance Co., Ltd.	4,514	1.39			
Toyota Industries Corporation Employee Ownership Program	4,266	1.31			
Total	176,902	54.29			
Notes: 1. Toyota Industries Corporation also holds 11,684 thousand shares of treasury stock but is excluded from t					

ne above list. 2. Shares held for the purpose of trust services of respective banks are as follows: The Master Trust Bank of Japan, Ltd. (Trust Account) 10,138 (Thousands) Japan Trustee Services Bank, Ltd. (Trust Account) 7,584 (Thousands)

#### **Distribution of Shares**



#### Stock Exchange Listings

Tokyo and Nagoya (Ticker Code: 6201)

#### Number of Shareholders

14.958

#### **Independent Accountant**

PricewaterhouseCoopers Aarata Sumitomo Fudosan Shiodome Hamarikyu Bldg. 8-21-1 Ginza, Chuo-ku, Tokyo, 104-0061, Japan

#### Transfer Agent **Special Account Management Institution**

Mitsubishi UFJ Trust and Banking Corporation 1-4-5, Marunouchi, Chiyoda-ku, Tokyo, 100-8212, Japan



## TOYOTA INDUSTRIES CORPORATION

2-1, Toyoda-cho, Kariya-shi, Aichi 448-8671, Japan Telephone: +81-(0)566-22-2511 Facsimile: +81-(0)566-27-5650 www.toyota-industries.com



This report is printed on FSC<sup>™</sup>-certified paper that contributes to forest conservation with ink derived from vegetables using a waterless printing process. Printed in Japan