

One-piece Cycle

Technology and quality
flowing together in one
perfect motion

TOPY Report 2019

TOPY Report 2019



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TOPY Report 2019



The Topy Industries Group Corporate Basic Philosophy

Win the trust and respect of society
through the continuance and development
of the Topy Industries Group
and the execution of one's duty
as a public institution.

The Topy Industries Group Corporate Code of Conduct

— To win the trust and respect of society —

Under the Corporate Philosophy, the management and employees
of the Topy Industries Group shall strictly abide by all applicable
laws and ordinances, the spirit reflected, and the Corporate Code
of Conduct, while accepting full corporate social responsibility and
fostering an open-minded and creative corporate culture.

Editorial Policy

Basic Policy

Topy Report 2019 provides selected important information focusing on the company's management strategies to improve corporate value in the medium to long term, including information related to its business activities, operating results, social responsibilities, and management control system. The aim of this report is to encourage candid dialogue with our stakeholders, including shareholders, investors and related parties.

The IIRC's International Integrated Reporting Framework and the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation were used as references in the creation of this report.

Reporting Scope

This report covers all companies listed as subsidiaries of the Topy Industries Group (consolidated basis). However, some activities and data represent only Topy Industries, Ltd. In principle, activities where the scope is not specified refer to those of the Topy Industries Group. Where it is necessary to specify the applicable scope, activities by Topy Industries alone are identified within the headline or descriptions as Topy Industries, and activities by an individual Group company are identified by its corporate name.

Reporting Period

Covers mainly FY2018 (April 1, 2018 to March 31, 2019), but also includes some activities that occurred on and after April 1, 2019.

Date of Issue

September 2019

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Businesses of the Topy Industries Group

The Topy Industries Group is a comprehensive metal processing group with an integrated production system from raw material production to the fabrication of finished products. Within this, the steel business engages in raw material supply and the automotive and industrial machinery components business unit deals in material processing, both of which are interrelated.

The Group is also striving to diversify its businesses, which now encompass the wholesaling of electricity, manufacture and sale of synthetic mica and crawler robots, leasing of real estate, and operation of sports clubs.

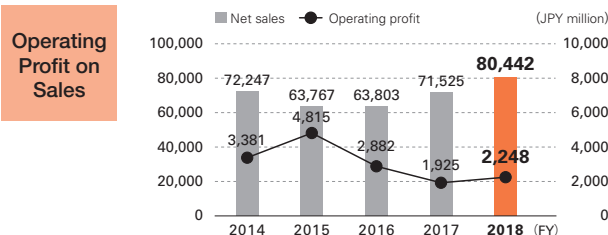
Steel Business

A raw material business operated since our foundation

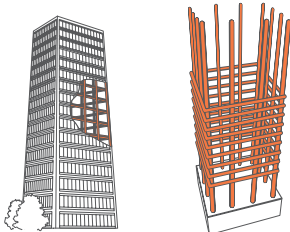


At the Topy Industries Group, the steel business unit produces steel using electric furnaces as well as a wide variety of steel bars.

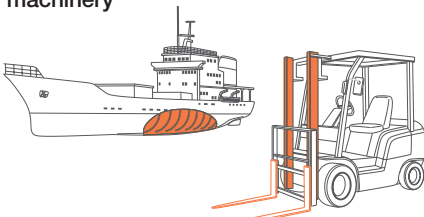
Wide flange beams, standard structural shapes and deformed bars are shipped as construction materials chiefly to customers in both domestic and overseas markets, while special sections are largely supplied to the company's automotive and industrial machinery components business unit where they are turned into finished products. This business unit includes companies engaging in the collection and recycling of steel scrap, a transportation company, and a trading company that acts as the logistic and trading arms of the unit. In addition to inter-group business transactions, it also sells products and provides services to customers outside the Topy Industries Group.



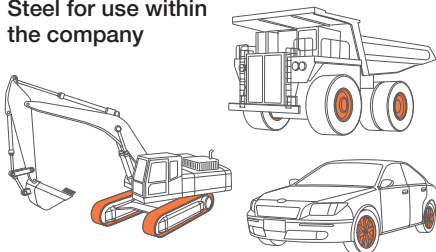
Steel construction materials



Steel materials for ships and industrial machinery



Steel for use within the company

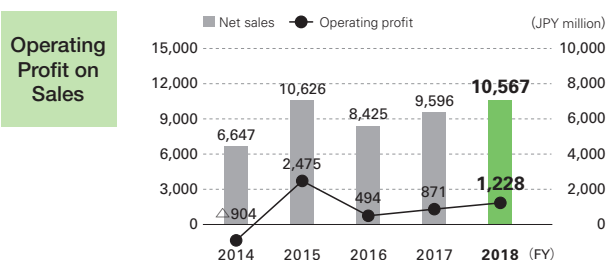


Power Generation Business

Focusing on the stable supply of electricity while paying utmost consideration to maintaining harmony with the surrounding environment

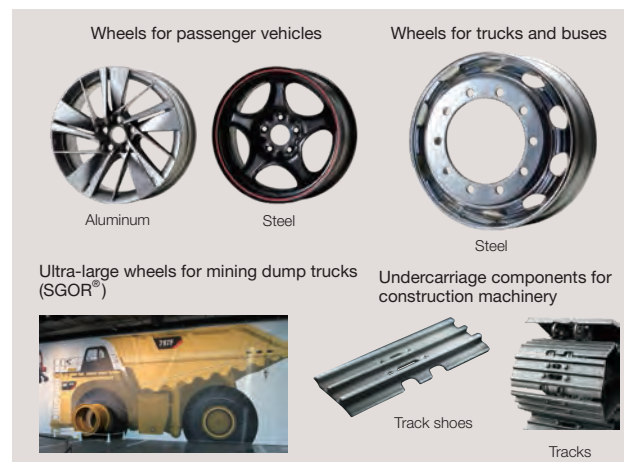


We took electricity deregulation as an opportunity to construct a coal thermal power plant (Toyohashi-shi, Aichi) while paying utmost consideration to maintaining harmony with the surrounding environment, and began to operate our electricity wholesale business in 2000. We changed the supply destination and began to supply power under new contracts in 2015.



Automotive and Industrial Machinery Components Business

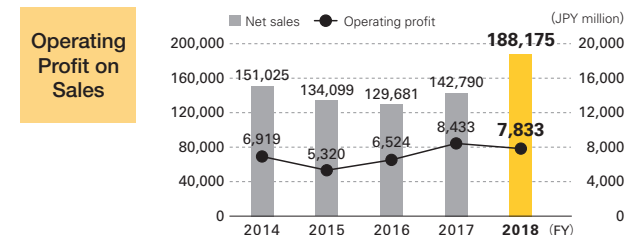
A world-leading comprehensive manufacturer of wheels and undercarriage components for construction machinery



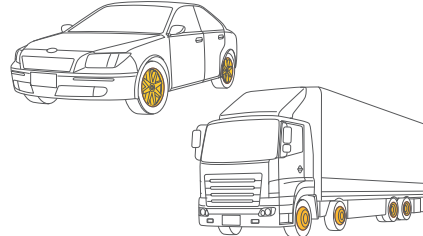
We manufacture and sell products including steel and aluminum wheels for automobiles, wheels for mining vehicles, undercarriage components for construction machinery (track shoes* and tracks**), and industrial steel fasteners such as precision leaf springs.

*Track shoes: Component of tracks manufactured by processing and heat-treating hot rolled steel materials (special steel). Track shoes and other components are assembled to form tracks.

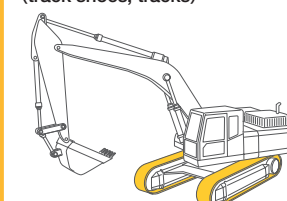
**Tracks: A general name for the assembled undercarriage components of construction machinery vehicles, which are generally called a steel track belt.



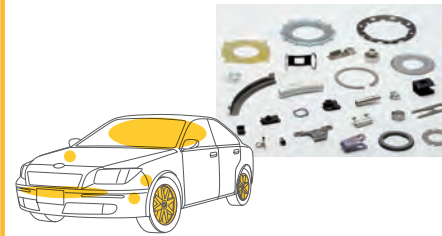
Wheels



Undercarriage components for construction machinery (track shoes, tracks)



Industrial fasteners (precision leaf springs, etc.)



Other Businesses

Creating new sources of profit

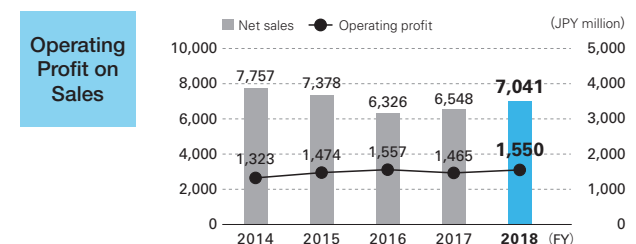


Crawler robots

Synthetic mica for use in cosmetics



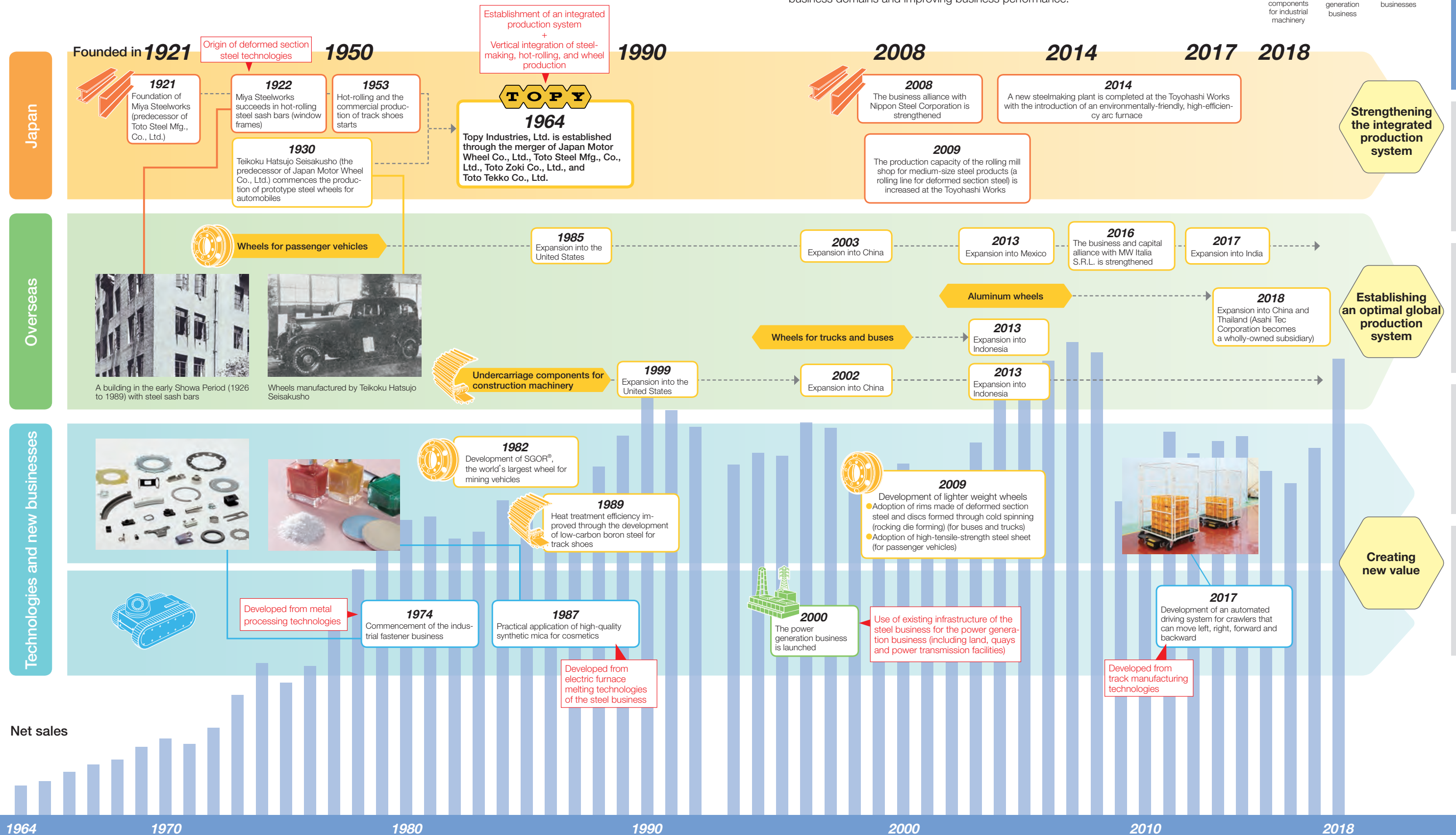
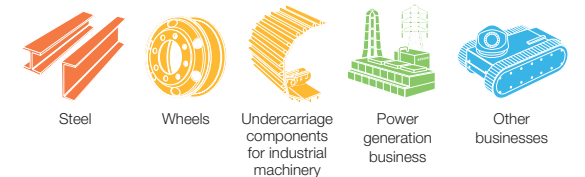
We are expanding sales of synthetic mica, which is used for cosmetics and other products, in Japan and other countries, while developing applications for crawler robots that can move left, right, forward and backward. We also lease real estate, such as Topy-Rec Plaza (Minami-Suna, Koto-ku, Tokyo), and operate sports clubs, including OSSO.



History of the Topy Industries Group

In the long history since its foundation, the Topy Industries Group has been expanding its businesses by leveraging the originality and ingenuity of the people at its work sites, based on its unique technologies.

In 1964, our integrated production system for producing and making full use of steel was completed through the merger of four companies (engaging in businesses concerning steel and wheels, undercarriage components for construction machinery, and others). The integration of different businesses creates management stability, while synergies lead to new businesses (industrial fasteners, synthetic mica, power generation, crawler robots, and other businesses), thereby expanding our business domains and improving business performance.



Value Creation Process of the Topy Industries Group

We solve social issues and achieve sustainable growth by generating unique value through each of our businesses.

The Topy Industries Group has leveraged its strengths of outstanding technological capabilities related to steel and an integrated system for production from raw materials to finished products in order to gain greater trust from customers and capture leading shares of the global market for its mainstay products, while expanding into peripheral businesses.

We will make full use of our business base and the strengths we have cultivated through our various businesses, including steel, automotive and industrial machinery components, power generation, synthetic mica, and crawler robots, to contribute to solving social issues related to the SDGs* and to grow sustainably together with society.

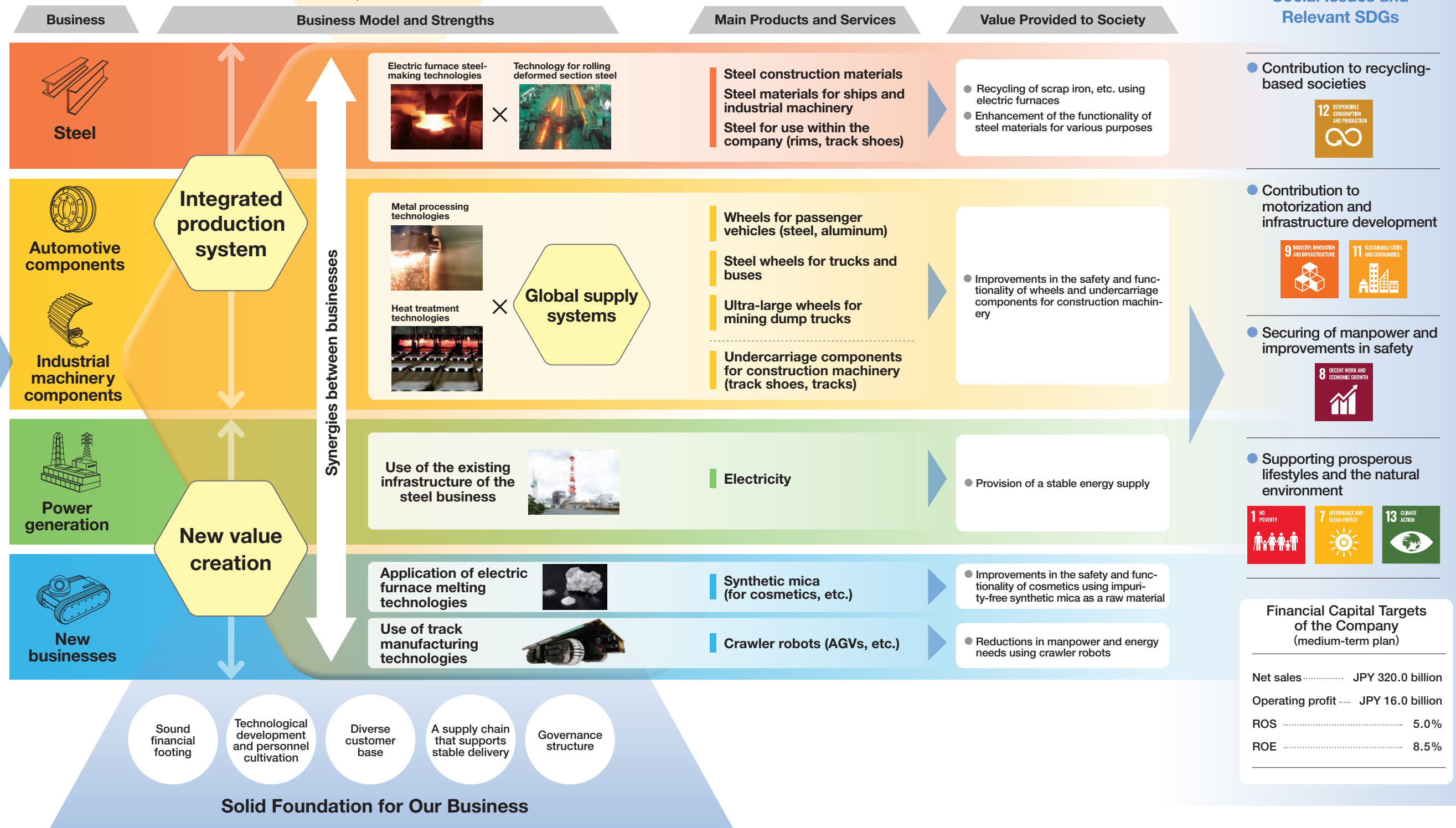
*SDGs: Sustainable Development Goals

The Sustainable Development Goals were adopted at a UN summit in 2015.

They comprise 17 goals and 169 targets for tackling challenges such as eradicating poverty and building recycling-based societies, with a deadline of 2030.

The Topy Industries Group Corporate Basic Philosophy

Win the trust and respect of society through the continuance and development of the Topy Industries Group and the execution of one's duty as a public institution.



Top Message

Cultivating People and Technology to Build a Value Creation Cycle for the Next 100 Years

Value creation that leverages outstanding technological capabilities for “making and mastering steel” and an integrated production system in its DNA

In 2021, Topy Industries will celebrate 100 years since its founding.

To date, we have leveraged the strengths rooted in our DNA of outstanding technological capabilities for “making and mastering steel” and an integrated production system spanning from raw materials to products. This has enabled us to win the trust of customers and capture a leading share of the global market for mainstay products including wheels for automobiles, wheels for mining vehicles, and undercarriage components for construction machinery. We have also continuously taken on new challenges and expanded our business into surrounding fields.

A structural shift is occurring in which every field of finance and industry worldwide is entering a transition period. The Topy Industries Group must respond to these changes in the economic environment with agility and accuracy. We must make full use of our business base and the strengths we have cultivated through our various businesses, including steel production, automotive and industrial machinery components, power generation, synthetic mica, and crawler robots, to help create a more prosperous and comfortable society and realize sustainable growth.

In our new medium-term management plan “Growth & Change 2021” (G&C 2021), which began in FY2019 and includes targets for 2021, this is the bedrock from which we will improve our corporate value and create a new Topy Industries for the next 100 years.



Reflecting on the Previous Medium-Term Management Plan “Growth & Change 2018” (G&C 2018)

In the series of medium-term management plans with the slogan of “Growth & Change” (G&C) since fiscal 2012, the Group has constantly promoted global “Growth” and “Change” to achieve a highly profitable business structure.

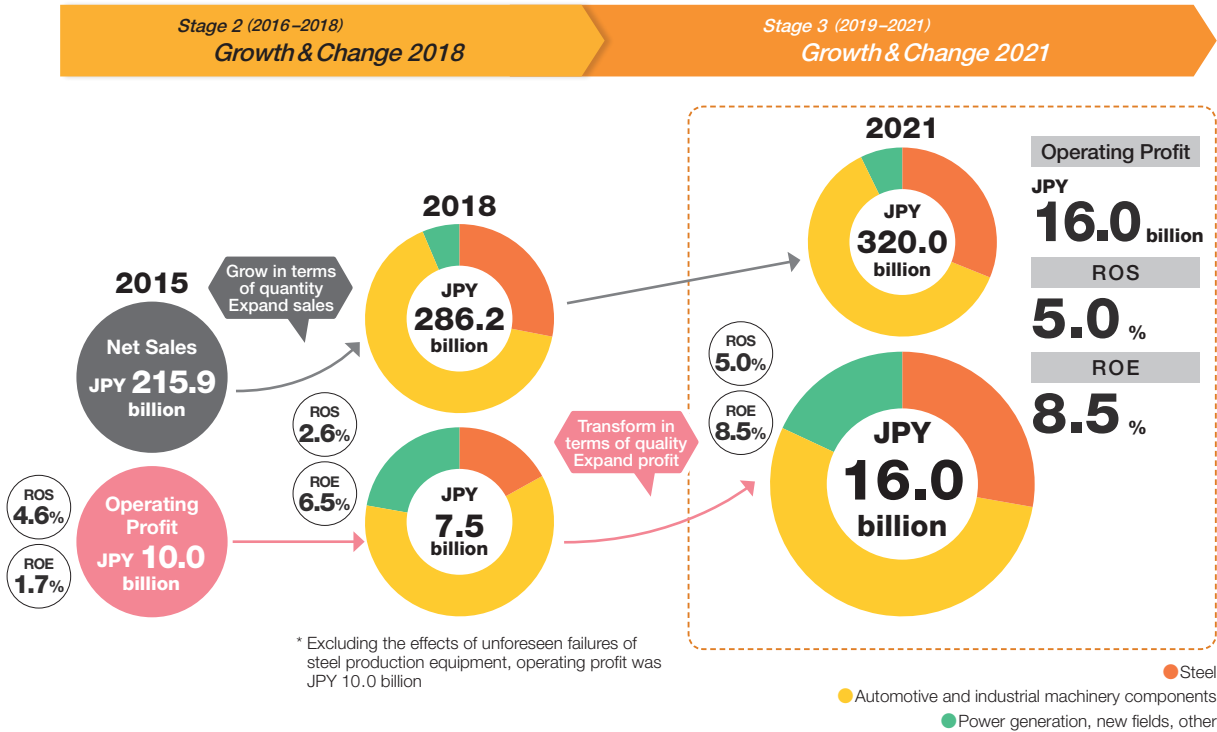
G&C 2018 (FY2016–2018) was the second stage of G&C and in the automotive and industrial machinery components business, we expanded our overseas locations to build a global supply system that enables us to supply wheels with common designs to anywhere in the world, particularly steel wheels for passenger vehicles. We also acquired Ring Techs Co., Ltd. as a subsidiary in order to reorganize and strengthen our production systems for steel wheels for passenger vehicles in Japan, and acquired Asahi Tec Corporation as a subsidiary in order to strengthen the foundations of our aluminum wheel business, which is enjoying significant growth in demand in both Japan and overseas. In the steel business, we leveraged our proprietary technologies for manufacturing deformed section steel and processing technologies to develop new products and proceeded to cultivate new customers. Furthermore, in regard to new businesses, we expanded sales of synthetic mica, a material used in cosmetic products to add gloss among other purposes, and steadily created a business foundation in crawler robots, including for use as automated guided vehicles (AGV).

Looking at the consolidated business results for the final fiscal year of the plan, we progressively captured demand for construction and mining vehicles which started to recover during the G&C 2018 period, and by making Ring Techs and Asahi Tec our subsidiaries, we achieved net sales that considerably outperformed the targets of the medium-term management plan, and I believe we have created a business framework for realizing the next stage of growth. However, in the steel business, sharp rises in the price of secondary materials such as graphite electrodes and alloy iron led to higher costs than expected, while unforeseen failures in steel

production equipment reduced production. The effects of these factors meant that we were unable to achieve the target profits. Currently we are dealing with these unforeseen equipment failures by implementing preventative measures, including in other major processes, and the entire company is engaged in building a new business continuity plan (BCP) framework to minimize the potential impact on customers in case of future incidents. Also, we are gradually shifting to sales prices that more appropriately reflect the increased costs caused by rising secondary material prices.



New Medium-Term Management Plan “Growth & Change 2021” (G&C 2021) Targets and How We Will Achieve Them

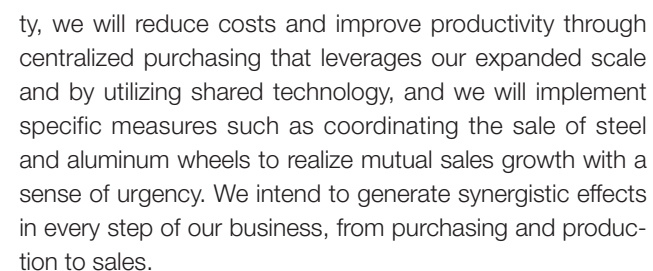


Accomplishing Global “Growth” and “Change” to Achieve a Highly Profitable Business Structure

◆ Increase Earnings Power and Leverage Group Synergies

Under these circumstances, in G&C 2021 (FY2019–2021), which is the final stage of G&C, we will put priority on increasing the earnings power of businesses that were enhanced under G&C 2018 and aim to achieve the primary business targets of an operating profit of JPY 16.0 billion, ROS of 5.0%, and ROE of 8.5%.

First of all, we will reap the results of growth measures implemented in G&C 2018 to ensure we definitely achieve our targets. In the automotive and industrial machinery components business, we will leverage our global supply system for steel wheels for passenger vehicles to focus on cultivating new customers and capture growth in demand worldwide, as well as work with Ring Techs and Asahi Tec to fully realize synergistic effects both in Japan and overseas as early as possible. The growing shift toward aluminum wheels and other factors have meant that demand for steel wheels in the Japanese market is far lower than forecast, so we will coordinate with Ring Techs to rebuild an optimal domestic production system for this level of demand in order to ensure profitability, while also realizing synergistic effects in terms of both sales and costs. On the other hand, demand for lighter vehicle bodies and higher design quality is growing. In order to capture the rising demand for aluminum wheels in Japan and overseas and improve profitabili-



Another important issue to tackle in order to increase earnings power is to break free from the commodification of existing products. Thus, we plan to leverage our unique technology to advance development and expand sales of products that can meet customers' needs and respond to social issues. In the automotive and industrial machinery components business, we will accelerate the development of lightweight wheels as well as wheels based on high-quality designs. While proposing new ideas, in regard to wheels for mining vehicles and undercarriage components for construction machinery, we will expand sales in the replacement parts market. In the steel business, we aim to capture

Preparing for the Next Stage of Growth

In G&C 2021, we will advance initiatives for growth beyond our 100th anniversary.

We will also apply IoT at our production sites to shift toward smart factories. Currently we are seeing significant energy-saving effects from visualizing energy usage volumes and making these visible to employees. In the near future, we plan to make use of the IoT that incorporates 5G large-capacity communications technology to strengthen the capability of production sites in Japan to function as mother factories that can manage operations and equipment at overseas locations.

Further Strengthen the Management Foundation

Dividends

For dividends during the G&C 2021 period, we will continue to use a consolidated dividend payout ratio of around 30–35% as a guide. We will also determine the dividend amount by fully considering the continued payment of stable dividends. Our internal reserve is allocated mainly to investment in new businesses and capital investment for long-term stable expansion in our efforts to raise corporate value and realize sustainable growth. We look forward to receiving the continued understanding and support of our shareholders and investors.

<p>Expand CF from operations by</p> <ul style="list-style-type: none">• Raising EBITDA• Efficiently shrinking inventory, etc. <p>3-Year CF from operations</p> <p>JPY 64.0 billion</p>	<p>Capital investments</p> <p>JPY 52.0 billion</p>	<p>JPY 15.0 billion</p> <p>Strategic investments</p> <p>Growth investments</p>
<p>JPY 7.0 billion</p> <p>Effective cash usage, etc.</p>	<p>Allocation for dividends</p> <p>JPY 19.0 billion</p>	<p>JPY 37.0 billion</p> <p>Maintenance investments</p> <p>BCP and response to laws and regulations, etc.</p>
<p>Allocate in a way that balances additional strategic investment, shareholder return, and reduction of interest-bearing debt based on consideration of funds available and capital structure</p>		

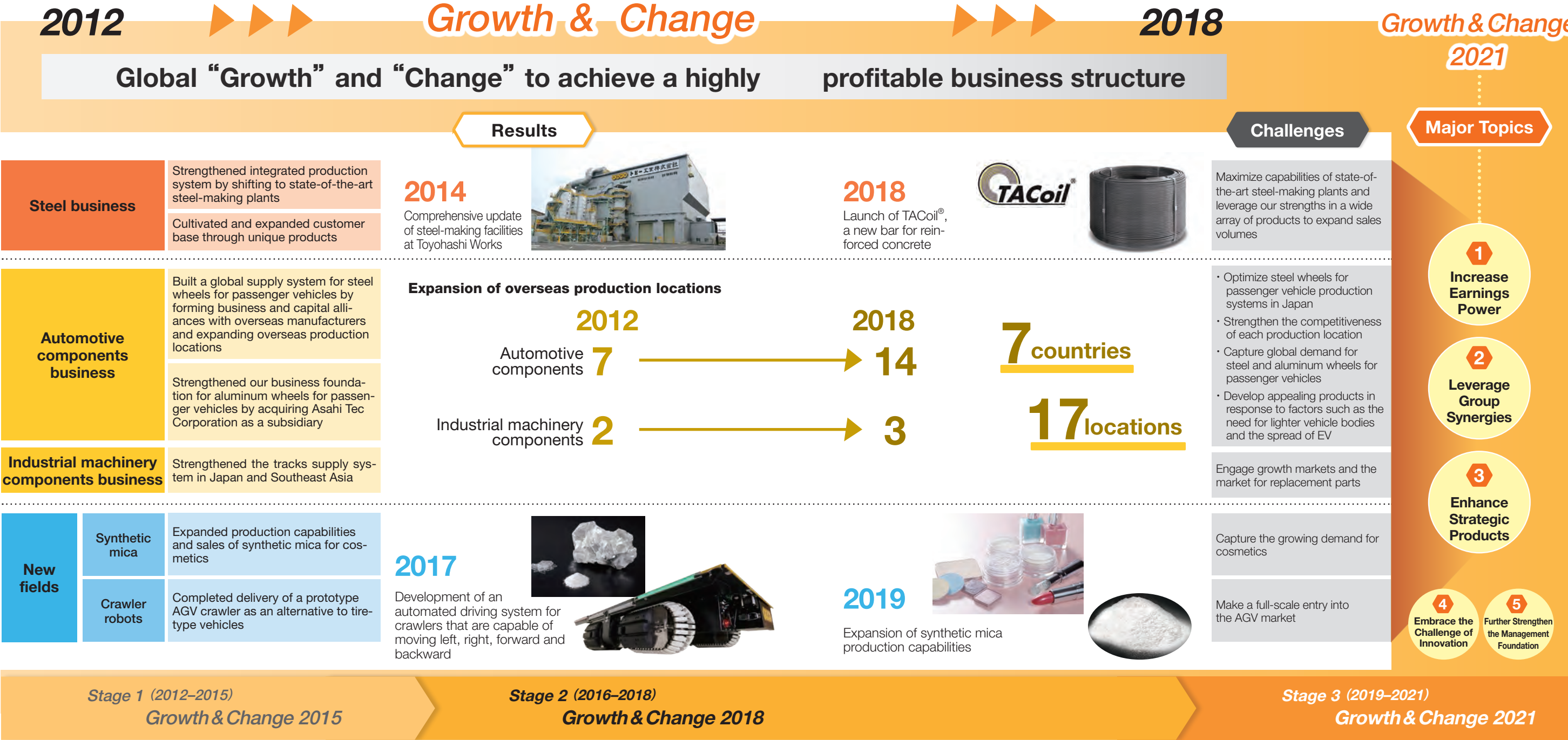
Reflecting on the Previous Medium-Term Management Plan (Growth & Change 2018)

In the series of medium-term management plans with the slogan of “Growth & Change” since fiscal 2012, the Group has been continuing to promote global “Growth” and “Change” to build a highly profitable business structure.

In the previous medium-term management plan, we achieved quantitative growth, particularly in terms of net sales, whereas qualitative transformation still remains to be attained, including our operating profit target, which has been set as a key issue to tackle in the new medium-term management plan.

Results to Date of Growth & Change (Results compared to FY2018 targets)

	Targets	Results		Targets	Results
Net sales	JPY 250.0 billion	JPY 286.2 billion	Operating profit on sales (ROS)	5.6%	2.6%
Operating profit	JPY 14.0 billion	JPY 7.5 billion	Return on equity (ROE)	7.7%	6.5%
Ordinary profit	JPY 13.5 billion	JPY 9.4 billion	Return on assets (ROA)	6.1%	3.2%
Profit attributable to owners of parent	JPY 8.5 billion	JPY 7.1 billion	D/E ratio	0.60	0.72



New Medium-Term Management Plan
(2019-2021)

Growth & Change 2021

With our priority on increasing the earnings power of businesses that were enhanced under the previous medium-term management plan, we will strive to expand our ability to generate cash flow for future growth. We will also aim for sustainable growth beyond our 100th anniversary by continuing to develop new businesses and products that meet customer and social needs.

Growth & Change 2021 Overview

Basic Policy

Accomplish G&C and prepare for the next stage of growth

Major Topics

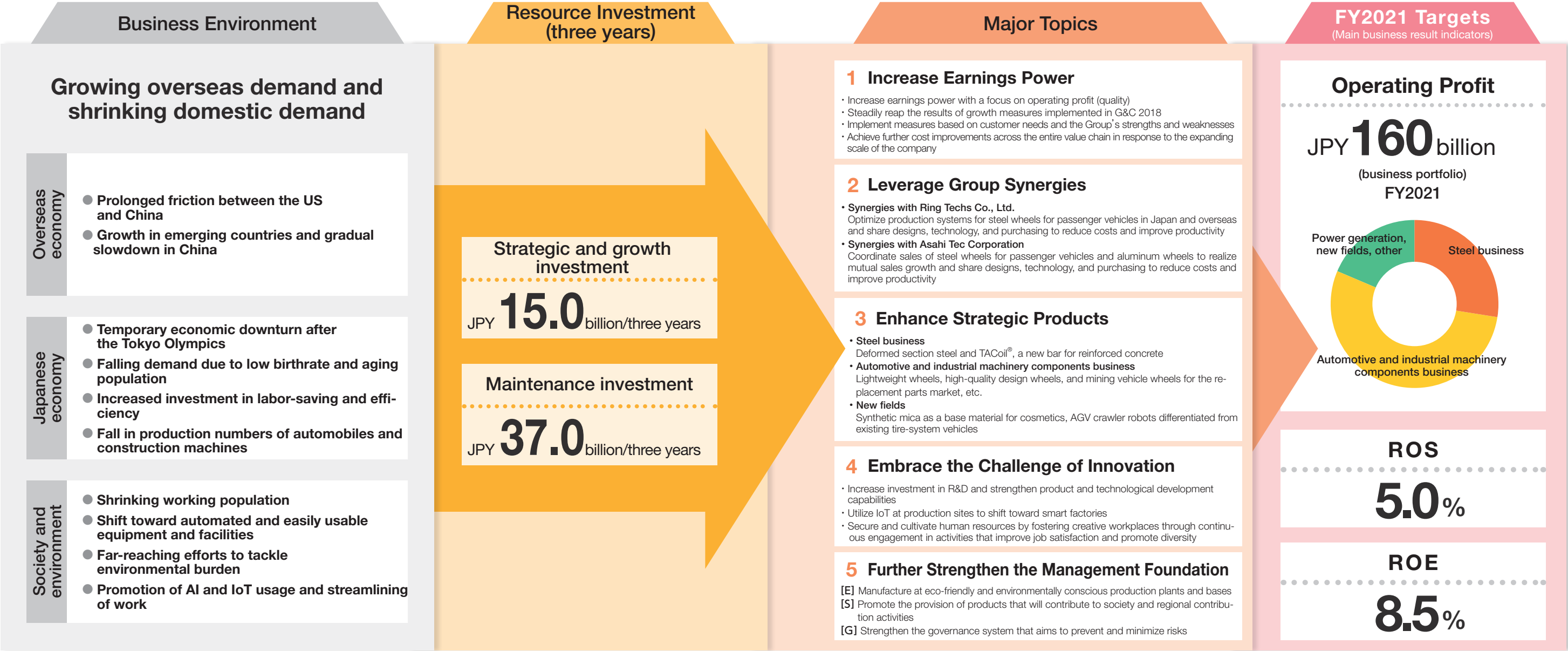
1 Increase Earnings Power

2 Leverage Group Synergies

3 Enhance Strategic Products

4 Embrace the Challenge of Innovation

5 Further Strengthen the Management Foundation



Steel Business



Along with satisfying customer needs by leveraging our unique technologies, we contribute to solving environmental and social problems.

Tsuyoshi Nakamura
Operating Officer in charge of the steel business
General Manager, Steel Division

Our Business Environment

Market Environment

- Global steel demand is being partly driven by infrastructure-related demand in emerging nations. The long-term outlook is that gradual growth will continue.
- While domestic steel demand should remain strong over the medium-term due to continued large-scale construction projects even after the Tokyo 2020 Olympics, this demand could shrink in the long term.
- Protectionism is becoming evident in many countries, and many emerging nations are shifting to domestic production.
- Reducing greenhouse gases, promoting recycling, and other such efforts aimed at making society more sustainable are becoming increasingly important.

Features and Strengths

- 1. Steelmaking mill with the latest world-leading equipment**
Our steelmaking mill features ECOARC™, an environmentally-friendly, high-efficiency arc furnace boasting world-leading heat efficiency. By combining this furnace with the steelmaking technologies of Topy Industries, we have reduced power consumption and increased productivity, resulting in unmatched cost-competitiveness. In addition, the mill is designed to be earthquake resistant in readiness for the Nankai Trough earthquake. This contributes to the stable supply of Group products, which enjoy large market shares.
- 2. Specialist in deformed section steel**
We are a specialist in the manufacture of deformed section steel with asymmetric cross-sections. We cater to diverse customer needs by providing high value-added products, which are developed, manufactured and fabricated based on our proprietary technologies for manufacturing deformed section steel utilizing numerical analysis.
- 3. Wide array of products and high production efficiency**
In response to customers' requests for high-mix, low-volume production, we manufacture products efficiently by maintaining high quality, productivity and yield.

G&C 2018 Review

We cultivated new customers for product groups that leverage technologies for manufacturing and processing deformed section steel, an area of strength for the Topy Industries Group.

- We have developed large, wide flat bars with grooves as segment members for tunnel construction and have begun delivering these products for the construction of the Tokyo Outer Ring Road, among other projects.
- We have expanded sales of mast rails for forklift trucks to overseas manufacturers.
- In the fall of 2018 we launched TACoil®, a densely rolled compact coil of deformed reinforcing bar. When used with automatic processing machines, TACoil® significantly improves processing efficiency while providing other benefits. It therefore contributes to solving the problems faced by users in the rebar industry, which includes labor shortages, processing losses, and insufficient storage space.

Policies and Initiatives under the New Medium-Term Management Plan

We will further expand sales of strategic products such as deformed section steel and TACoil® while boosting profitability by maximizing synergies with Group companies.

- We will expand sales of unique products that include deformed section steel such as mast steel for forklift trucks and segment members for tunnel construction, as well as TACoil®, a new deformed reinforcing bar product and the first such product in Japan.
- We will achieve the optimal product mix while maximizing production capacity.
- We will promote energy and resource conservation by developing products that leverage unique technologies and further improving recycling technologies that utilize an electric furnace process.
- We will carry out activities in conjunction with Group companies with the goal of reducing costs at all stages of production, from raw material procurement to product delivery.

TOPICS

Recycling 24,000 Tons of Waste Vehicles Annually

Working with Akemi Recycling Center, Ltd., a subsidiary with one of the largest shredder plants in Japan, we crush and sort waste vehicles, collect steel, aluminum, and other materials, and make use of those materials in steelmaking. Meanwhile, to raise the efficiency of automobile recycling, we use the shredder dust as an alternative to the coke used in electric furnaces. Through efforts such as these, the Topy Industries Group leverages electric furnace technologies to contribute not only to steel scrap recycling but also to the recycling of a wide range of resources.



Akemi Recycling Center, Ltd.

Automotive and Industrial Machinery Components Business (Wheels)



Our Completed Global Network, and Maximizing Synergies as a Comprehensive Wheel Manufacturer

Ichiro Takeuchi

Managing Executive Officer in charge of the automotive and industrial machinery components business
General Manager, Wheel Division

Our Business Environment

Market Environment

- As a result of economic growth worldwide, global automobile demand is expected to expand in the medium to long term, particularly in emerging nations.
- Domestic automobile demand is expected to contract due to, among other factors, Japan's declining population.
- The automotive industry is likely to see further technological innovations along the lines of CASE* and MaaS**.
- Mining machinery demand should see moderate growth in the medium to long term, but demand is likely to fluctuate significantly in the short term.
- Protectionism is becoming evident in many countries.

*Connected, Autonomous, Shared/Service, Electric **Mobility as a Service

Features and Strengths

1.Approx. 90% domestic market share*(steel wheels for trucks and buses)

We have succeeded in developing lightweight wheels by using deformed section steel produced in our steel business. We also have a base in Indonesia where we cater to the local procurement needs of Japanese automakers.

2.Approx. 80% global market share*(ultralarge diameter wheels for mining dump trucks [SGOR®])

Our wheels for mining vehicles are used at mines under harsh conditions all over the world, and are now a well-trusted product thanks to their track record. We also produce SGOR®, which, with a rim diameter of 63 inches (1.6 meters) and a weight of nearly 3 tons, is one of the largest wheels in the world.

3.Global supply system(steel wheels for passenger vehicles)

We supply steel wheels to all automakers in Japan as an independent wheel manufacturer. We have also established a global supply system under which our bases in the United States, Mexico, China, and India and a strategic alliance with MW Italia S.R.L. enable us to cater to the local procurement needs of automakers from Japan, Europe, and the United States.

4.Broad sales network as a comprehensive wheel manufacturer

As a comprehensive wheel manufacturer, we have a broad sales network in Japan and overseas comprising major manufacturers of complete automobiles that range from passenger cars to buses and trucks.

*OEM market share (components to be mounted on new vehicles)

G&C 2018 Review

Along with completing a global supply system to supply steel wheels for passenger cars, we also acquired a new business platform that will facilitate building a global supply system for aluminum wheels.

- Strengthening our business and capital alliance with MW Italia S.R.L. in Europe (2016) and establishing a joint venture with Wheels India Limited in India (2017) have allowed us to build a system for supplying steel wheels with common designs for passenger cars, and to supply them to anywhere in the world.
- Preparations are proceeding as planned for renovating a steel wheel production site in the U.S. (construction will begin in 2020).
- To strengthen our business base in Japan, in 2018 we acquired 100% ownership of the steel wheel manufacturer Ring Techs Co., Ltd.
- To capture rising demand for aluminum wheels, in 2018 we acquired 100% ownership of the aluminum wheel manufacturer Asahi Tec Corporation, which has production facilities in Thailand and China.

Policies and Initiatives under the New Medium-Term Management Plan

Along with fully leveraging the business platform which we expanded and improved under G&C 2018 and raising profitability, we will promote product development aimed at achieving the next stage of growth.

- In addition to restructuring our domestic production system with Ring Techs Co., Ltd., which has helped us respond to a downturn in domestic demand for steel wheels for cars, we will boost the competitiveness of our overseas production sites through focused investments and continuous improvement.
- We will make use of our network as a global supplier of steel wheels for passenger cars, an area of strength for the Topy Industries Group, and fully leverage synergies as a comprehensive wheel manufacturer in the business of manufacturing and selling aluminum wheels and wheels for commercial vehicles. These efforts will see us expand sales to major automakers worldwide and gradually capture globally rising demand.
- There are two things wheels need to have in the automotive industry, where technological innovations collectively known as CASE are ascendant: structures to accommodate sensor installation (Connected), and lightweight products to accommodate the shift to electric vehicles (Electric). Leveraging its accumulated technologies, the Topy Industries Group will develop appealing products that satisfy these needs.

TOPICS

Joint Venture in Steel Wheels for Passenger Cars Begins Operations at a New Factory in India

In June 2019, WIL Car Wheels Ltd. ("WCWL"), a joint venture in India, began operations at a factory (Vanod Factory) producing steel wheels for passenger cars, the third such plant in the country. In India, a country where automobile production is expected to grow in the medium to long term, the Topy Industries Group is going through WCWL to steadily capture demand in the growing segment of steel wheels for passenger cars, enabling us to expand our presence as a global supplier.



Vanod Factory

Automotive and Industrial Machinery Components Business (Undercarriage Components for Construction Machinery)



Achieve stable earnings and growth as a leading company in undercarriage components for construction machinery

Katsuyoshi Tanaka

Operating Officer in charge of the automotive and industrial machinery components business
General Manager, Undercarriage Components Division

G&C 2018 Review

In response to a rapid recovery in demand for construction machinery, we have improved upon our system for supplying Japan and Southeast Asia with tracks, an undercarriage component for construction machinery. These efforts have seen us capture significant demand in this segment while gaining further trust from our customers.

- We built a new track assembly line (went into operation in 2018) at our logistics facility in Indonesia, expanded on and improved our product lineup, and enhanced our supply capabilities, while at the same time shortening our lead time and improving our delivery capacity for customers.
- We built a new track assembly line at Toyohashi Works (went into operation in 2019), achieved integrated production at the facility for everything from track materials to products, and reduced logistics costs. Additionally, by improving the upward elasticity of our production capacity, we have been able to achieve more flexibility in the supply of tracks.

Our Business Environment

Market Environment

- Although long-term growth is expected for construction machinery demand worldwide due to the rising global population and advancing urbanization, demand is likely to fluctuate significantly in the short term.
- Demand is expected to rise for smaller product models as emerging nation populations become increasingly urban.
- Protectionism is becoming evident in many countries.

Features and Strengths

1. Top-ranking global OEM market share for hydraulic excavator tracks

We deliver track shoes and tracks for hydraulic excavators to major Japanese and U.S. construction machinery manufacturers, which produce the majority of hydraulic excavators worldwide. We are proud of our OEM market share for these products, which is among the highest in the world.

2. High quality level, reliable delivery, and design development capabilities made possible by integrated production

We ensure a high level of quality and reliable delivery with integrated production from raw materials to products. We have also received high acclaim from construction machinery manufacturers for our VA proposals and meticulous services, which we provide by making full use of the design development capabilities that we have cultivated.

3. Global Supply System

We strive to improve customer satisfaction by supplying high-quality products to customers all over the world on a timely basis in accordance with their needs. We deliver these products from our six production sites: the Kanagawa Factory, Toyohashi Works, Sanwa Buhin, and sites in the USA (Tennessee), China (Qingdao), and Cikarang (Indonesia).

Policies and Initiatives under the New Medium-Term Management Plan

We aim to achieve stable earnings and growth supported by the trust we have earned over the years from construction machinery manufacturers.

- We will improve our readiness for the supplemental components market as a strategic partner for construction machinery manufacturers.
- With the goal of sustainable growth, we will continue to plan and build a supply system to serve international growth markets.
- We will identify customer needs and enhance our system for developing new products and technologies in order to further improve customer satisfaction.

TOPICS

New track assembly line at Toyohashi Works Environmentally-friendly factory construction

The new track assembly line at Toyohashi Works helps to reduce CO₂ emissions by the integrated production of everything from track materials to products, significantly reducing shipping volume. The facility also curbs emissions of volatile organic compounds (VOCs) by using water-soluble coatings in its coating process.



New Fields



Becoming a Global Niche Leader in Innovative Technologies

Satoshi Fukura
Operating Officer
General Manager, Science Division



Synthetic Mica

Market Environment

- Demand for cosmetics, the primary application for synthetic mica, continues to grow worldwide due to economic growth, a growing female workforce, and other factors, suggesting further expansion ahead.

Policies and Initiatives under the New Medium-Term Management Plan

- Our synthetic mica has received high acclaim for its high translucency and safety as a base material for cosmetics. We will add to our synthetic mica product lineup, including original products such as colored mica that combine a soft feel with superior adhesion, and expand product sales in Japan and overseas.
- In the industrial field, since our products have been recognized for their superior barrier performance as a raw material for food and other product packaging, we will also begin developing products for the paper and film production markets.

TOPICS

Increasing Production Capacity for Synthetic Mica Used in Cosmetics

We increased production capacity for synthetic mica for cosmetics in order to capture growing demand.



9th Cosmetics Ingredients & Technology Exhibition (CITE Japan 2019)



Crawler robot

Market Environment

- Japan's robot market is expected to see rapid growth due to the country's shrinking labor pool and the advance of automation in this fourth industrial revolution.
- In addition, the market for automated guided vehicles (AGVs), which will involve the use of robots in the logistics field, is growing.

Policies and Initiatives under the New Medium-Term Management Plan

- The AGVs we produce use crawler belts for propulsion. Because they excel in getting over rises and handling rough terrain, they can handle situations such as getting on and off elevators and loading and unloading cargo between platforms and truck beds. We have developed new products that are able to freely and autonomously move left, right, forward and backward, and we will be fully entering markets where demand is expected to grow as a consequence of the labor shortage.

TOPICS

Crawler robots used in a range of fields

We will actively enter the AGV market by relying on the technologies we have accumulated in manufacturing survey and exploration robots and on the trust we have earned from our many customers.



Recovery solutions for Fukushima Daiichi NPP



Accident response and maintenance



Maritime surveys supported by JAMSTEC



Distribution warehousing



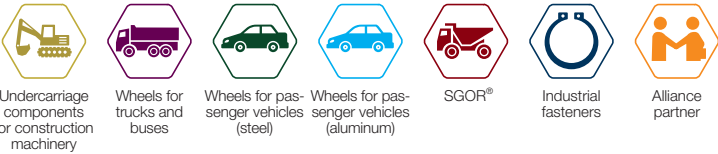
Agriculture

Global Expansion of the Topy Industries Group

To capture some of the global increase in demand for automobile and construction machinery, we are expanding and strengthening the global supply system for our automobile and industry machinery components business.

To provide our customers worldwide with high-quality products that satisfy their needs, the Topy Industries Group is opening new production and sales facilities and conducting business with its alliance partners.

Icon Legend (products produced at each base)



TOPICS

United States

Wheels for passenger vehicles (steel)

Topy America, Inc.

Updating our production line (operations to begin in 2020)



Europe
(France, Poland, Romania, Russia, and Turkey)

(MW Italia S.R.L.)

China

Topy Undercarriage (China) Co., Ltd.

Fujian Topy Autoparts Co., Ltd.

Ring-Techs Guangzhou Co., Ltd.

Guangzhou Wheelhorse Asahi Aluminium Co., Ltd.

Guangzhou Dicastal Asahi Aluminium Co., Ltd.

India

WIL Car Wheels Ltd.

Thailand

Topy Fasteners (Thailand), Ltd.

Asahi Tec Aluminium (Thailand) Co., Ltd.

South Africa

(MW Italia S.R.L.)

Vietnam

Topy Fasteners Vietnam Co., Ltd.

United States

Topy America, Inc.

Topy Precision Mfg., Inc.

Japan

Topy Industries, Ltd.

Ring Techs Co., Ltd.

Kyushu Wheel Kogyo, Ltd.

Topy Fasteners, Ltd.

Mexico

Topy MW Manufacturing Mexico S.A. de C.V.

Topy Fasteners Mexico, S.A. de C.V.

Indonesia

PT. Topy Palingda Manufacturing Indonesia

PT. Topy Undercarriage Indonesia

(PT. Inkoasku, PT. Pakoakuina)

TOPICS

India

Wheels for passenger vehicles (steel)

WIL Car Wheels Ltd.

The newly opened Vanod Factory, a joint venture (2019)



TOPICS

Indonesia

Undercarriage components for construction machinery

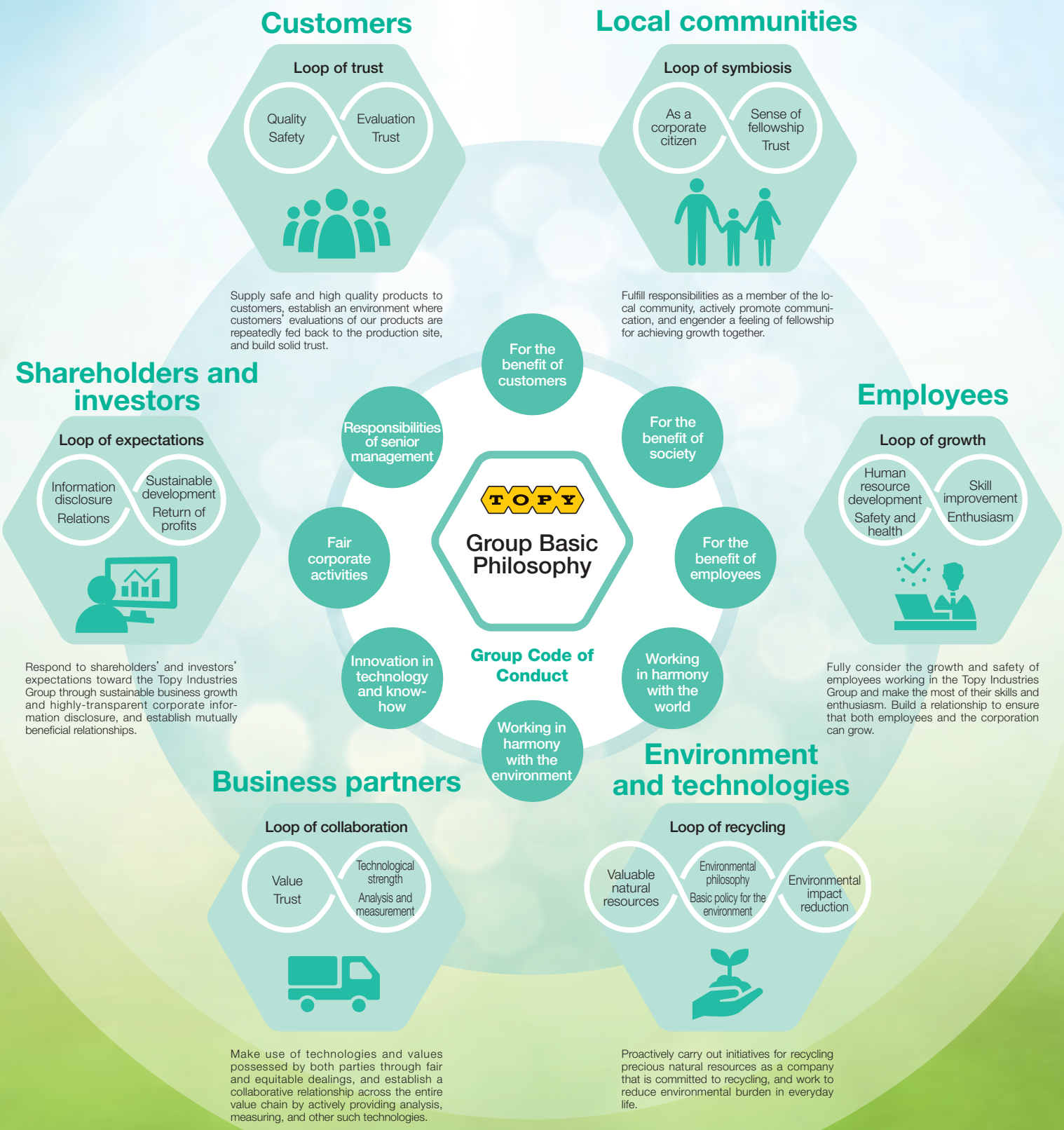
PT. Topy Undercarriage Indonesia

New track assembly line in operation since 2018



Sustainability Initiatives of the Topy Industries Group

At the Topy Industries Group, we see our relationship with stakeholders as shown below and aim to achieve sustainable growth by deepening mutual understanding through the six loops.



Corporate Basic Philosophy of the Topy Industries Group

[The Topy Industries Group Corporate Basic Philosophy]

Win the trust and respect of society through the continuance and development of the Topy Industries Group and the execution of one's duty as a public institution.

[The Topy Industries Group Corporate Code of Conduct]

— To win the trust and respect of society —

Under the Corporate Philosophy, the management and employees of the Topy Industries Group shall strictly abide by all applicable laws and ordinances, the spirit reflected, and the Corporate Code of Conduct, while accepting full corporate social responsibility and fostering an open-minded and creative corporate culture.

Article 1 For the benefit of customers

Produce and supply, high-quality and safety-oriented merchandise and service to gain customers and consumer confidence.

Article 2 For the benefit of society

1. Communicate widely with society as well as shareholders and actively disclose corporate information fairly and appropriately. Cooperate with local communities and actively work on social contribution activities as being a good corporate citizen.

2. Oppose resolutely any anti-social forces and parties posing a menace to social orders and security.

Article 3 For the benefit of employees

Respect the individual character and personality of employees, and provide safe-working environments allowing them to work with enthusiasm, and attain fulfilling lives.

Article 4 With the world

Pay due respect to different cultures and customs of all countries and regions, and perform business activities to contribute to the development and well-being of local communities.

Article 5 With the environment

Realize that a sensible approach to environmental conservation is essential to the existence and activities of the company, and behave voluntarily and actively.

Article 6 Technology and know-how innovation

Seek widely for knowledge and information both domestically and internationally, and continue the innovation of technology and knowhow by refining distinctive technologies and professional competence.

Article 7 Fairness in corporate activities

Operate business in a fair and transparent manner under free competition and appropriately keep an arm's length distance from politics and administrative agencies.

Article 8 Responsibilities of top management

1. Top management shall make example by leadership and inform the strict adherence to the Code of Conduct and ensure the compliance of the corporate ethics effectively administrating its management systems.

2. If and when any of the Code of Conduct is violated, management shall demonstrate an indomitable determination to personally solve the issue by launching an investigation and shall take actions to prevent the recurrence of such incidents. At the same time, top management shall make full disclosure within and outside the company promptly and precisely, and, upon determining the source of competence and responsibility, impose strict disciplinary action against those held responsible.

ESG Initiatives of the Topy Industries Group

	Environmental and social issues	Topy Industries' approach		Corresponding SDGs
		Business opportunities	Response to risks and regulations	
E	Acceleration of global warming	Environmentally-friendly product development Recycling business	Recycling	1 NO POVERTY 4 QUALITY EDUCATION 7 AFFORDABLE AND CLEAN ENERGY
	Water and resource depletion		Global warming reduction initiatives	
	Air pollution		Chemical management Waste reduction initiatives	
S	Skilled worker shortages	Products enhancing work efficiency	Promotion of responsible procurement	8 DECENT WORK AND ECONOMIC GROWTH 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION
	Tightening of laws and regulations in countries		Supplying safe, secure products (quality assurance)	
	Local economic development		Local job creation	
Supporting systems		System for promoting environmental activities Supply chain management	Small group activities Communication Promotion Committee	Diversity Recruitment and development of globally competitive human resources
			Strengthening governance Risk management system BCP (Business Continuity Plan)	Global management Compliance

Environmental Initiatives

Environmental Philosophy and Basic Environmental Policy

Environmental Management

Environmental Philosophy

We believe it is our duty to preserve a rich and beautiful world for future generations to enjoy. In partnership and solidarity with local communities, we will work to promote continuous improvement in everything we make—from materials to finished products—to lay the foundation for the sustainable development of society.

【Basic Environmental Policy】

As part of its duty as a corporate citizen, Topy Industries ranks continuous improvement under the ISO 14001 environmental management system as among its top management priorities. Topy Industries has therefore established and implemented the following policies.

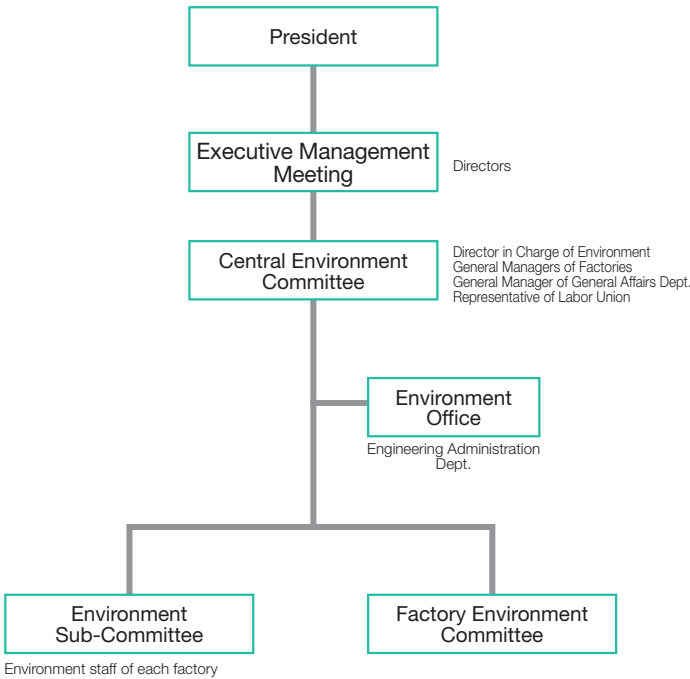
- 1. Complying with the Law**
Topy Industries will comply with all environmental regulations, protocols, and agreements in its manufacturing activities.
- 2. Working to Save Energy and Prevent Global Warming**
In all its manufacturing processes, Topy Industries will proactively strive to save energy and reduce greenhouse gases.
- 3. Reducing Our Environmental Footprint**
In order to bolster environmental management, Topy Industries will undertake cost-conscious efforts to reduce its environmental footprint by saving energy, lowering greenhouse gas emissions, using fewer resources, and recycling.
- 4. Developing Environmentally Conscious Products**
Topy Industries will develop environmentally-friendly products at every stage in their life cycle, from design and production to use and disposal.
- 5. Raising Environmental Awareness and Preserving the Environment at the Global Level**
Topy Industries will promote understanding of its environmental policy and raise environmental conservation awareness through environmental training and enrichment for its employees.
- 6. Conserving the Environment in Overseas Business Activities**
Topy Industries will remain mindful of its impact on local environments and implement measures in accordance with the needs of local communities.

ISO 14001 certification

Since the Wheel Division (Toyokawa and Ayase factories) launched a program to acquire ISO 14001 certification to promote environmental conservation activities in February 1998, all Topy manufacturing sites have undertaken the certification acquisition program, which was completed in June 1999.

Proper maintenance of our environmental management system has been confirmed through regular audits after this initial certification. We continue to carry out environmentally-friendly production activities by promoting scheduled and systematic environmental initiatives in line with our Basic Environmental Policy.

Environmental conservation structure (Topy Industries)



ISO 14001 Certification Status (Topy Industries)

Factory	ISO 14001 certification obtained	Transition to 2004 version	Transition to 2015 version
Toyohashi	Apr. 1999	Completed in Feb. 2006	Completed in Apr. 2018
Toyokawa	Nov. 1998	Completed in Oct. 2005	Completed in Aug. 2016
Ayase	Nov. 1998	Completed in Nov. 2005	Completed in Aug. 2016
Kanagawa	Jun. 1999	Completed in Jun. 2005	Completed in Jun. 2017

Environmental Initiatives

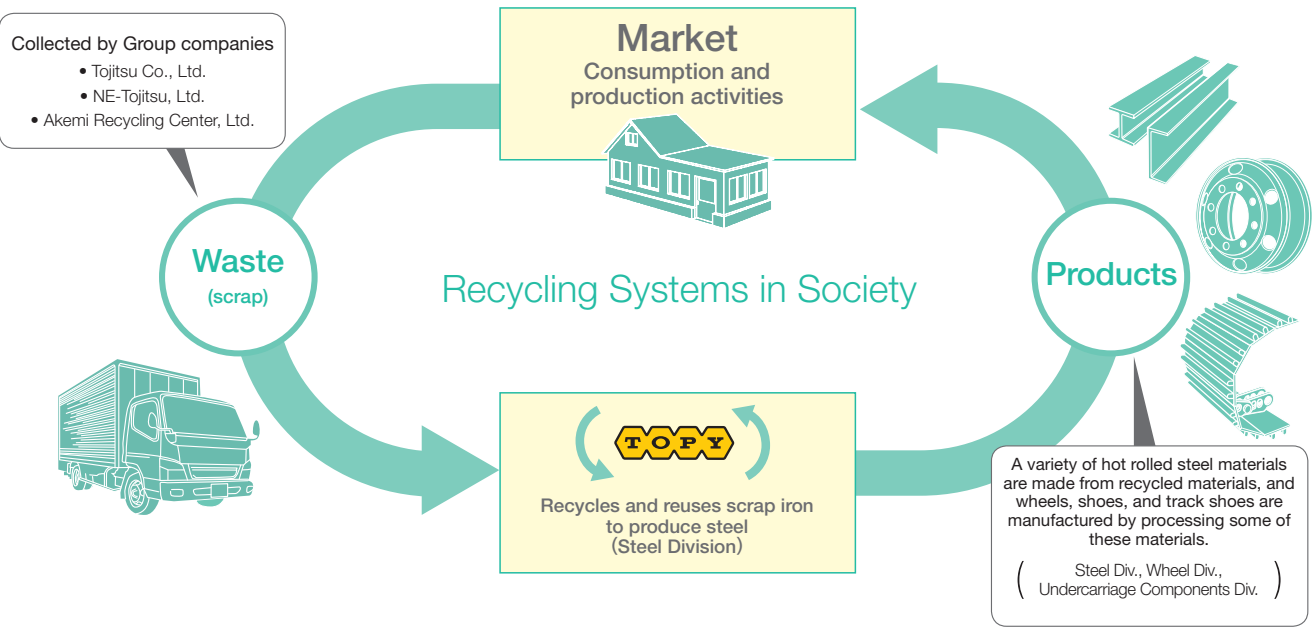
Nature of Our Business

Recycling

Topy Industries is a recycling corporation

Topy Industries manufactures steel products using scrap iron generated in the course of consumption and production activities around the world. In this business model, we have a vital role to play in production activities within society's recycling

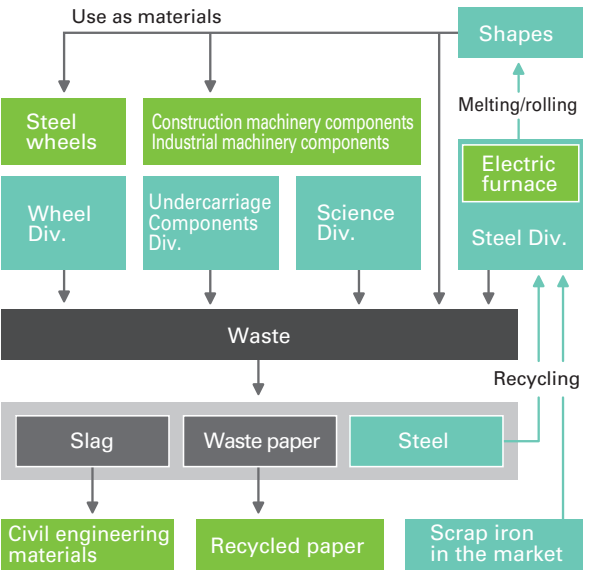
systems. Furthermore, we implement an original recycling system within our production flow for the reuse of resources.



Reuse of materials

At Topy Industries' Toyohashi Works, we produce various steel sections from molten steel made in an electric furnace. We have two sources of scrap iron, which is the major material for our steelmaking process: scrap gathered in-house and scrap procured externally. A substantial quantity of steel sections produced by the Steel Division is shipped to the Wheel Division and the Undercarriage Components Division to be used as raw materials in the production of various wheels and undercarriage components.

In-house recycling system



Recycling business (Akemi Recycling Center)

Recycling of end-of-life vehicles, end-of-life vending machines, and other waste

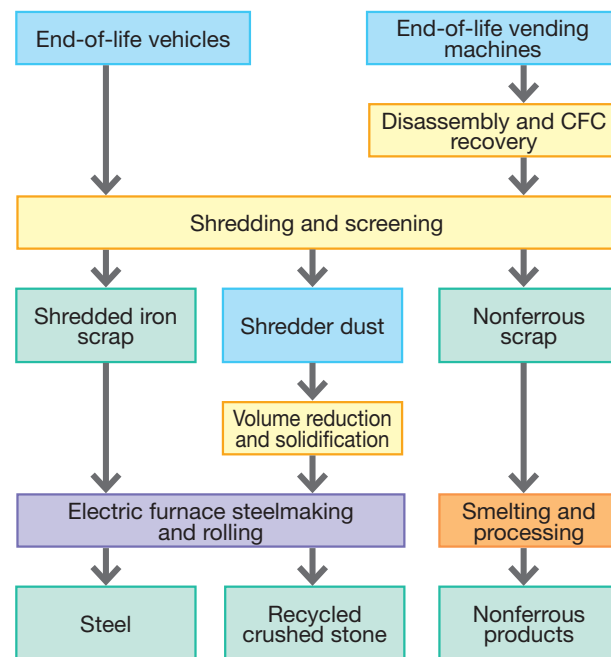
Akemi Recycling Center, Ltd. was established in 1991 as a member of the Topy Industries Group. Since then, the company has been recycling large volumes of iron scrap, end-of-life vehicles, and industrial wastes into major raw materials for producing steel and aluminum by making full use of its shredder plant, which is among the largest in Japan.

In 2004, Akemi Recycling Center and Topy Industries jointly developed a technology for recycling automobile shredder residue (ASR), which is generated when shredding end-of-life vehicles (ELVs), into an alternative to cokes used for electric furnaces. The companies established ASR recycling facilities and created the ideal recycling system that produces zero waste.

In 2013, Akemi Recycling Center significantly improved the quality of iron and nonferrous scrap obtained from ELVs and other industrial wastes by increasing the dust collection capacity of the shredder line and building a new line for screening out nonferrous metals.

The company also works to protect the environment by recovering CFCs from end-of-life vending machines and similar wastes while screening out fluorescent lamps and dry cells in advance.

Recycling flow chart



Shredding and screening

ELVs, end-of-life vending machines, and other waste are crushed into tiny pieces with blades attached to a cylindrical drum that rotates at high speed in the shredder. The shredded pieces go through various screening processes in which they are sorted out into iron, nonferrous metals (e.g., copper and aluminum), and shredder dust (e.g., plastics and rubber)



End-of-life vehicles and vending machines



Shredded iron scrap

Volume reduction and solidification

Shredder dust is reduced in volume and solidified into shapes optimal for use in electric furnaces. The resulting product is used as an alternative to coke in the electric furnaces at Topy Industries' Toyohashi Works for thermal recycling.



A machine for reducing the volume of shredder dust and solidifying it



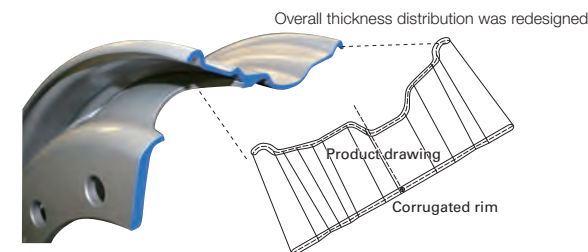
Combustion improver for electric furnaces

Development of Environmentally-friendly Products

Lightweight wheels

Helping improve fuel efficiency with about 15% lighter weight

Topy Industries has developed ISO-compliant wheels, which are about 15% lighter than corresponding conventional wheels, by combining an ECOD-processed disc with a corrugated rim created with the company's proprietary weight reduction technology. The corrugated rim is made from a rim section of an uneven thickness and corrugated tire-mounting surface, giving it optimal thickness distribution when roll-formed. The corrugated rim is a product of our integrated production system, which enabled us to combine our proprietary hot-rolling steel-making technologies with wheel analysis and design technologies. The ECOD disc is formed through cold spinning (rocking die forming) tubes made of steel plate. This enables a thinner, lighter disc while also ensuring the required strength.



Non-chrome pre-treatment of aluminum wheel painting

An industry first for chromium-free processing

Aluminum alloy wheels have long been surface-treated to achieve long-term corrosion resistance and anti-discoloring, and treatment with chromium was thought to be essential to confer anti-corrosion properties. However, in view of European environmental regulations, Japanese automobile manufacturers have turned their attention to surface treatments that avoid the use of heavy metals such as chromium. Topy Industries has spent substantial time on the study and technological development of alternative materials to replace chromium, and is the first in the industry to succeed in creating a chromium-free process.



Hot-rolled, high-strength rim material

Wheels that reduce vehicle weight and improve collision safety

Aiming to simultaneously boost fuel efficiency (conserve energy) by reducing chassis weight and improve collision safety, automotive manufacturers are using more parts made from high-strength steel sheets, which allow the sheets to be made thinner. In response, we are turning to high-strength section steel rim materials, which are used in making wheels for trucks and buses. A challenging issue for the raw material was how to attain uniform strength. We have succeeded in commercial production thanks to our proprietary hot-rolling technologies for controlling material thickness and temperature.



Ultra-large diameter wheel for mining dump trucks (SGOR®)

The world's largest wheel contributing to efficient mining operations and hauling

SGOR® (Super Giant Off-the-Road Rim) wheels are ultra-large diameter wheels that we have developed for dump trucks used at large mines across the world. Currently, the largest wheels available have rim diameter of 63 inches (about 1.6 m), are 44 inches (about 1.1 m) wide, and weigh as much as 2.83 tons each, making them about five times the diameter of ordinary passenger car wheels. SGOR® wheels meet the demanding requirements of mining applications in terms of functionality and hauling capacity, and contribute to reducing environmental burden.

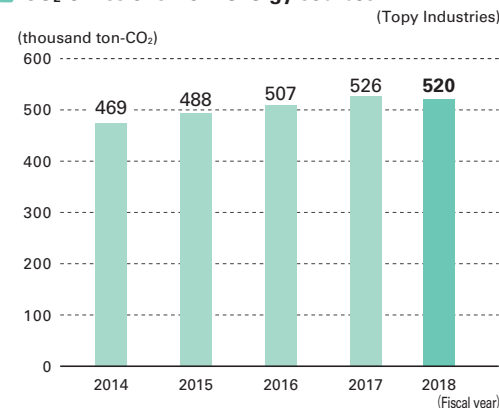


Initiatives for Preventing Global Warming

Reduction of CO₂ emissions

Every Topy Industries factory undertakes a range of improvement activities appropriate to the products and production equipment it handles to achieve the CO₂ reduction target outlined in the Action Plan for Low Carbon Society stipulated by the Japan Business Federation. In FY2018, CO₂ emissions from energy sources at Topy Industries were 520,000 tons, which is below the FY1990 level set as the target. However, the volume has been rising since FY2015 due to the increase of crude steel production with the commencement of a new steel-making facility. In view of the anticipated increase in energy usage associated with growing production in the future, we will introduce further controls and improvements to curb the increase in energy consumption. The amount of CO₂ emitted by Topy Industries is regularly reported to the relevant government authorities through data that includes emissions from its offices and emissions from energy management factories designated in the Revised Act on the Rational Use of Energy, which came into effect in 2009. With regard to the Ayase Factory and the Kanagawa Factory in Kanagawa Prefecture, we submit our plans for counteracting global warming in our business activities in accordance with Kanagawa Prefecture's ordinance to promote measures against global warming. In FY2010, we began reporting the actual CO₂ emissions and improvements that we have made in accordance with our reduction plan. For the Toyohashi Works and the Toyokawa Factory in Aichi Prefecture, we submit our plans to tackle global warming to the prefectural government by following the regulations stipulated in prefectural ordinances.

CO₂ emissions from energy sources



Energy Conservation Meister Meeting Kickoff

To further promote energy saving, Topy Industries has implemented the Energy Conservation Meister Program at all companies. Energy Conservation Meisters propose and give advice on tasks to all employees up to factory manager level at their production sites, while also playing a leading role in energy-saving

activities throughout the site. Since this fiscal year, Energy Conservation Meister Meetings have also been held regularly to promote energy-saving activities.

For its outstanding achievements, the Kanagawa Factory, which was the first site to implement the Energy Conservation Meister Program, received the Chairman of the Energy Conservation Center, Japan Award in the Best Practice Category of the Energy Conservation Grand Prize for FY2017, which is hosted by the Energy Conservation Center, Japan and sponsored by the Ministry of Economy, Trade and Industry.



Pilot introduction of a solar power generation facility

We are promoting Energy Saving Action 2020, which aims to preserve the global environment through energy conservation. As part of the Promotion of Energy Efficiency Investments, the main initiative of Energy Saving Action 2020, we have experimentally deployed a solar power generation facility at the Toyohashi Works and began assessing it in March 2014. The facility has a total solar panel area of 270 m² and estimated output of some 46,000 kWh per year. In the pilot deployed, three different panels (single-crystal panel, multi-crystal panel, and CIS panel) were installed at the same time to compare output and power generation characteristics. In another experiment, we laid oxidized slag aggregates produced in-house on the ground of the pilot facility to check their effectiveness for preventing weeds and their effects on the pilot equipment and its power generation performance. Through these and other initiatives, we are striving to help protect the global environment in a variety of ways.

Biodiversity Preservation

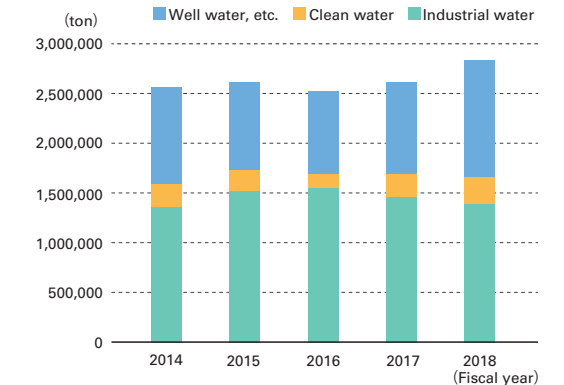
Biodiversity Initiatives

The business and manufacturing operations of Topy Industries do not involve activities such as deforestation and other activities that may disrupt the ecosystem. We recognize that biodiversity conservation and global warming prevention are essential for a sustainable society. As a part of efforts to conserve biodiversity and forest resources in developing countries, we encourage the use of paper made from domestically-produced materials and recycled paper.

Water Resource Conservation Initiatives

To conserve water resources, Topy Industries is working to reduce water consumption by circulating and reusing cooling water at its factories. Also, to prevent environmental pollution, we are using treatment facilities to purify our drainage to within environmental regulatory limits.

Water consumption (Topy Industries)

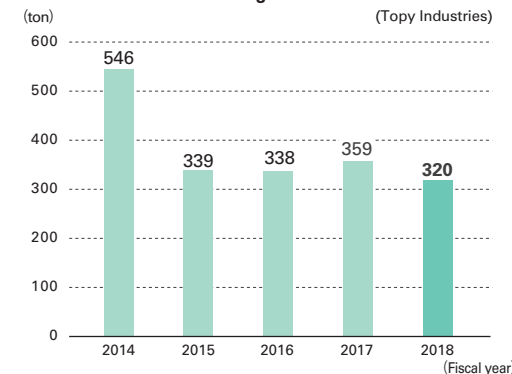


Chemical Management

Substance emissions and management under the PRTR Act

In accordance with the PRTR Act (the Pollutant Release and Transfer Register Act; the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management thereof), business entities that handle chemical substances are obliged to manage and report to administrative offices the amount of environmental emissions and transfers of chemical substances that are hazardous to humans and ecosystems at each of their business sites. Based on this system, we submit annual reports to the respective regulatory bodies while also using this process to continuously manage chemical substance and emission reductions. FY2018 saw a reduction over FY2017 as planned, and further systematic reductions will be made.

Total amounts of environmental releases and transfers of substances regulated under the PRTR Act



Air pollution prevention initiatives

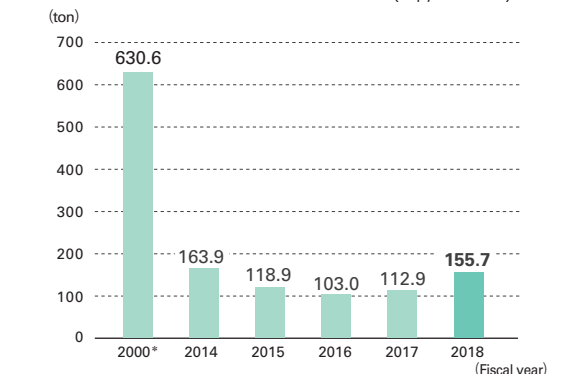
With the revision of the Air Pollution Control Law in May 2004, it became necessary to comply with regulations governing VOC emissions, and a reduction of 30% compared to FY2000 on a year-on-year basis was presented as the domestic reduction target by the end of FY2010.

As a proactive approach for the prevention of air pollution, Topy Industries voluntarily measures VOC concentrations from VOC generating facilities at its four major factories while also reviewing actions items related to production technologies for the reduction of emissions.

Due to an increase in production volume, FY2018 emissions were higher than the FY2017 level. However, the emissions level—roughly a 75% reduction compared to the FY2000 level—was far below the guideline level established in the Air Pollution Control Act.

We will continue striving to reduce the emissions in a well-planned manner.

Total amounts of environmental releases and transfers of VOC



*Figures for 2000 do not include Toyohashi.

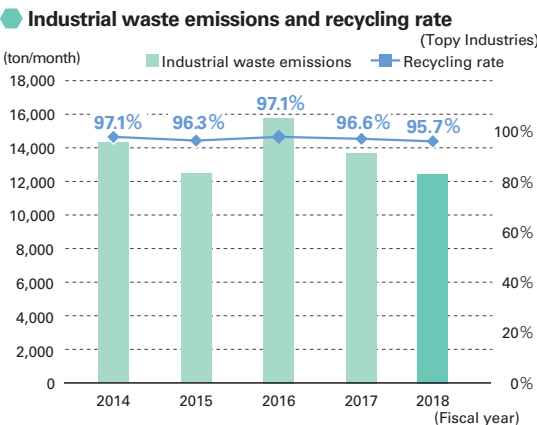
Initiatives for Reducing Waste (Topy Industries)

Waste reduction and recycling

A part of the metal scrap (steel) generated during production activities is reused directly in-house as a raw material in electric furnaces. As for other waste, we are engaged in reducing final waste disposal volumes through re-resourcing efforts such as collecting scrap iron and collecting zinc from melted dust. At least 90% of oxidized slag generated from steelmaking is recycled and reused for civil engineering and concrete materials.

The amount of discharged industrial waste decreased about 10% year-on-year in FY2018 due to a drop in crude steel production, among other factors. The recycling rate was a high 95.7%.

We continue to promote recycling and reduce final disposal volumes of industrial waste by expanding and improving our 3R activities.



Metalworking oil recycling through purification

Topy Industries uses various types of metalworking oil in its manufacturing processes, and the reuse of such oil has become one of the major concerns in terms of environmental impact. At the Ayase Factory, used metalworking oil is purified and reused. We plan to deploy this system at all other factories.

Effective utilization of electric furnace slag (electric furnace oxidized slag aggregate)

Toyohashi Works has deployed a slag cooling facility and crushing facility to separate, treat, process, and recycle oxidized slag generated within the electric furnace during the refining process, and has reduced the slag discharged from the ladle after continuous casting subsequent to the refinery process. In April 2013, the factory obtained "JIS A 5011-4: Slag aggregate for concrete Part 4: Electric arc furnace oxidizing slag aggregate" certification. In December 2013, the factory acquired another certificate for the Revised JIS A 5011-4 and started to produce and sell electric furnace oxidized slag aggregate for concrete.

Oxidized slag aggregate has a larger specific gravity than natural materials such as sand and gravel which have traditionally been used as concrete aggregate materials, and we therefore expect slag to be used for heavy concrete aggregate such as wave dissipation blocks. Increasing sales of oxidized slag aggregate for conl as it reduces the extraction of natural aggregate materials and thus mitigates its impact on the natural environment while also curbing energy consumption. We will continue working to reduce our environmental load by reviewing our business activities.

Effective utilization of electric furnace slag (electric furnace slag for recycled road-bed material)

The electric furnace slag for recycled road-bed materials (product name: ECO Stone™) is a recycled roadbed material made by crushing, sheaving, and mixing oxidized slag and reduced slag. The ECO Stone™ obtained a license on August 31, 2014 under the Aichi Prefecture Recycle Materials Evaluation System (pet name: AIKURU), which started in 2002. The license certifies that the materials meet quality, performance, and environmental safety requirements, and that they can be used for public works (Certificate Number: 2)-201).

ECO Stone™ passes environmental standards by a wide margin in terms of elution and inclusion of hazardous materials.

Sustainability

Social Responsibility

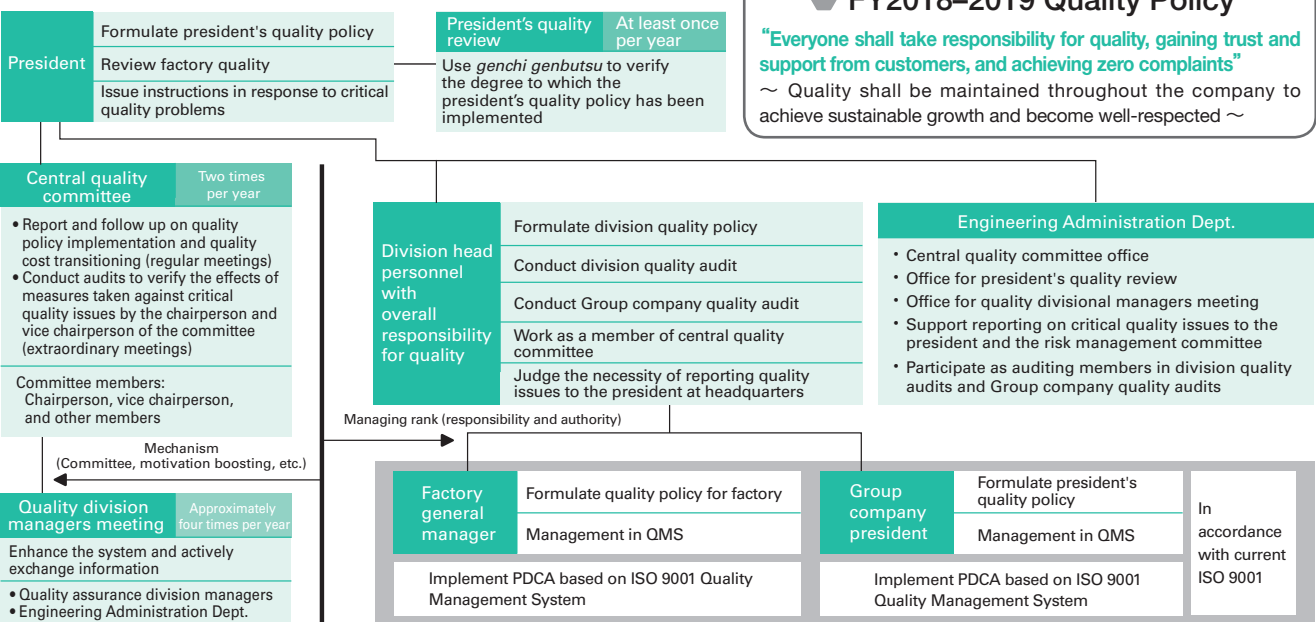
Relationship with Customers

Quality Assurance Philosophy

Topy Industries is committed to making customers its first priority and strives to contribute to society by delivering safe and high-quality products and services that always satisfy customers, while continuously improving the effectiveness of its quality management system (QMS).

1. Always anticipate the expectations and needs of customers ahead of time, react to their requirements promptly and precisely, and continue to introduce and deliver quality products and services that satisfy customers
2. Focus on building quality in the design and development stages, and stabilize product quality while improving reliability
3. Recognize the importance of education and training and enhance the quality awareness of all employees at the company
4. Recognize that quality defects are caused by multiple factors and promptly investigate the true causes of problems to make substantial improvements

Quality Management Structure



Awards from Customers

For the seventh consecutive year, we have been certified as a Platinum Level supplier of wheels for mining vehicles in Caterpillar's 2018 Supplier Quality Excellence Process (SQEP). Platinum Level is the highest level, and SQEP is a program under which Caterpillar Inc. certifies excellent suppliers every year based on its own criteria. Suppliers are evaluated comprehensively in terms of various requirements. Certification criteria are well-defined and consist of four levels: platinum, followed by gold, silver, and bronze. This year, only six out of more than 8,000 suppliers have received Platinum certification for seven or more consecutive years.

Such suppliers are very rare, making this certification a true honor. We also received the Silver certification as a supplier of undercarriage components for construction machinery. We will continue making continuous improvements to enhance our collective strengths and gain further trust from customers. We have also been commended as an excellent supplier by Hino Motors Manufacturing Indonesia for our truck and bus wheels and by Fiat Chrysler Automobiles (FCA) for our passenger car wheels.



Contribution through Business Products with high work efficiency

TACoil® deformed reinforcing bars

TACoil® is an advanced solution to problems faced by users in rebar industry, such as labor shortages, processing losses, and storage space.

(1) Product name : TACoil®

(2) Sizes : D10, D13, D16

(3) Features:

- 1) Combined with an NC processor, it significantly increases processing efficiency and resolves labor shortages.
- 2) It is capable of minimizing the loss generated during the process and increasing the yield rate.
- 3) Highly dense and compact, it saves storage space while enabling excellent transportation efficiency.
- 4) Maintains the same performance as existing deformed reinforcing bars even when used as a straightened bar.



Densely rolled compact coil is drawn and put into the NC processor.



NC processor (exhibited at Tekkin Expo, a trade show on reinforcing steel)



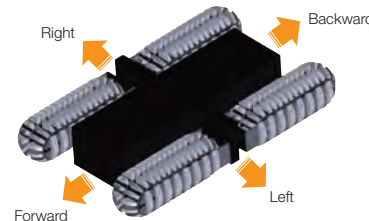
Examples of a TACoil® processed with an NC processor

Crawler mechanism for moving left, right, forward and backward OMNICRAWLER®

We are striving to spread this product in a wide range of areas as a tool for addressing the labor shortages in diverse industries. Example applications include harvesting and conveying agricultural crops and conveying goods in logistics warehouses.

(1) Features

- 1) Providing a high driving force with a wide ground contact area, it enables the vehicle to travel on rough roads.
- 2) Its high horsepower enables it to climb up and down hills.
- 3) It moves left, right, forward and backward while facing in the same direction, making it unnecessary to turn around. It can therefore travel in narrow and complex spaces.
- 4) Thanks to its high positioning accuracy, it stops precisely at the desired point.
- 5) It drives itself by detecting landmarks (fixed poles) via a laser sensor and functions for preventing collisions and avoiding obstacles.



Example use for saving labor in agriculture

- Spraying chemicals onto and transporting agricultural crops (automatic follow-up in harvesting)

*Joint marketing with Ginza Farm Co., Ltd.



Suggestions for saving labor in logistics

- Loading and unloading trolleys onto and from trucks at logistics warehouses



Example use for saving labor in construction

- Transportation of heavy goods at construction sites

Crawler TO, for robot-assisted transportation

* Jointly developed with Takenaka Corporation and Okaya & Co., Ltd.



Contribution to Local Communities

Activities Being Conducted at Each Site

(Head Office) Support for the Shinagawa Kids' Cafeteria Network

Of the Head Office's stocks of emergency provisions for disasters, we donated 600 meals that are one year from expiration to the Shinagawa Kids' Cafeteria Network, an organization run by the Shinagawa City Council of Social Welfare. We will continue making such donations to help combat food waste and contribute to local communities through such new CSR activities.



(Toyohashi Works) Environmental conservation activities

In solidarity with the Environmental Conservation Management Program, we carry out conservation activities twice a year in areas around the factory. A total of 93 people took part in FY2018, collecting roughly three truckloads of trash from beaches near the factory.



(Toyokawa Factory) Joint fire drills with the city of Toyokawa

In conjunction with the city of Toyokawa, in June 2018 we conducted fire drills simulating the outbreak of a fire. These joint drills help us to build a robust system of mutual assistance with local communities while ensuring their safety and strength.



(Ayase Factory) "Agreement on the Use of Facilities during Disasters" signed with the city of Ayase

As part of the Ayase City Urban Development Plan for Disaster Readiness, in July 2018 we signed an agreement with the city that allows it to use our Ayase Factory in the event of a disaster. The city can now use the factory as a temporary shelter for victims of earthquakes or other disasters.



Tours for Elementary and Junior High School Students

Workplace visits for junior high school students

In March 2019, eight students from Koriyama Shiritsu Otsuki Junior High School in Fukushima Prefecture visited the company as part of the career education support activities conducted by the NPO School Support Center. We hope this effort helped to broaden the students' view of society and benefit them in the future.



Factory tour for elementary school students

As part of our efforts to communicate with local communities, our factories provide tours to local elementary schools and other such organizations. Allowing participants to see, touch, and feel where products are made, the tours have been very popular experiences.



Support for cultural activities and sports

As a good corporate citizen, we continue to support cultural activities and sports in a low-profile manner by working together with local communities.

In cultural activities, we co-sponsored the special exhibition "Insects" as well as the planned exhibition "Under Construction!" In the field of sports, we continue to be an official sponsor of the San-En Neophoenix, a professional basketball team in the B. League. Our sponsorship, which began last year, is based out of the city of Toyohashi. We will continue to engage in support activities for revitalizing local communities and other purposes.



SGOR®, ultra-large diameter wheels for mining dump trucks, as shown during the "Under Construction!" planned exhibition



Relationships
with Employees

Initiatives for employees

Human resource development

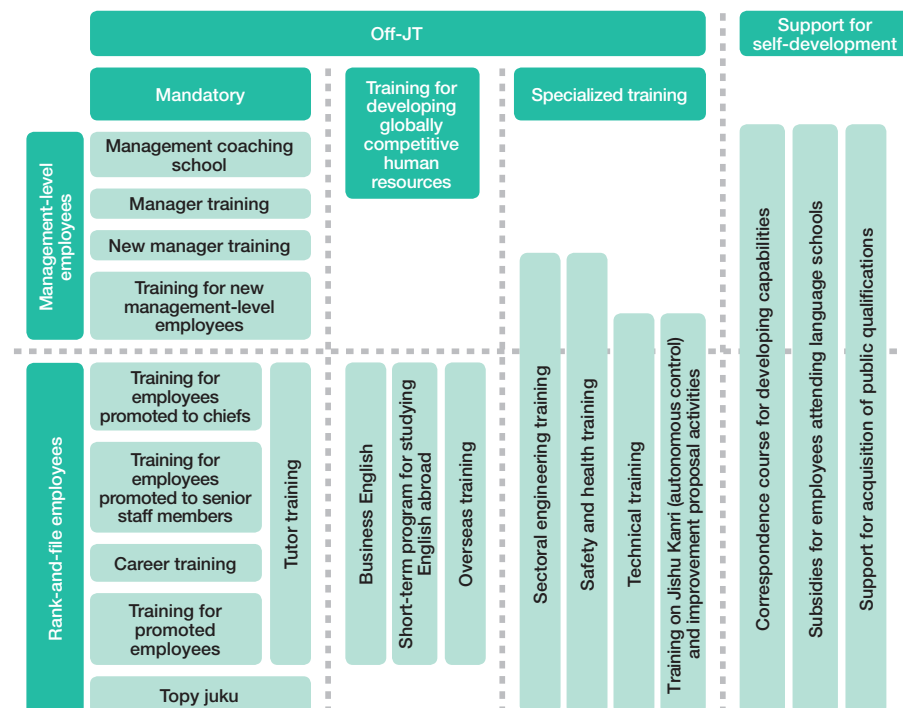
Our philosophy and basic policy on human resources development

The Topy Industries Group declares in Article 3 of the Code of Conduct (for the benefit of employees) that it will “Respect the individual character and personality of employees, and provide safe working environments that allow them to work with en-

thusiasm, and attain fulfilling lives.” We promote initiatives for reinforcing our human resources in the belief that they are our greatest asset and that improving their capabilities creates our value itself.

Training Programs (Topy Industries)

- Create human resources (human assets) who continue to develop
- Strengthen employees' capability to respond to environmental changes
- Support employees in their autonomous career development
- Continue to produce future business leaders
- Create an organizational environment that permits diverse human assets to work actively in various ways



New employee training

We provided Topy Juku, a new employee training program, during a four-month period from mid-April 2018. The training was provided to 18 trainees, who were allocated to different factories to receive on-the-job training and practical training. The on-the-job training saw participants learn the fundamentals of manufacturing through actual tasks at production sites, while in the practical training they took part in continuous improvement activities under the guidance of senior workers. In July 2018, a debriefing session on the training was held at the headquarters, and all of the Topy Juku trainees reported on their achievements from the training.



Global HR development

In FY2017, we introduced Long-Term Overseas Training with the aim of developing young employees who can demonstrate their capabilities in the different cultural environments of other countries. The employees who undergo this training are dispatched to overseas group companies as trainees and receive practical on-the-job training under the guidance of local managers in accordance with a training plan, thereby experiencing and learning about overseas work. They also acquire the ability to communicate in different languages, along with intercultural skills. In June 2019, the trainees who were dispatched to the production facilities management functions division of Topy America, Inc. in FY2018 reported on their achievements after the one-year training.



[Outline of the program]

Period: One year
Destination: Overseas group company (FY2018, Topy America, Inc.)
Requirement for trainees: TOEIC® score of 600 or higher



Small group activities

The Third All Topy Small Group Activity Presentation Convention was held in December 2018. In the presentations of this fiscal year's activities, a total of ten groups—two from the back-office section, two from the Shonan district, three from the Mikawa district, and three from group companies—competed for First Prize. Also, award-winning essays on autonomous control activities of the year were announced. After the presentations, a reception was held that was attended by President Takamatsu and other executives. At the event, the groups that gave presentations and the employees who were commended for their essays were rewarded for their services in a friendly atmosphere.



Diversity Initiatives

Support for women's empowerment

Topy Industries stipulates that it shall “Respect the individual character and personality of employees” in the Topy Industries Group Corporate Code of Conduct and implements initiatives for promoting the active participation of female employees as a measure for promoting diversity. As one of the initiatives, we launched a diversity promotion project in FY2014. In this project, we identified new issues and determined measures to be taken by FY2015, and enhanced related programs and introduced measures related to career development support. At present, we are carrying out an action plan targeting the following, based on the Act on Promotion of Women's Participation and Advancement in the Workplace, with the aim of allowing female employees to participate actively and fulfill their potential. (Plan period: April 1, 2016 to March 31, 2021)

- We will maintain the percentage of women among new recruits (career-track employees) at 40% or higher.
- We will proactively support employees' career development.
- We will increase the percentage of women among management-level employees (executives) five-fold compared to the current level.

Work-life Balance Initiatives

A variety of measures

We have taken a variety of measures to improve the work-life balance of our employees.
(April 2018 to March 2019)

Measures taken

- Operational improvement activities: Selected a pilot worksite where all employees carried out operational improvement activities
- Trial implementation of Anniversary Leave: Allows employees to take paid leave on an anniversary of their choosing (birthday, etc.)

Action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children

We are implementing an action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children with the aim of enabling all employees to fulfill their potential by balancing work and childcare.
(Plan period: July 1, 2015 to June 30, 2020)

- Increase the rate of taking childcare leave to the standard or a higher level during the plan period.
Male employees: At least one person shall take childcare leave during the plan period.
Female employees: Achieve the rate of taking childcare leave of 75% or higher.
- Encourage employees to take annual paid leave.

Efforts to heighten engagement

Communication Promotion Committee

With the goal of nurturing and enriching the human resources who support technological innovation and further growth for the company around the world, Topy Industries established the Job Satisfaction Improvement Committee. Comprising mostly younger employees, the committee was active throughout the Medium-Term Management Plan, also known as Growth & Change 2018. The committee conducted the company's first employee satisfaction survey, then, based on the survey results, discussed and carried out more than 20 measures for improving engagement.

In order to ensure the continuation of the achievements made through the engagement improvement activities and to solve problems, we renamed the committee the Communication Promotion Committee and began moving to the next stage in fiscal 2019.

By carrying out initiatives tailored to areas of communication not covered by current HR activities, the committee will improve employee satisfaction while conducting activities that will lead to better systems for developing human resources.

Topy Mentoring Program (TMP)

Under this program third-year employees will meet with their senior colleagues and receive help with solving the problems they face and achieving professional growth. Activities conducted this year led to a greater retention rate among program participants and improved communication skills.



Meetings

External Mixers

Topy Industries holds regular mixers with companies engaged in the same kinds of activities. Attendees talk about the troubles and challenges in their work and come away with knowledge that will prove useful in designing new measures.



Measures Taken up to FY2018

(1) Mentor program	(12) Discussions with managers
(2) Corporate culture improvement workshop for managers	(13) Encouraging interpersonal greeting
(3) Workplace culture survey	(14) Activity-Based Working (ABW) implementation
(4) Topy Cafe sessions (general employee meetings)	(15) Self-led measures by committee-member departments
(5) Manager meetings	(16) Installation of engagement bookshelves
(6) Operational improvement activities	(17) Promotion of 5S in the workplace
(7) Thanksgiving activities	(18) Deployment of IT tools to support sales
(8) Women's meetings	(19) Re-examination of age restrictions for bachelor dormitories
(9) Inter-departmental mixers	
(10) Department self-introduction sessions	
(11) Anniversary Leave program implementation	

Employee Health & Safety

Improvement of labor health and safety

Initiatives to Eliminate All Workplace Accidents

At Topy Industries, our primary corporate responsibility is to ensure the safety and health of our workers. We therefore implement a variety of actions to achieve zero accidents. We also conduct statistical surveys on labor accidents and report the results through in-house newsletters and other media to raise the safety and health awareness of each and every employee.

Results of a Statistical Survey on Labor Accidents
(Period: January to December 2018) (Topy Industries)

Manufacturing site	Total working hours	Number of accidents	Frequency	Severity
Kanagawa	438,195	3	6.85	0.00
Ayase	921,936	4	4.34	0.00
Toyohashi	1,563,455	7	4.48	0.06
Toyokawa	894,048	0	0.00	0.00
Total	3,817,634	14	3.67	0.03

Health promotion

Mental Health Initiatives

With the aim of recognizing one's own stress and preventing mental health issues, we conduct stress checks for all employees and use the findings to improve workplace environments. High-stress employees can receive follow-up care that includes consultations with industrial physicians.

Corporate Governance

We will work on strengthening and improving corporate governance to establish a company that will earn the trust of all stakeholders.

Basic Policy on Corporate Governance

Topy Industries pledges to enhance corporate value in the medium to long term by establishing a corporate governance system that is appropriate for the company from the standpoint of management soundness, transparency, and efficiency in order to maintain and improve the trust of stakeholders. This comes from the group's basic philosophy: "Win the trust and respect of society through the continuance and development of the Topy Industries Group and the execution of one's duties as a public institution."

Overview of Corporate Governance System

Topy Industries has an Audit & Supervisory Board, while the Board of Directors comprises executive directors well-versed in the Group's business and independent outside directors. The Board of Directors makes decisions on important managerial matters and oversees company management, while the Audit & Supervisory Board, which has a legally stronger right to audit, oversees the company's management. Through this system, we maintain and strengthen the soundness and efficiency of the company's management and improve corporate value.

Business Execution Structure

Our management functions consist of a management decision-making function and a business execution function, and we employ an executive officer system to vitalize and improve the efficiency of company management.

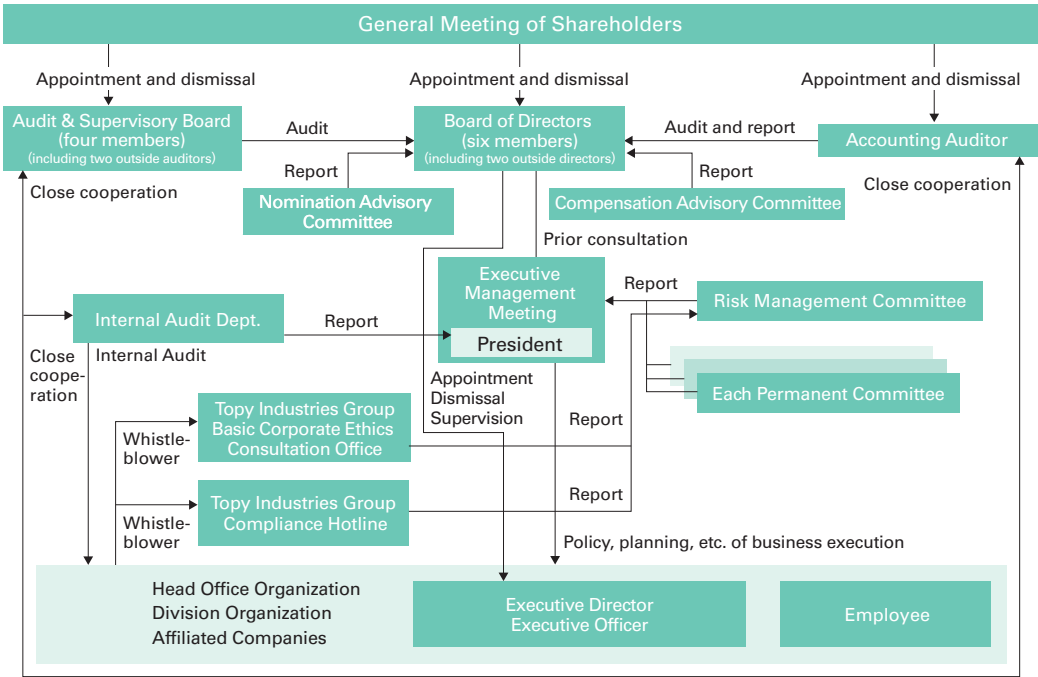
Nomination Advisory Committee

To ensure the fairness and transparency of director nominations, we have a Nomination Advisory Committee chaired by an outside director and comprising the President and two outside directors. The committee serves as an advisory body to the Board of Directors.

Compensation Advisory Committee

To ensure the fairness and transparency of director compensation, we have a Compensation Advisory Committee chaired by an outside director and comprising the President and two outside directors. The committee serves as an advisory body to the Board of Directors.

Corporate Governance Structure



Outside Officers

Independence of Outside Officers (Outside Directors and Outside Audit & Supervisory Board Members)

In accordance with independence standards established by financial instruments exchanges in Japan, the company determines the independence of its outside officers (outside directors and outside Audit & Supervisory Board members) based on their interests in the company, which include personal relationships, capital ties, and business relationships with the company. The company deems all of its officers to be independent and has notified financial instruments exchanges of such.

Compensation for Directors and Audit & Supervisory Board Members

Basic Policies

In accordance with its basic principle of improving company performance and value, the company uses compensation standards and a compensation system appropriate to individual employees' job responsibilities. The company also uses survey data compiled by outside experts to improve the objectivity of compensation standards.

Procedure for Determining Compensation

The Compensation Committee deliberates on the level of Board member compensation, which is determined by considering the compensation policy, the business performance of the company, and other factors. Based on the results of the deliberation, the amount of compensation for each director is determined by the Board of Directors, and that of each member of the Audit & Supervisory Board is determined through deliberation by all members of the Audit & Supervisory Board within the total amounts of compensation for which resolutions were passed in advance at the General Meeting of Shareholders.

Incentive Compensation System and Compensation Composition

Compensation types	Details of compensation	Performance indicators	Payment model
Performance-based stock compensation (medium to long term incentives)	<ul style="list-style-type: none">• The amount of this compensation is linked to the level of achievement of the Medium-Term Management Plan.• The standard amount of this compensation is 5% of the basic compensation, varying from 0% to 10%.	<ul style="list-style-type: none">• Level of achievement of performance indicators set in the Medium-Term Management Plan, including net sales, operating profit, profit attributable to owners of parent, operating profit on sales, operating margin, ROE, ROA, and debt equity ratio.	Stocks, cash
Performance-based compensation (short-term incentives)	<ul style="list-style-type: none">• This is linked to company performance and individual performance in the previous fiscal year.• The standard amount of this compensation is 30% of the basic compensation, varying from 0% to 75%. The portion based on the company's business performance ranges from 0% to 65%, while that based on individual performance ranges from 0% to 10%.	<ul style="list-style-type: none">• One is the result of quantitative evaluation, which is calculated based on return on equity (ROE) as the key indicator, and the level of achievement of performance indicators such as return on assets (ROA), operating profit on sales, and debt equity ratio. The other is the result of qualitative evaluation, which is determined in consideration of management activities and other situations.• Level of achievement of individual missions	Cash

Compensation for Outside Directors and Audit & Supervisory Board Members

Compensation for outside directors and members of the Audit & Supervisory Board consists of only a fixed basic compensation. This is in consideration of their independent position,

which is unaffected by the company's business performance.

Position	Total amount of compensations (million yen)	Amount of compensation by type (million yen)			Number of subject officers
		Basic compensation	Bonus	Stock-based compensation	
Directors (excluding outside directors)	244	234	—	10	7
Members of the Audit & Supervisory Board (excluding outside members)	40	40	—	—	3
Outside officers	37	37	—	—	4

Internal Control and Risk Management System

Internal Control Systems in General

To ensure the effectiveness of the internal control systems of Topy Industries and its Group companies, and to make continuous improvements to these systems, the company's Internal Audit Department monitors Topy Industries Group companies for compliance with internal control rules established by the Companies Act and Financial Instruments and Exchange Act based on the company's annual auditing policies and plans.

Compliance System

We have formulated the Group Basic Philosophy and the Group Code of Conduct and ensure that all the officers and employees of the Topy Industries Group are familiar with them through such means as our websites, in-house newsletter, and Group Compliance Guidebook. Moreover, under the leadership of the Risk Management Committee of the company, employees in each department of the company and group companies formulate annual activity plans to ensure full compliance, engage in compliance improvement activities, and share relevant information. In addition, company divisions that include those supervising compliance provide a range of compliance education to employees at each level of the Topy Industries Group. Regarding the whistle-blowing system, the Rules concerning the Topy Industries Group Basic Corporate Ethics Consultation Office and the Topy Industries Group Compliance Hotline stipulate that reports and consultations from employees are held in strict confidence and will not become the basis for any unfair treatment. We also provide outside counsel as recipients of such reports and consultations.

Risk management system

Under the leadership of the Risk Management Committee of the company, employees in each department of the company and group companies formulate annual activity plans for risk management and engage in risk management improvement activities. When an issue related to risk management occurs or is likely to occur in the Topy Industries Group, it is reported to organizations including the Risk Management Committee, with the necessary instructions provided through the risk management system. For responding to major natural disasters and other emergencies, we formulate and regularly review business continuity plans. We also work to improve the earthquake resistance of company buildings and production facilities while regularly conducting drills and other activities to cope with emergencies.

Execution of duties by Directors

The Board of Directors resolves matters required by laws and regulations or the articles of incorporation, as well as important issues of the company as stipulated in the Board of Directors Regulations. Moreover, prior deliberations of matters to be resolved by the Board of Directors are held at the Executive Management Meeting, which comprises the Executive Directors and others. Prior explanations of the agenda for Board of Directors Meetings are provided to Outside Directors who do not attend the Executive Management Meeting. In addition, the company endeavors to ensure efficient deliberations by the Board of Directors and rationality in the course of its decision-making by means such as establishing Bylaws concerning Preparation of Agenda Documents for Board of Directors Meetings.

Business management of the group companies

In accordance with the Group Company Management Regulations, the division of the company supervising the group companies receives reports therefrom regarding their business policies, plans, results and other matters as necessary, while important matters are resolved at Executive Management Meetings or Board of Directors Meetings. In addition, the company promotes the autonomous management of each group company and conducts management soundness evaluations to ascertain business results and risk management status, among other aspects, of each group company for every fiscal year. Based on the results of such evaluations, the division of the company supervising the group companies provides instructions and support to the group companies.

Audits by the Audit & Supervisory Board

Through Board of Directors Meeting attendance, as well as by Executive Management Meeting and other important meeting attendance by full-time members of the Audit & Supervisory Board, Audit & Supervisory Board members receive reports on the activities of such organizations as the Internal Audit Department and Risk Management Committee and other matters that have a significant influence on the Topy Industries Group. In addition, the Representative Director and Audit & Supervisory Board members hold regular meetings to exchange opinions. Information sharing sessions are also conducted among outside directors and Audit & Supervisory Board members. When an issue related to risk management occurs or is likely to occur in the Topy Industries Group, it is also reported to Audit & Supervisory Board members in accordance with the Group Risk Management Regulations. In addition, the company has developed a structure in which whistle-blowing is reported to Audit & Supervisory Board members in accordance with the Rules Concerning the Topy Industries Group Basic Corporative Ethics Consultation Office and the Topy Industries Group Compliance Hotline.

Adequate information disclosure

Article 2 (For the benefit of society) of the Topy Industries Group Corporate Code of Conduct stipulates that the Group will “Communicate widely with society as well as shareholders and proactively disclose corporate information fairly and appropriately. Cooperate with local communities and be philanthropically active as a good corporate citizen.” From the standpoint of securing management transparency we are endeavoring to disclose corporate information in a fair and equitable manner in accordance with the related laws and regulations such as the Financial Instruments and Exchange Act.

Initiatives to vitalize general meetings of shareholders

We are taking the following initiatives to vitalize general meetings of shareholders as a place for communication among the company, shareholders, and investors and to facilitate the seamless exercising of voting rights:

- ① Enrichment and early dispatch of notice to convene general meetings of shareholders
- ② Use of the Internet for notices to convene general meetings of shareholders
- ③ Exercise of voting rights via the Internet
- ④ Preparation of notices to convene general meetings of shareholders in English (summary)

Financial results briefings

We believe that the opportunity for our top executives to directly explain our management plan and financial results helps us earn the trust of our investors. Such sessions are held after financial results are disclosed at the end of the second quarter and at the end of the fiscal year for analysts and institutional investors. The president himself presents our financial results as well as our medium to long term consolidated management plans. This management plan session can be watched via streaming from the IR Library on our website for shareholders and investors.

Financial results briefings held in FY2018

Date	Content	Number of participants
November 20, 2018	2Q financial results briefing	24 members
May 24, 2019	Full-year financial results briefing	30 members



Our History

1921	Miya Steelworks (predecessor of Toto Steel Mfg., Co., Ltd.) was founded
1922	Miya Steelworks succeeded in hot-rolling of steel sashes
1926	Tokyo Shearing Co., Ltd. (predecessor of Toto Steel Mfg., Co., Ltd.) was founded
1930	Teikoku Hatsujo Seisakusho (predecessor of Japan Motor Wheel Co., Ltd.) commenced production of prototype steel wheels for automobiles
1934	Tokyo Sharin Seisakusho Co., Ltd. (predecessor of Japan Motor Wheel Co., Ltd.) was founded
1941	Tokyo Sharin Seisakusho and Abe Tekkosho Co., Ltd. merged to form Japan Motor Wheel Co., Ltd.
1943	Miya Steelworks and Tokyo Shearing Co., Ltd. merged to form Toto Steel Mfg., Co., Ltd.
1955	Toto Zoki Co., Ltd. was founded
1956	Toto Tekko Co., Ltd. was founded
1958	Toyohashi Steel Mill Plant of Toto Steel Mfg., Co., Ltd. (current Toyohashi Works of Topy Industries, Ltd.) was established
1961	Chigasaki Seisakusho of Toto Zoki Co., Ltd. (now Kanagawa Factory of Topy Industries, Ltd.) was established Toyokawa Plant of Japan Motor Wheel Co., Ltd. (now Toyokawa Factory of Topy Industries, Ltd.) was established
1964	Ayase Plant of Japan Motor Wheel Co., Ltd. (current Ayase Factory of Topy Industries, Ltd.) was established Japan Motor Wheel Co., Ltd., Toto Steel Mfg. Co., Ltd., Toto Zoki Co., Ltd. and Toto Tekko Co., Ltd. merged to form Topy Industries, Ltd.
1969	Topy International, Inc. (current Topy America, Inc.) was founded
1972	Technology Research Center (current R&D center) was opened at Toyohashi Works
1977	Sales of synthetic mica started
1980	Concluded a technical assistance agreement with PT. Inkoasku (Indonesia)
1982	Concluded a technical assistance agreement with PT. Palingda Nasional (Indonesia) Developed tubeless tire wheels for heavy- and medium-duty trucks and buses at Ayase Factory Super-Giant Off-the-Road Rim (SGOR®) vehicle wheels for mining dump trucks were developed
1985	Topy Corporation (current Topy America, Inc.) was founded
1987	Succeeded in the practical application of high-quality synthetic mica for cosmetics

1988	Concluded a technical assistance agreement with PT. Pa-koakuina (Indonesia)
1989	A plant for undercarriage components for construction equipment commenced operation at Toyohashi Works
1990	Akemi Plant of Toyokawa Factory commenced operation
1991	Kimi to Boku Hall was completed at Toyohashi Works
1992	Kurate Plant of Toyokawa Factory commenced operation
1995	A mill for deformed concrete bars commenced operation at Toyohashi Works
1998	Obtained ISO 9001 certification at all production sites
1999	Topy International, U.C.A. Inc. (now Topy America, Inc.) was founded ISO 14001 certification was obtained for all production sites
2000	Akemi Electric Power Ltd., which engages in the power supply business, commenced operation
2003	Took a stake in Fujian Yuan Shing Topy Ltd. (now Fujian Topy Autoparts Co., Ltd.)
2004	Hamura Plant of Ayase Factory commenced operation
2007	Topy America, Inc. was founded (merger of Topy International, Inc., Topy Corporation, and Topy International U.C.A. Inc.) Head Office moved to Osaki, Shinagawa-ku, Tokyo
2008	Science Division was established Concluded an agreement with Nippon Steel Corporation to strengthen general business cooperation
2011	Topy Undercarriage (China) Co., Ltd. was founded
2013	PT. Topy Palingda Manufacturing Indonesia was founded PT. Topy Undercarriage Indonesia was founded Topy MW Manufacturing Mexico S.A. de C.V. was founded
2014	PT. Topy Undercarriage Indonesia commenced operation The new steel making plant commenced commercial operation at Toyohashi Works
2015	Topy Fasteners Mexico S.A. de C.V. was founded
2016	The business and capital alliance with MW Italia S.R.L. was strengthened
2017	WIL Car Wheels Ltd., a joint venture with Wheels India Limited, was established (India)
2018	Ring Techs Co., Ltd. was made into a wholly-owned subsidiary Asahi Tec Corporation was made into a wholly-owned subsidiary



Representative Director and President Nobuhiko Takamatsu

1979 Joined Nippon Steel Corporation
2011 Executive Officer General Manager, Head of Division, Ironmaking Technology Division, Nippon Steel Corporation
2012 Advisor, Nippon Steel Corporation; Executive Officer in charge of technology/quality, Usiminas Siderúrgicas de Minas Gerais S.A.
2014 Executive Vice President in charge of business planning, Usiminas Siderúrgicas de Minas Gerais S.A.
2016 Managing Executive Officer and Vice Head of Global Business Development Sector, Nippon Steel & Sumitomo Metal Corporation
2016 Director at Usiminas Siderúrgicas de Minas Gerais S.A.
2017 Senior Executive Officer, Appointed as Assistant to the President of Topy Industries, Ltd.; Advisor, Nippon Steel & Sumitomo Metal Corporation
2017 Representative Director and President (to present)



Director Sumio Moriwaki

1981 Registered as lawyer (to present)
Joined Ishii Law Office (to present)
1991 Partner of Ishii Law Office (to present)
1999 Instructor, the Training and Research Institute for Court Officials, Supreme Court of Japan
2007 Visiting Professor, the University of Tokyo Graduate Schools for Law and Politics
2015 Chairman, Research Committee on the Judicial System, Japan Federation of Bar Associations
2017 Director of Topy Industries, Ltd. (to present)
Outside Auditor of JSR Corporation (to present)



Director and Executive Vice President Norio Saito

1979 Joined Topy Industries, Ltd.
2007 Operating Officer, Deputy General Manager of Wheel Div.
2011 Director, General Manager of Wheel Div.
2013 Managing Executive Officer, Automotive and Machinery Components Business, General Manager of Wheel Div.
2015 Managing Executive Officer, General Manager of Corporate Planning Dept.
2017 Director of Topy Undercarriage (China) Co., Ltd., Senior Managing Operating Officer of Corporate Planning Dept. and Finance Dept. Senior Managing Director of Corporate Planning Dept. and Finance Dept.
2018 Senior Managing Director in charge of Corporate Planning Dept., Finance Dept., and Sales Administration Dept.
Representative Director and President of ATC Holdings Co., Ltd. (to present),
Director of Asahi Tec Corporation (to present)
2019 Director and Executive Vice President (to present)



Audit & Supervisory Board Member Yukihiko Ogawa

1982 Joined Topy Industries, Ltd.
2007 Manager of Educational Issues at Personnel Dept.
2010 Senior Manager of General Affairs Dept. (PR, IR)
2014 Deputy General Manager of General Affairs Dept.
2015 Audit & Supervisory Board Member (to present)



Senior Managing Director Satoshi Kumazawa

1980 Joined Orient Watch Co., Ltd.
1989 Joined Topy Industries, Ltd.
2010 Operating Officer, General Manager of General Affairs Dept.
2013 Operating Officer, General Manager of Personnel Dept.
2015 Managing Operating Officer, General Manager of Personnel Dept.
2016 Managing Operating Officer, General Manager of Personnel Dept.
2017 Senior Managing Operating Officer, General Manager of Personnel Dept.
2018 Senior Managing Director in charge of General Affairs Dept. and Personnel Dept.
Supervisor, Fujian Topy Autoparts Co., Ltd. (to present)
2019 Senior Managing Director (to present)



Audit & Supervisory Board Member Koichi Sakamoto

1982 Joined Topy Industries, Ltd.
2015 Operating Officer of Topy Industries, Ltd., Director and CEO of Qingdao Topy Machinery Co., Ltd., and Director and CEO of Topy Undercarriage (China) Co., Ltd.
2016 Operating Officer of Topy Industries, Ltd. and Director and CEO of Topy Undercarriage (China) Co., Ltd.
2017 Councilor of Topy Industries, Ltd. and Director and CEO of Topy Undercarriage (China) Co., Ltd.
2018 Councilor to General Affairs Dept. of Topy Industries, Ltd., Audit & Supervisory Board Member (to present)



Senior Managing Director Hiroyuki Kinoshita

1981 Joined Nippon Steel Corporation
2011 Operating Officer, Technical Coordination (Manager, Special Matters) of Topy Industries, Ltd.
2012 Operating Officer, Deputy General Manager of Undercarriage Components Div. and General Manager of Kanagawa Factory, Undercarriage Components Div.
2015 Managing Executive Officer, General Manager of Undercarriage Components Div.
2017 Senior Executive Officer, General Manager of Undercarriage Components Div.
2018 Senior Managing Director in charge of Engineering Administration Dept., Internet of Things Promotion Dept., and Safety at Topy Industries, Ltd.
2019 Senior Managing Director (to present)



Audit & Supervisory Board Member Masakazu Kawabata

1977 Joined Fuji Bank Limited
2005 Executive Officer, Branch Manager of Shinjuku Branch of Mizuho Bank Ltd.
2006 Executive Managing Officer of Mizuho Bank Ltd.
2009 Representative Director, Vice President of Mizuho Research Institute Ltd.
2012 Representative Director and President of Mizuho Capital Co., Ltd.
2016 Audit & Supervisory Board Member of Topy Industries, Ltd. (to present)
Outside Corporate Auditor of Komori Corporation (to present)
Outside Director of Fuyo Auto Lease Co., Ltd. (to present)



Director Tsuyoshi Inoue

1976 Joined Development Bank of Japan
2006 Supervisor of Development Bank of Japan
2008 Resident Auditor of Development Bank of Japan
2010 Managing Director of Japan Nuclear Fuel Limited
2013 Director and Executive Officer of Japan Nuclear Fuel Limited
2014 Representative Director and President of Value Management Institute, Inc.
Outside Audit & Supervisory Board Member of Mitsubishi Paper Mills Limited
Auditor of Fuji Oil Co., Ltd. (to present)
2015 Director of Topy Industries, Ltd. (to present)
2016 Representative Director and President of Japan Economic Research Institute Inc.



Audit & Supervisory Board Member Kazuo Shouyu

1978 Joined Meiji Yasuda Life Insurance Company
2005 General Manager of Multi-life Product Development Promotion Dept. of Meiji Yasuda Life Insurance Company
2008 General Manager of Medical Department of Meiji Yasuda Life Insurance Company
2012 Statutory Auditor of Meiji Yasuda System Technology Company
2016 Audit & Supervisory Board Member of Topy Industries, Ltd. (to present)
Managing Director of Meiji Yasuda Cultural Foundation (to present)

Note:
Director Tsuyoshi Inoue and Sumio Moriwaki are outside directors.
Audit & Supervisory Board Member Masakazu Kawabata and Kazuo Shouyu are outside audit & supervisory board members.

Position	Name	Title or responsibilities
Managing Executive Officer	Ichiro Takeuchi	General Manager of Wheel Div., in charge of Automotive and Industrial Machinery Components Business
Managing Executive Officer	Masayoshi Takezawa	General Manager of Engineering Administration Dept.
Managing Executive Officer	Katsuyoshi Daido	General Manager of Internal Audit Dept.
Managing Executive Officer	Hiroji Kobayashi	General Manager of Corporate Planning Dept.
Operating Officer	Satoshi Fukura	General Manager of Science Div.
Operating Officer	Tsuyoshi Nakamura	General Manager of Steel Div., in charge of Steel Business
Operating Officer	Takanori Kawano	General Manager of Finance Dept.
Operating Officer	Kentaro Oba	Deputy General Manager of Wheel Div.
Operating Officer	Shuichi Tachibana	General Manager of General Affairs Dept.
Operating Officer	Masatoshi Takahashi	Director and Vice President of Asahi Tec Corporation
Operating Officer	Masahiro Abe	Deputy General Manager of Wheel Div.
Operating Officer	Katsuyoshi Tanaka	General Manager of Undercarriage Components Div., in charge of Automotive and Industrial Machinery Components Business
Operating Officer	Tetsuya Sakai	General Manager of Personnel Dept.
Operating Officer	Koji Nanayama	Deputy General Manager of Wheel Div.
Operating Officer	Hideo Katsuyama	General Manager of Marketing Administration & Planning Dept.
Operating Officer	Makoto Shimura	General Manager of Toyokawa Factory, Wheel Div.
Operating Officer	Shuichi Taguchi	General Manager of Administration & Procurement Dept., Wheel Div.

As of June 25, 2019

Consolidated Financial Performance for the Past 11 Years

(Unaudited; for reference only)

Fiscal year	2008	2009	2010	2011	2012
Operating Results (Fiscal year) (Million yen)					
Net sales	290,333	196,848	221,413	240,534	226,912
Operating profit	6,686	355	7,006	10,554	6,990
Ordinary profit	6,010	626	5,241	7,304	6,234
Profit (loss) before income taxes	5,225	(1,641)	4,765	6,118	5,842
Profit (loss) attributable to owners of parent	2,384	(1,032)	2,072	3,918	3,409
Capital expenditure	12,401	7,659	7,170	8,982	20,477
Depreciation and amortization	11,707	11,195	10,057	9,310	8,957
Research and development costs	1,649	1,288	1,245	1,271	1,212

Financial Position (End of fiscal year) (Million yen)					
Total assets	202,995	201,138	203,956	212,828	208,781
Shareholders' equity	80,286	81,087	79,500	82,389	89,522
Net assets	80,942	81,884	80,165	83,096	91,258
Interest-bearing debt	63,906	62,358	61,759	58,091	53,534

Cash Flows (Fiscal year) (Million yen)					
Cash flows from operating activities	21,547	12,010	6,236	16,010	16,770
Cash flows from investing activities	(15,908)	(7,507)	(3,681)	(7,703)	(14,770)
Cash flows from financing activities	(287)	(2,236)	(1,952)	(4,983)	(4,997)

Per Share Information (Yen)					
Net profit (loss) per share	103.88	(42.96)	86.37	165.20	143.76
Dividends per share	50	20	40	40	40

Financial Indices (%)					
Operating profit on sales	2.3	0.2	3.2	4.4	3.1
Return on equity	2.9	(1.3)	2.6	4.8	4.0
Equity ratio	39.6	40.3	39.0	38.7	42.9

Number of employees at period end [Average number of temporary employees not included in the above]	4,125 [471]	4,242 [422]	4,151 [432]	4,135 [428]	4,374 [491]
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* A one-for-10 reverse stock split of common stock went into effect on October 1, 2016. Data per share is thus calculated on the assumption that the reverse stock split was executed at the beginning of fiscal 2008.

2013	2014	2015	2016	2017	2018
234,682	237,677	215,872	208,237	230,462	286,227
5,308	6,422	10,000	7,180	7,997	7,505
4,485	6,037	8,806	6,116	8,034	9,357
4,249	4,476	4,681	10,897	7,933	10,345
1,914	2,360	1,700	7,191	5,500	7,114
25,458	20,374	8,815	9,874	12,132	25,100
10,086	10,315	11,321	10,631	10,599	11,110
1,519	1,202	1,059	1,137	1,131	1,096

232,714	252,456	231,583	223,050	248,102	284,198
94,363	106,187	98,893	103,951	108,959	111,304
96,219	107,941	99,973	104,853	109,859	112,362
62,453	77,516	70,070	55,831	61,096	79,676

7,251	19,440	19,346	10,130	10,780	11,725
(17,478)	(29,141)	(7,529)	(1,016)	(5,861)	(20,835)
7,538	13,157	(8,391)	(16,861)	1,834	15,936

80.76	99.65	71.80	303.90	234.25	302.85
20	40	60	80	80	90

2.3	2.7	4.6	3.4	3.5	2.6
2.1	2.4	1.7	7.1	5.2	6.5
40.5	42.1	42.7	46.6	43.9	39.2

4,515 [538]	4,596 [573]	4,408 [597]	4,568 [587]	5,034 [581]	6,241 [869]
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Detailed financial data are available on the following page of our official website.
<http://www.topy.co.jp/ja/stock/library.html>

Major Subsidiaries & Affiliates

Company name	Head office location	Capital (millions of yen)	Business segment	Voting rights held or owned by (%)
(Consolidated Subsidiaries) Topy Enterprises, Ltd.	Shinagawa-ku, Tokyo	480	Steel, Automotive and Industrial Machinery Components, Other	100
Topy Marine Transport, Ltd.	Toyohashi-shi, Aichi Pref.	225	Steel	100
Topy Fasteners, Ltd.	Matsumoto-shi, Nagano Pref.	310	Automotive and Industrial Machinery Components	100
Topy-Rec, Ltd.	Koto-ku, Tokyo	300	Others	100
Kyushu Wheel Kogyo, Ltd.	Miyako-gun, Fukuoka Pref.	100	Automotive and Industrial Machinery Components	100
Tojitsu Co., Ltd.	Toyohashi-shi, Aichi Pref.	80	Steel	100 (100)
NE-Tojitsu, Ltd.	Urayasu-shi, Chiba Pref.	34	Steel	100 (100)
Autopia, Ltd.	Hachioji-shi, Tokyo	30	Automotive and Industrial Machinery Components	100 (100)
Akemi Recycling Center, Ltd.	Toyohashi-shi, Aichi Pref.	200	Steel	100 (30)
Sanwa Buhin Co., Ltd.	Bando-shi, Ibaraki Pref.	200	Automotive and Industrial Machinery Components	100
Akemi Electric Power, Ltd.	Toyohashi-shi, Aichi Pref.	205	Power Generation	100
Ring Techs Co., Ltd.	Kurashiki-shi, Okayama Pref.	100	Automotive and Industrial Machinery Components	100
Seibu Wheels Co., Ltd.	Kurashiki-shi, Okayama Pref.	10	Automotive and Industrial Machinery Components	100 (100)
ATC Holdings Co., Ltd.	Kikugawa-shi, Shizuoka Pref.	100	Automotive and Industrial Machinery Components	100
Asahi Tec Corporation	Kikugawa-shi, Shizuoka Pref.	100	Automotive and Industrial Machinery Components	100 (100)
Topy America, Inc.	Kentucky, U.S.A.	600 U.S. dollars	Automotive and Industrial Machinery Components	100
Topy Precision Mfg., Inc.	Illinois, U.S.A.	50,000 U.S. dollars	Automotive and Industrial Machinery Components	100 (100)
Topy Fasteners (Thailand), Ltd.	Chonburi, Thailand	50 million baht	Automotive and Industrial Machinery Components	90 (55)
Fujian Topy Autoparts Co., Ltd.	Fujian, China	194 million renminbi	Automotive and Industrial Machinery Components	100
Topy Undercarriage (China) Co., Ltd.	Qingdao, China	606 million renminbi	Automotive and Industrial Machinery Components	100
Topy Fasteners Vietnam Co., Ltd.	Yen My District, Hung Yen Province, Vietnam	6,240,000 U.S. dollars	Automotive and Industrial Machinery Components	100 (80)
PT. Topy Palingda Manufacturing Indonesia	Karawang Regency, West Java, Indonesia	710.5 billion rupiah	Automotive and Industrial Machinery Components	90
PT. Topy Undercarriage Indonesia	Bekasi Regency, West Java, Indonesia	2,850,000 U.S. dollars	Automotive and Industrial Machinery Components	100 (3)
Topy MW Manufacturing Mexico S.A. de C.V.	Silao City, State of Guanajuato, Mexico	867 million pesos	Automotive and Industrial Machinery Components	95
Topy Fasteners Mexico, S.A. de C.V.	San Luis Potosi City, State of San Luis Potosi, Mexico	166 million pesos	Automotive and Industrial Machinery Components	100 (100)
Ring-Techs Guangzhou Co., Ltd.	Guangzhou City, Guangdong Province, China	188 million renminbi	Automotive and Industrial Machinery Components	90 (90)
Asahi Tec Aluminium (Thailand) Co., Ltd.	Khlong Tamru, Chonburi, Thailand	14.80 million baht	Automotive and Industrial Machinery Components	100 (100)
Asahi Tec North America, Inc.	Troy, Michigan, U.S.A.	90,000 U.S. dollars	Automotive and Industrial Machinery Components	100 (100)
Guangzhou Asahi Dongling Research & Development Co., Ltd.	Guangzhou City, Guangdong Province, China	11,900,000 renminbi	Automotive and Industrial Machinery Components	51 (51)
(Equity-method affiliate) Hokuetsu Metal Co., Ltd.	Nagaoka-shi, Niigata Pref.	1,969	Steel	35.6 (1.4)
Guangzhou Wheelhorse Asahi Aluminium Co., Ltd.	Guangzhou City, Guangdong Province, China	216 million renminbi	Automotive and Industrial Machinery Components	49 (49)
Guangzhou Dicastal Asahi Aluminium Co., Ltd.	Guangzhou City, Guangdong Province, China	40 million renminbi	Automotive and Industrial Machinery Components	25 (25)
(Other affiliates) Nippon Steel & Sumitomo Metal Corporation	Chiyoda-ku, Tokyo	419,524	Manufacture and sales of steel products and engineering	0.1 (Owned by) 20.8 (0.2)

Notes:

1. The respective business segments are listed in the "Business segment" column (excluding other affiliated companies).

2. Topy America, Inc. and Topy Precision Mfg., Inc. have paid premiums of U.S. \$62,999,400 and U.S. \$4,950,000, respectively, aside from the capital mentioned above, totaling capital of U.S. \$63,000,000 and U.S. \$5,000,000, respectively.

3. Topy Enterprises, Ltd., Topy America, Inc., Fujian Topy Autoparts Co., Ltd., Topy Undercarriage (China) Co., Ltd., PT. Topy Palingda Manufacturing Indonesia, Topy MW Manufacturing Mexico S.A. de C.V., Ring-Techs Guangzhou Co., Ltd., and Asahi Tec Aluminium (Thailand) Co., Ltd. are specified subsidiaries.

4. Hokuetsu Metal Co., Ltd. and Nippon Steel & Sumitomo Metal Corporation issue official financial statements separately. Nippon Steel & Sumitomo Metal Corporation changed its trade name to Nippon Steel Corporation on April 1, 2019.

5. The sales ratio of Topy Enterprises, Ltd. as a proportion of the consolidated sales of the Topy Industries Group exceeds 10% (excluding internal sales among consolidated Topy Industries Group companies).

Major financial information	(1) Net sales JPY	¥115,398 million
	(2) Operating profit JPY	¥1,358 million
	(3) Net profit JPY	¥3,032 million
	(4) Net assets JPY	¥9,727 million
	(5) Total assets JPY	¥43,152 million

6. The values in parentheses in the "Voting rights held or owned by" column represent indirect holding percentages or percentages of voting rights indirectly owned by the company, which are each included in the value above.

IR Information

Stock exchange listings First Section of the Tokyo Stock Exchange & First Section of the Nagoya Stock Exchange (Securities code 7231)

Number of authorized shares 88,300,000

Number of outstanding shares 24,077,510

Number of shareholders 10,920

Top 10 major shareholders

Name	Number of shares held	Shareholding ratio (%)
Nippon Steel & Sumitomo Metal Corporation	4,818,264	20.46
Topy Fund Business Association	1,065,410	4.52
Meiji Yasuda Life Insurance Company	975,134	4.14
The Master Trust Bank of Japan, Ltd. (trust account)	834,000	3.54
Mizuho Bank, Ltd.	787,802	3.34
Japan Trustee Services Bank, Ltd. (trust account)	687,127	2.92
Sompo Japan Nipponkoa Insurance Inc.	574,600	2.44
Employee Shareholding Association of Topy Industries, Ltd.	550,243	2.34
DFA Intl Small Cap Value Portfolio	537,400	2.28
Government of Norway	494,200	2.10

Notes:

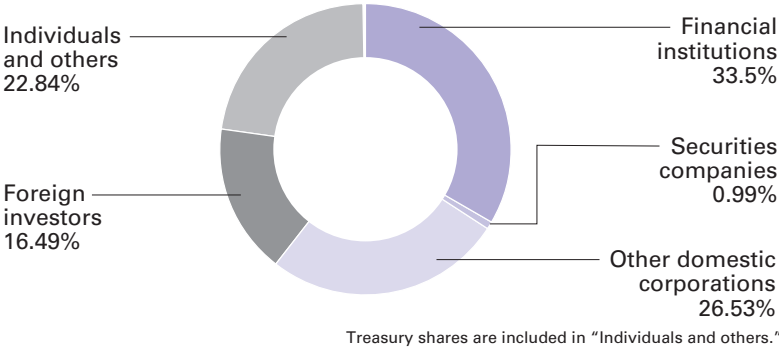
1. Topy Industries, Ltd. owns 525,496 treasury shares but is excluded from the major shareholders listed above.

2. The shareholding ratios were calculated by excluding treasury shares.

3. Nippon Steel & Sumitomo Metal Corporation changed its trade name to Nippon Steel Corporation on April 1, 2019.

4. Topy Fund Business Association is the name of the shareholding association of Topy Industries, Ltd., its affiliates, and its business partners.

Breakdown of shareholders by type



Fiscal year end March 31

Ordinary general meeting of shareholders June

Record date March 31 (ordinary general meeting of shareholders, year-end dividend)
September 30 (interim dividend)

Share unit number 100

Shareholder registry administrator (special account management institution) Sumitomo Mitsui Trust Bank, Limited
1-4-1 Marunouchi, Chiyoda-ku, Tokyo

Contact for inquiries Stock Transfer Agency Business Planning Dept.
Sumitomo Mitsui Trust Bank, Limited
2-8-4 Izumi, Suginami-ku, Tokyo 168-0063
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