

Top Message

Achieving Solid Growth amid Significant Changes and Major Trends

Even while facing increasingly drastic changes in the business environment, the Toyota Industries Group will continue to work as one team to take on challenges by dedicating itself to providing products and services that are helpful to society.

Introduction



Akira Onishi
President

In fiscal 2022, the impact of COVID-19 lingered on a broad scale and a series of earthquakes, heavy rains and other natural disasters occurred in Japan. Outside the country, unexpected geopolitical risks emerged. It was also a difficult year for management decision-making. I would like to extend my heartfelt sympathies to everyone who has been affected by the disease and disasters. I wish for the earliest possible restoration of peace to everyday life.

Amid the changes in the circumstances surrounding our business, the rapid progress of digitalization, **the trend toward electrified vehicles** and **the accelerated popularization of e-commerce** following lifestyle changes **have brought great business opportunities**. Accordingly, **our businesses have grown significantly, including for electric car air-conditioning compressors and logistics solutions**. While raising our sensitivity to risk, we will continue to regard changes in society as an opportunity for growth and **aim to achieve corporate growth by undertaking businesses in response to societal needs**. We will do so by delivering new value for people's lives and contributing to reducing environmental impact through the electrification of automobiles and automated and streamlined logistics operations.

Review of Fiscal 2022

In fiscal 2022, many countries embarked on the normalization of economic activities despite the lingering impact of COVID-19. The solid automobile and lift truck markets have led to **a huge turnaround in each of our businesses from the previous fiscal year, resulting in record-high net sales and operating profit**.

The **Automobile Business** was impacted chiefly by difficulties in the procurement of semiconductors and other components; the resulting revision of automakers' production plans, which in turn forced us to make operation adjustments; and soaring raw material and energy costs due to supply constraints. Nevertheless, **production of the RAV4 proceeded at a high level** while **engine production was strong**, mainly for GD diesel engines mounted on the Innovative International Multipurpose Vehicle (IMV) series of Toyota Motor Corporation (TMC) as well as other vehicles. **As for car air-conditioning compressors, unit sales of electric compressors continued to increase beyond expectations** amid the accelerated electrification of automobiles following the global trend toward carbon neutrality.

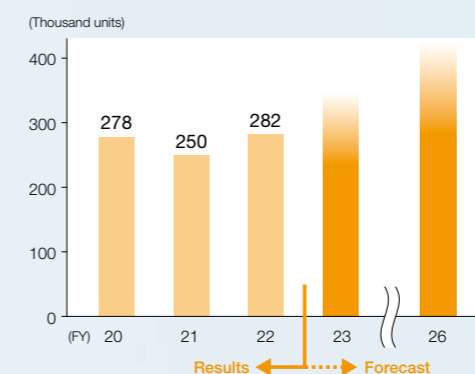
In the **Materials Handling Equipment Business**, needs for more efficient and automated logistics have been expanding. The upward trend is becoming even more prominent due to an increasing logistics volume arising from global economic development and the expansion of e-commerce as well as COVID-19-induced changes in behavior. Under such circumstances, **market needs remained extremely robust** for both logistics solutions and lift trucks, leading to **record-high net sales**.

Amid intensifying changes in the business environment, we believe we were able to achieve solid results as a result of Group-wide efforts to quickly identify what is demanded by society and meet customers' needs in the respective businesses.

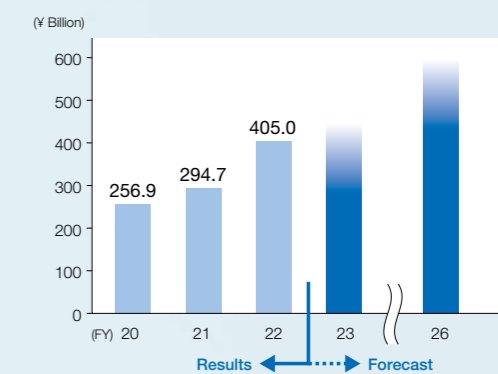


Production of the RAV4

Lift Truck Sales



Logistics Solutions Sales



Future Business Direction

With **the electrification of vehicles and the increasing need for more efficient logistics** expected to continue over the medium term, we regard these factors as **opportunities for growth** and strive to capitalize on these prospects. Meanwhile, **COVID-19 will continue to have an impact on the procurement of parts in fiscal 2023**. Since it will be some time before the supply chain returns to normal, **we need to take proper action**. In addition, we recognize that it is vital to be **well prepared for sudden changes** and respond to uncertainties such as **geopolitical risks and costs of raw materials, energy and logistics, which keep rising or remain high**, with a flexible and resilient approach. To realize medium-term growth, we intend to focus especially on the electrification of vehicles and the response to needs for more efficient logistics. The following details our specific initiatives.

■ Accelerating Electrification of Vehicles

With rising environmental consciousness of consumers and ever more stringent environmental laws and regulations in many countries and regions, a number of countries, mainly developed ones, have announced that they will eventually ban the sale of internal-combustion vehicles that consume fossil fuels. In response to this trend, it is increasingly apparent that **automakers are making an ambitious shift toward battery electric vehicles (BEVs)** in their electrification strategies.

■ Expanding Business Opportunities Capturing the Trend toward Electrification

The trend toward the **electrification of vehicles** is irreversible, and we will respond to it as a matter of course. In parallel, we will seek to develop **more energy-saving engines with lower emissions with a view toward reducing their environmental impact**.

In the **Car Air-Conditioning Compressor Business**, we will **continue to reinforce our production capacity in order to firmly respond to growing demand for electric compressors** that accompanies the increase of electrified vehicles. In addition, the widening variety of electrified vehicles will lead to **the diversification of needs for electric compressors**. As a leading company in the industry, we will continue our intensive efforts to develop products to meet many different needs. As a specific example, since BEVs have no engine, they are unable to use waste heat from the engine to heat the interior of the vehicle. To solve this issue, we are striving to make **compressors usable for heating purposes** as well. Moreover, there are also needs for the **cooling of batteries and electronic components** to maintain operating efficiency. In this and other ways, the role of electric compressors is expected to keep expanding. We are **working tirelessly on the development of technologies to ensure we do not miss such business opportunities**.



Electric car air-conditioning compressor

In July 2021, the **Battery Business** began mass production of **bipolar nickel-metal hydride batteries** for hybrid electric vehicles (HEVs) (See “Development of Technologies and Products Contributing to the Resolution of Social Issues” on page 20). Jointly developed with TMC, **the battery has been highly acclaimed by industry experts for its bipolar structure, which has been adopted for the first time in the world in an on-board battery, and its superior performance**. We are delighted and greatly encouraged by the appreciation for our persistent research and development efforts. Looking forward, we will seek greater productivity while preparing for **the launch of the new Ishihama Plant, which is slated to begin mass production within fiscal 2023**. In this way, we aim to **have the battery fitted in more vehicle models and deliver new value** for ever-evolving electrified vehicles.



Ishihama Plant

■ Future Needs for Engines

For the widespread acceptance of BEVs, the building of recharging infrastructure and the stable supply of electricity are necessary. As such, **it will be some time before we see them widely used in emerging countries**. In addition, depending on the environment, vehicles must demonstrate powerful driving performance. Therefore, it is expected that **a need for diesel and other internal-combustion engines will remain for some time**. As electrification continues to progress, it is thought that the development and mass production of HEVs will eventually become a realistic option, but we foresee there will still be some needs for internal-combustion vehicles in the medium term.



New V6 diesel engine

■ Contributing to Electrification through Production of Vehicles and Engines

In the **Vehicle Business**, **a majority of the vehicles produced are electrified ones**, such as HEVs and plug-in hybrid electric vehicles (PHEVs). We will **contribute to TMC's electrification efforts through our manufacturing capability** that capitalizes on our strengths in safety, environment, quality, cost and delivery (SEQCD).

In the **Engine Business**, we will work to **develop and produce diesel engines with superior environmental performance** to meet the continuously robust demand. We will also **respond to increasing demand for electrified vehicles by manufacturing engines for HEVs**.

■ Sustained Expansion of Roles of Lift Trucks and Logistics Solutions

Although e-commerce is expanding across many global commercial transactions at a surprising pace, viewed holistically it is not mainstream yet, accounting for only around 8% of all transactions in Japan*1. In addition to the advancement of information technologies, the convenience to place orders at any time using a computer, smartphone or tablet and to have orders delivered to the desired location is widely appreciated by the public. Consequently, it is believed that **the e-commerce market will continue to grow for the foreseeable future.**

Increases in logistics volume and small cargo delivery have rendered **logistics operations**, including sorting systems, **becoming more complex and sophisticated.** It is also necessary to **increase processing capacity.** Under these circumstances, our Materials Handling Equipment Business must **play a greater role and provide broader and more advanced features through its lift trucks and logistics solutions.**

*1: Based on the scale of the business-to-consumer (B-to-C) EC market in the merchandising sector in the Ministry of Economy, Trade and Industry's FY2020 Industrial Economic Research Commissioned Project (E-Commerce Market Survey)

■ Meeting Demand for More Efficient Logistics by Leveraging Our Strengths

We will continue to meet the needs of our global customers by capitalizing on our well-established strengths. These include our expertise for more efficient logistics that we have nurtured over long years by responding to various needs required at logistics sites as well as our full range of product offerings and responsive after-sales services by highly skilled and experienced service personnel.

In the **Lift Truck Business**, we have **global development, production, sales and service networks** mainly in the key markets of Japan, the United States and Europe. We thus believe that we have mostly established the structure to meet the needs for more streamlined logistics. Based on this structure, we will proceed with **product development and market releases suited to the needs of different countries and regions.**

Amid the **ongoing labor shortages and soaring labor costs around the world**, there is **an increasing need for labor savings and the automation** of lift trucks. The **automated operation** of lift trucks in fixed patterns in limited **indoor spaces has already been available for practical use.** However, **automated operations in outdoor environments** are technically challenging. We will continue **research and development** to successively resolve issues with a view toward the **practical application** of the technology.

In the United States, we suspended the shipment of models of some internal-combustion lift trucks in January 2021 and their production in June 2021. **In May 2022, we obtained certification from the authorities for small liquefied petroleum gas (LPG) lift trucks, which are our mainstay internal-combustion lift trucks in the U.S. market, and resumed shipment. I wish to extend sincere apologies to all of our customers who were inconvenienced.**

In the **Logistic Solutions Business**, we will endeavor to firmly capture **robust demand in the e-commerce, food and retail sectors to expand business over the medium term.** Our logistics solutions are in very high demand in the e-commerce sector and have significantly contributed to our business results.



Feasibility test of an automated guided forklift

In the future, we will accelerate efforts to receive orders from other industries. At the same time, we **expect a growth in demand for baggage handling systems in anticipation of a post-pandemic recovery in the aviation industry.**

Vanderlande Industries Holding B.V. has a proven track record of providing solutions based on its independently developed systems and equipment for large projects around the world, mainly in Europe. As for medium-sized projects, although Bastian Solutions LLC and Toyota Material Handling Japan have an advantage in North America and Japan, respectively, we were less established in this area in Europe. To reinforce our European operations, we **acquired viastore*2, a Germany-based logistics system integrator, and made it into a subsidiary** in July 2022. With the addition of viastore, we believe that we are now fully prepared to fulfill the needs for automated logistics. Our basic strategy for the future is to **achieve organic growth.** In this regard, we will proactively **strengthen our businesses using an M&A approach if we identify any good matches in an area where the Toyota Industries Group is lacking in presence.**

*2: viastore is a Germany-based logistics system integrator with nine bases in eight countries, including Germany, Spain, France, Russia, the Czech Republic, the United States, Mexico and Brazil. Its annual sales for 2021 were approximately ¥18 billion.



Vanderlande's hanging high-speed sorting system

Laying Down a Foundation for Business Growth

Society is dramatically changing and unforeseen events may occur. However, if we are well prepared, we may be able to mitigate their impact. **We will learn from the past and strengthen our ability to identify potential changes. Accordingly, we will use our extensive knowledge and imagination free from preconceptions to build a foundation for reducing risk.**

■ Creating a Safe and Comfortable Workplace Environment

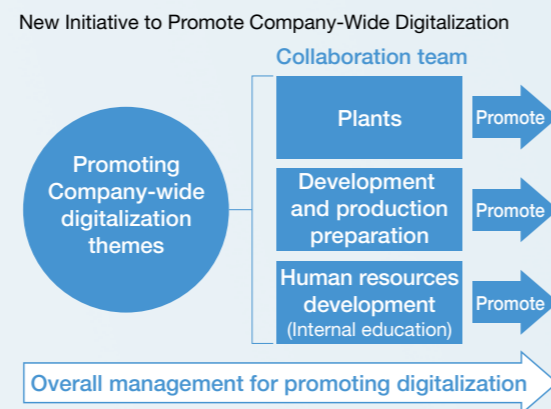
Under the recognition that nothing is more important than safety, we place priority in the order of **safety first, quality second and production third.** Taking pride as a leading manufacturer in the industry, we always bear in mind that safety is of the greatest importance. Fully aware of circumstances on site, we will continue to make Group-wide efforts to create workplaces that allow all employees to work with peace of mind.



Sharing safety technology with a subsidiary outside Japan

Acceleration of Research and Development and Effective Capital Investment

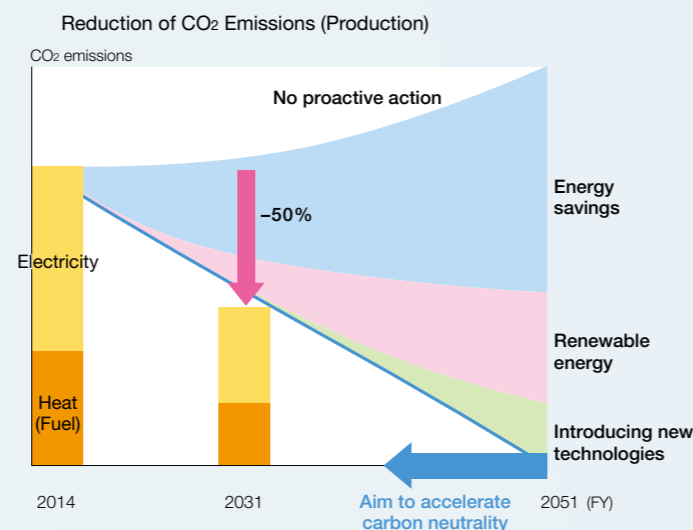
We possess a wide variety of technologies and solutions cultivated in diverse businesses. Using this strength, we have a policy of flexibly and proactively introducing the knowledge of external parties into our activities while placing a focus on in-house development. As I mentioned earlier, in order to create new value we aim to clarify priority areas and targets and make **effective capital investment** for the advancement and sophistication of our products and services as well as the reinforcement of our production capacity while **focusing more on research and development in the domains of electrification and automation.**



We will also strive to **improve the productivity of the entire Company** by introducing advanced **digital technologies** not only in product and technology development but also for production departments and all other operations. In February 2022, we **launched the Company-wide digitalization project.** It is not an initiative that individual business divisions separately undertake but a project in which all our executives discuss the cross-divisional direction and apply it throughout the Company. In the future, we will **accelerate digital transformation (DX) in the three areas of “plants,” “development and production preparation” and “human resources development.”** In addition, we also began a corporate transformation (CX) project with the goal of advancing head office and other functions. We will streamline existing operations and actively leverage the capabilities of subsidiaries to clarify the areas that the Head Office should focus on to raise the added value of our corporate operations in every possible way. Regarding the Company-wide digitalization project and environmental initiatives, we will vary our focus in our allocation of capital with the aim of resolving social issues and making our businesses more competitive.

Further Strengthening Environmental Initiatives from a Medium- to Long-Term Perspective

We have steadily reduced the CO₂ emissions from our production activities while increasing sales. We understand that this is a result of sharing best practices among business divisions and making tireless efforts mainly to thoroughly conserve energy. With regard to **our goal of halving CO₂ emissions by fiscal 2031, it looks likely we will achieve this objective** by carrying out a range of actions such as the active utilization of renewable energy. To **realize carbon neutrality** laid out in our **Environmental Vision 2050,** we have commenced the **development of new technologies to reduce CO₂ emissions** using



hydrogen and other materials.

Use of our products accounts for a large portion of CO₂ emissions from the entire product lifecycle. Even though we have long been delivering energy-efficient products in individual businesses, we will leverage our strengths in the operation of both the Materials Handling Equipment and Automobile businesses to **further strengthen the electrification of products with a view toward zero CO₂ emissions during the entire product lifecycle.** Our basic stance is to accurately identify customers' needs to develop products they truly need and differentiate ourselves through the appeal of our products.

To protect the global environment, we will **work together with local communities** to further expand our activities for **conserving biodiversity,** which is just as important as carbon neutrality.

Implementing Fair and Transparent Corporate Governance

While paying attention to changes in society's awareness regarding corporate ethics and a shift in people's values, we have been **working to establish and operate an effective governance system in its true essence** as opposed to mere formalities. These efforts have been well received by outside directors as a sound response. In addition, we are **increasing the diversity of our executives using a bottom-up approach.** With more and more women playing key roles in diverse job categories in Japan, we **remain committed to channeling more efforts to increase diversity.**

We regard the cross-shareholdings with TMC and other Toyota Group companies as an indispensable element for the solidarity of the group and the medium- and long-term expansion of business. We will continue to **seek sustained growth and return the results of our business activities to our shareholders and investors in the form of stable dividends.**

In Conclusion

Our ultimate goal is to develop businesses by **providing products and services that are helpful to society.** To achieve this goal, we will dedicate ourselves to achieving **further corporate growth** through a three-pronged approach. Specifically, Toyota Industries is placing **top priority on safety; creating an environment** where individual employees with many different skills and experiences can thrive and **demonstrate their capabilities to the fullest;** and **developing human resources who can play key roles on the global stage.**

We look forward to your continued understanding and support as we endeavor to implement these initiatives.

