# Business Strategy | Safety Systems (SS)

Message from Corporate Officers

**We promote high-performance safety products globally, contributing to reducing traffic fatalities.**

**Tadashi Yamamoto**
Corporate Officer, Chief of SS Business Headquarters

## Safety Systems Business Policy

Around 1.2 million people worldwide die in traffic accidents each year. As a safety-related business, the Safety Systems (SS) business creates safer products and encourages more people to use them, thereby contributing to reducing traffic fatalities.

Our SS business accounts for around 40% of the Company's sales. To achieve the company-wide 2030 Business Plan, the SS business is aiming for sales exceeding 500 billion yen and to further enhance profitability by FY2030.

## Review of FY2024

In FY2024, we achieved record-high sales thanks to the increased global production output of our main clients. In addition, higher production volumes in Japan, efforts to reduce variable costs, and improved sales ratio of steering wheels with functions such as grip detection and heating led to improved profitability. As efforts toward future development, we announced our research results on future safety at Airbag 2024, an international symposium on automotive safety, where we were also able to communicate our thoughts on future safety issues.

Regarding mass production, amid the strengthening of safety assessments in India, we began production of side impact airbags, which are now being installed, and expanded the Neemrana Plant in northern India to increase airbag installation capacity, with operations now underway. In addition, we enhanced production capacity at existing facilities to meet local procurement needs in Brazil.

## Future Growth Initiatives

The following are the three strategy pillars to achieve the vision of the SS business policy:

### 1. Strengthen global competitiveness

Lead by head office, we will collaborate with overseas locations and partner companies to establish a global strategy and enhance our competitiveness.

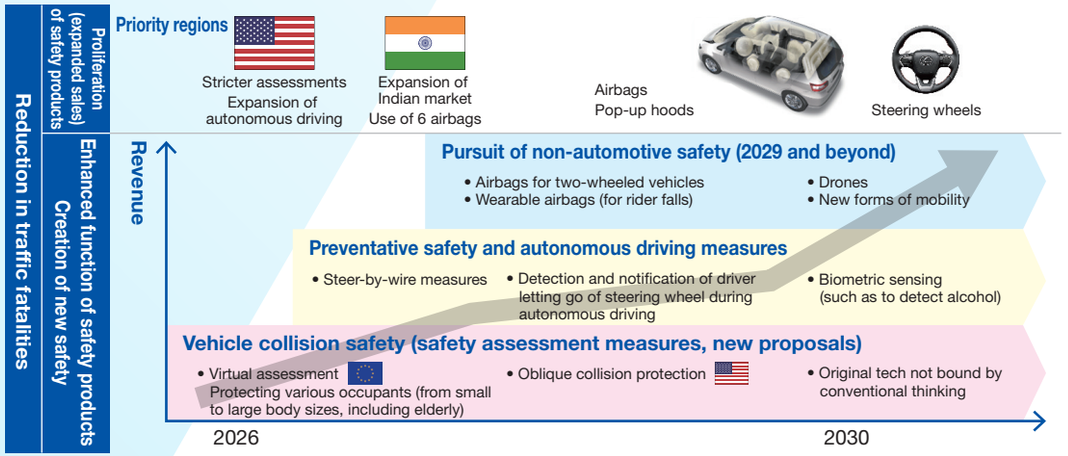
### 2. Expand sales by identifying priority regions and customers

We will focus on regions with growth opportunities due to environmental changes and aim to expand sales to both existing customers and new customers.

### 3. Develop new products to reduce traffic fatalities

We will enhance the functionality of automotive airbags and steering wheels, and develop new products that contribute to safety in non-automotive fields as well, helping further reduce traffic fatalities.

**Leveraging Our SS Business Strategy to Achieve Our Vision**

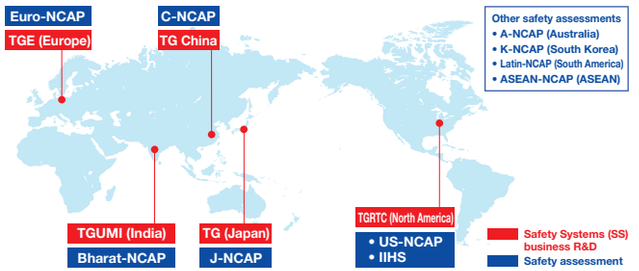


## Strengthening Global Competitiveness

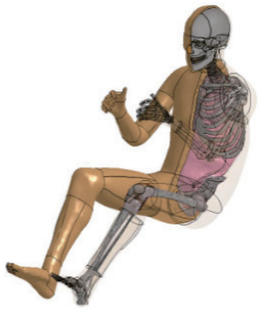
Currently, a high proportion of SS segment sales are to non-Toyota OEMs and in overseas markets. It is important to standardize SS products as much as possible, despite the challenges of addressing the varying requirements of customers and safety assessments tailored to the traffic conditions of different regions around the world. In addition, many of the materials and components used in SS products are purchased, so supply chain strategies are also important. Head office develops strategies for product specifications, production technology, supply chains and more, tailored to these target customers and regions, and then shares these with each location, promoting business plans globally.

Accident investigation and safety assessments are also important to the development of new products. Through "antenna activities" coordinated with our global R&D, we participate in conferences in each region, gather information from related organizations, share it globally, and use this knowledge to drive new product development.

### Major Assessments of Our R&D Bases and Regions




Through medical and engineering collaboration with medical schools, both in Japan and around the world, and by leveraging computer simulation technology using the THUMS virtual human body model software program, we will evaluate damage to internal organs, which has still not been adequately studied, and use this information to propose further improvements to automotive safety.



**THUMS* virtual human body model**

* Total HUman Model for Safety

## Expanding Sales by Focusing on Priority Regions and Customers

### North America

In the SS business, North America is the second largest market after Japan. Furthermore, North America, along with Europe and China, leads the world in automotive safety assessment and autonomous driving technology. The market environment is also changing, with increasing demand for greater functionality in airbags and steering wheels. Amid this background, we are aiming to expand sales while focusing on the North American market. Regarding Japanese-affiliated OEMs, we will expand sales to existing businesses as well as to new models. For North American OEMs, by strengthening our R&D in North America, we are now better positioned to propose specifications that meet the expectations of US OEMs, and to ensure that these customers recognize our ability to address their technical requirements, as we aim to further accelerate sales in these markets. In terms of products, we will expand sales in conjunction with existing products, focusing on new airbags in response to stricter safety assessments specific to North America and HMI steering wheels for autonomous driving.

Challenges facing production include securing production capacity due to increased volume and manufacturing at low cost in response to rising labor costs. We believe that automation technology is the key to solving these issues, but to avoid excessive investment, we are aiming for efficient manufacturing with low investment by combining smart manufacturing techniques, such as mechanisms and methods developed over the years.

### India

In India, a growth market for automobiles, Japanese-affiliated OEMs, who are our main customers, make up around 40% of the local market, and our SS products account for approximately half of the market share, making it a key market. The country also has the most traffic fatalities in the world, making it a social challenge.

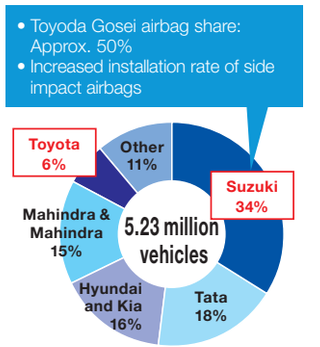
In addition to the mandatory introduction of frontal impact airbags, side impact airbags were also introduced in order to obtain high scores in safety assessments that were revised in 2023.

At the same time, demand for local development has increased, and in 2023, we relocated and expanded our technical center to strengthen the development framework, enabling us to integrate prototyping, product evaluation, and computer simulations. Through these initiatives, we will actively propose technology, including to local OEMs such as Tata.

Going forward, we expect the number of Safety Systems units sold in India to increase from approximately 6.5 million in FY2024 to around 10 million in FY2030. To secure the necessary capacity, we plan to begin operations of a new plant in Halohalli in southern India in 2026. Furthermore, in addition to in-house processing, we will promote local procurement of materials and components based on shared strategies with partner companies, thereby strengthening our competitiveness.

**OEM Share of Indian market**

Source: MarkLines Co., Ltd., Sales of automobiles in India by manufacturer and brand, FY2024




**Toyoda Gosei Technical Center India (TGTCI)**

50 employees, 1,200 m² area

Business Strategy | Safety Systems (SS)

# Developing New Products to Reduce Traffic Fatalities

## Protecting Various Occupants

Until now, automobile crash tests have used dummies equipped with various sensors that replicate the structure of the human body, in order to evaluate human body behavior and injury levels during collisions. This has improved occupant protection performance, but actual machine tests using dummies face challenges in increasing the number of tests and types based on physique, age, gender, and other factors. In the future, we will begin virtual assessments that recreate occupants of various sizes using computer simulations, creating opportunities for further evolution of the airbag.

At Toyoda Gosei, we are developing contoured airbags that provide greater safety to occupants of all sizes, from small to large. In addition, with the spread of autonomous driving, ensuring occupant safety during changes in seating position, such as seat sliding or reclining, has become a key issue. We are responding by developing variable-capacity and variable-venting technologies to optimize airbag size and cushioning.

## Technology for Autonomous Driving and Preventative Safety

With the advancement of autonomous driving technology, the adoption of Level 2 autonomous vehicles (partial automation) is becoming more widespread. However, there are still situations in which the system cannot respond, making it necessary for the driver to constantly grip the steering wheel and intervene for emergency operations. We provide steering wheels equipped with functions that detect the driver's grip and alert the driver to driving hazards detected by the vehicle through vibrations and lights. In the future, this technology will contribute not only to crash safety but also to preventative safety.

In addition, with steer-by-wire technology, which enables electronic steering control, there are now vehicles that no longer require multiple rotations of the steering wheel, and we have begun mass production of non-circular steering wheels compatible with steer-by-wire systems. Going forward, we will respond to diverse steering wheel needs through both form and function.

**Technology Under Development**

### Crash Safety (Various Occupants)

2026 target

**Contoured airbag**

Protects occupants of all sizes, from small to large

2029 target

**Variable-capacity and variable-venting airbags**

Controls the airbag size and cushioning according to changes in seating position, such as reclining

### Preventative Safety and Autonomous Driving


2028 target

**HMI steering wheel**

Detects when the driver lets go of the steering wheel during autonomous driving and alerts using lights

Equipped in LEXUS RZ550e F SPORT

**Steer-by-wire system steering wheel**

### Non-automotive Safety

2029 target

**Airbags for two-wheeled vehicles**

Protects riders of two-wheeled vehicles during collisions

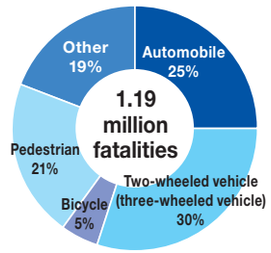
Actual vehicle collision test

## Initiatives to Further Reduce Traffic Fatalities

Although the evolution and spread of safety technology are expected to reduce automobile-related traffic fatalities, reducing traffic fatalities associated with other modes of transportation remains a challenge. In particular, there are many traffic fatalities involving two-wheeled vehicles mainly in ASEAN countries and India, and in response, we are developing airbags to protect riders of these vehicles.

**Breakdown of Global Traffic Fatalities**

Source: WHO, Global status report on road safety 2023




We are also developing new products to provide safety to pedestrians, bicycles, drones, and various other new forms of mobility. In developing new products, we conduct accident investigations in collaboration with global R&D bases and advance development efficiently by combining real-world and virtual evaluations.

## Ensuring Competitiveness through Collaborative Synergy

As we compete globally, we may encounter challenges that exceed the capabilities of our current technologies and resources when enhancing the functionality of existing products or developing entirely new products. By leveraging collaborative synergies with partner companies that possess deep expertise in areas such as seat belts, electronic components, propellants, and base fabric, we aim to overcome these challenges.

We will continue to further promote our safety products and develop new products, thereby contributing to further reducing traffic fatalities.

# Business Strategy | Interior and Exteriors (IE)

Message from Corporate Officers

**We identify the needs of end users and customers and work sincerely and unwaveringly to develop products and enhance our manufacturing competitiveness.**

**Kenji Hayashi**
Corporate Officer, Chief of IE Business Headquarters

## Interior and Exteriors Business Policy

By anticipating changes in society, the environment, and the automotive market, and by accurately identifying the needs of our customers and end users, we aim to create a better mobility society through high-value-added interior and exterior components. Looking ahead to the expansion of next-generation vehicles, we aim to provide end users with safer, more comfortable interior spaces through new lighting and air conditioning functions. For exterior components, we will create new value by integrating form and function through technologies such as luminescence, radar transparency, and novel decorative techniques.

In addition, we will reduce the weight of our products and expand the use of recyclable materials, thereby reducing their environmental impact. We will also decarbonize our manufacturing processes, increase the use of renewable energy, and reduce $CO_2$ emissions across the supply chain, contributing to the realization of a sustainable society.

## Interior Components

As autonomous driving technology has become more widespread in recent years, the nature of in-vehicle spaces is changing dramatically. In addition to the driving experience, there is growing demand for greater cabin comfort, with increasing expectations for mobility comfort and sensory experiences. In ultra-quiet BEVs, interior experience elements, such as lighting, acoustics, and climate control, are becoming increasingly important.

In response to these changes, interior components, such as the instrument panel, consoles, registers, and lighting, are evolving with a focus on the end-user experience. For example, lighting is designed with color temperature and distribution based on human-centric engineering to evoke a sense of security and comfort, while also being able to provide safety alerts. The console provides a user-friendly storage space that is both ergonomic and practical. The register provides personal climate control that delivers airflow only to areas where the occupant needs it, achieving both enhanced comfort and improved energy efficiency.

Going forward, we will accelerate the evolution of interior components that contribute to carbon neutrality while pursuing improved electric power efficiency through the use of eco-friendly materials and weight reduction.

### Creating Comfortable In-car Spaces

Meeting expectations for comfortable and immersive mobility experiences

Lighting

Consoles

Register

## Exterior Components

Exterior components represent "the face of the brand," and their importance as functional components that support autonomous driving is increasing. As it becomes increasingly important for us to adequately address each of our customers' business strategies and model life management, there is growing demand for flexible development and design capabilities that can accommodate any design—regardless of the model, grade, or customization requirements.

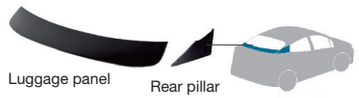
In response, exterior components, such as lighting grilles, luminous emblems, and body-colored millimeter-wave transparent panels, are evolving in terms of both form and function. For example, it is possible to engineer parts that can both function as "signage," expressing brand image with lighting or communicating information to people outside the vehicle, while simultaneously enabling sensing functionality, such as millimeter wave radar. In addition, we are utilizing decorative technology, such as eco-friendly in-mold painting and hot stamping, which achieve an attractive appearance without the need for painting, thereby contributing to creating a sustainable society.

Going forward, we will contribute to carbon neutrality by leveraging eco-friendly materials and innovating our manufacturing processes, while developing products that deliver diverse value in form, function, safety, and environmental performance.

### Realizing Diverse Designs

Brand expression and signage that achieve both form and function

### Eco-friendly Decorative Technology




In-mold painting


Hot-stamping

Business Strategy | Interior and Exteriors (IE)

## Plastic Recycled Materials

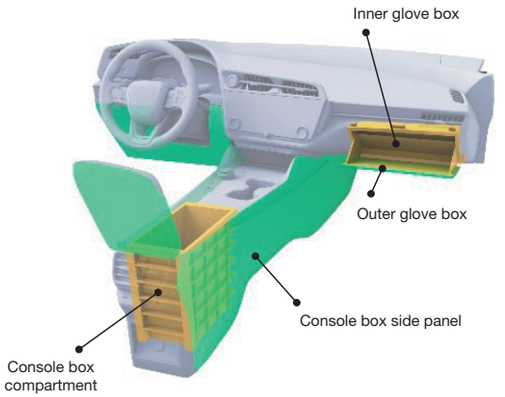
In Europe, the ELV Directive proposes that 25% of all plastics used in automobiles be recycled materials, of which 25% must come from end-of-life vehicles. In Japan, too, efforts to recycle plastics for automobiles are in full swing, and automobile manufacturers are actively considering adopting recycled materials.

Amid this background, Toyoda Gosei, as an automotive parts manufacturer, has established breakthrough plastics recycling technology with the aim of contributing to a circular economy and a decarbonized society. Of particular note, we have successfully developed high-strength recycled material containing 50% waste-derived content for polypropylene, which is the most widely used material in automotive interior and exterior components.

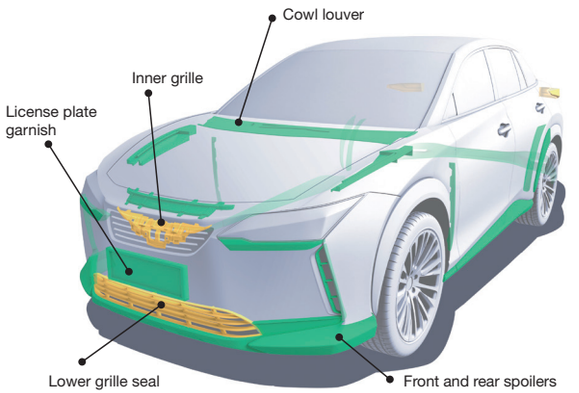
In developing this innovation, we leveraged our proprietary technology to address the challenges of foreign matter contamination and deterioration of physical properties, which have long been issues with recycled materials. Specifically, we developed a technology for efficiently removing paint from recycled bumpers and material mix design technology that realizes physical properties similar to virgin materials. In this way, we realized the practical application of automotive parts that require high quality.

Our achievements as the world's first to apply this technology for interior use and the first to have it adopted on Toyota vehicles is more evidence of our technical prowess. Looking ahead, we aim to further expand applications, including design parts, and increase the use of recycled materials, fulfilling our responsibilities as a plastic parts manufacturer to reduce environmental impact in the automotive industry and support the realization of a circular economy.

### Interior Component Applications




### Exterior Component Applications



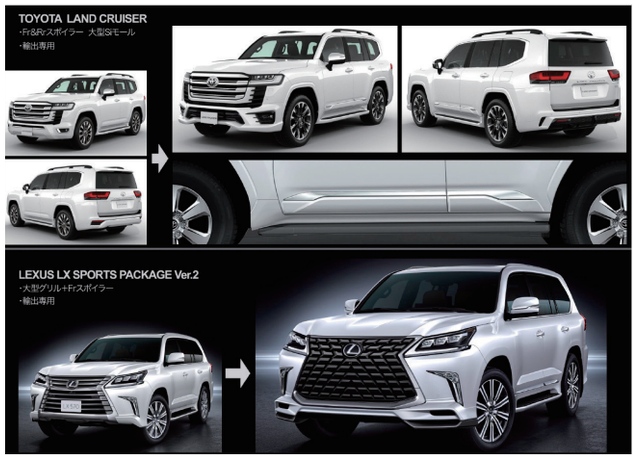

■ Parts made from recycled materials ■ Future applications

## Accessories Strategy

As the popularity of customizations increases, sales in the automotive parts market are expected to grow. Accordingly, we are following a strategy of providing OEMs with a range of accessories to enable end users to customize their own vehicles.

Demand for aerodynamic parts for SUVs in particular is high, and we are actively developing differentiated, high-value-added aerodynamic parts, such as new decorations and lighting. In addition, we will align with each OEM's strategy to provide services spanning from new vehicles to end-of-life vehicles, and through our accessories strategy, which also anticipates expansion into the aftermarket, we will engage directly with end users, rapidly bring newly developed products to market, and propose new products tailored to each automaker's new vehicles.

### Accessories (Representative Products)



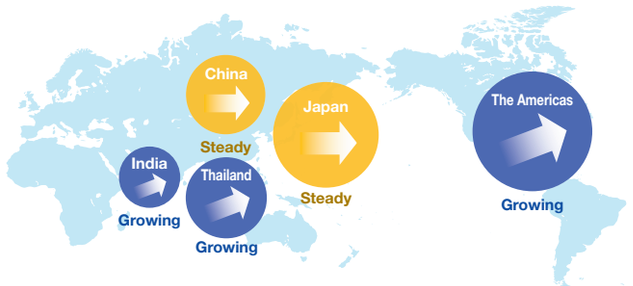
Business Strategy | Interior and Exteriors (IE)

## Global Strategy

With the increase in EVs and other next-generation vehicles in recent years, there is growing interest around the globe in our specialized plastic products that support innovative design and further lightweighting to extend driving range. Through our Interior and Exteriors segment, we are strategically establishing and expanding locations for technological development and production around the world, including in Japan, North and South America, China, Thailand, and India. This global framework will enable us to develop products tailored to local market needs and realize stable product supply, while playing an important role in the global supply chain of major automakers.

Looking ahead, we will press forward with planned capital expenditure and new product launches while developing local talent in priority regions that are key to the 2030 Business Plan: the Americas, which has achieved high sales volume and steady growth, and India, which is experiencing remarkable market expansion.

**Revenue by Region**

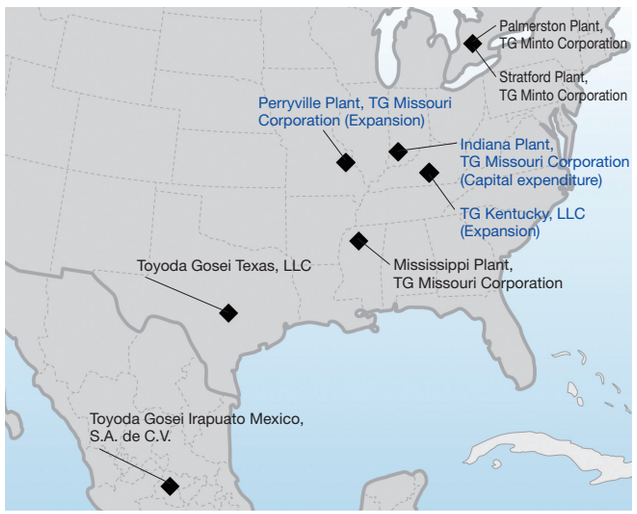



## The Americas

In the Americas, where the shift to BEVs is accelerating, market competitiveness is increasing with the introduction of new products. High-value-added products are entering the market, such as body-colored grille covers with radar-penetrating technology and console boxes with a refrigerator, which contribute to the creation of comfortable interior spaces.

In addition, in response to expanded BEV production at our major customers, we made significant investments last year to expand the production footprints at TG Missouri Corporation and TG Kentucky, LLC. Going forward, we will leverage our technological development sites in the US with the aim of expanding business not only at existing customers but also at Detroit's "Big Three" automakers to achieve further growth.

**Interior and Exteriors Production Footprint in North America**




## India

India is a rapidly growing automotive market. The passenger vehicle market is expanding particularly quickly, with annual sales projected to grow from the current four million units to approximately seven million units by FY2030. Our customers' vehicle production volumes are also forecast to grow significantly. We view India as an important market for business expansion.

In the Interior and Exteriors segment, we are promoting newly developed products for next-generation automobiles at local new product exhibitions, while actively implementing sales promotion activities targeting both existing and new customers. At the same time, we are actively investing in resources and capital, and expanding local development and production, with the aim of enhancing competitiveness and delivering consistently high-quality products, while ensuring sustainable growth in India through the technological innovations accumulated to date.

**Items Exhibited at the Bharat Mobility Global Expo 2025 in India**

Flesby BEV concept car

Luminescent millimeter-wave-compatible emblems

# Business Strategy | Functional Components (FC)

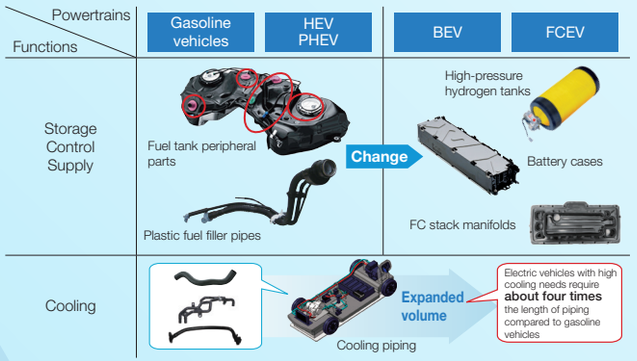
Message from Corporate Officers

## We are promoting an all-around strategy to contribute to the spread of new forms of mobility while aiming for further growth.

**Yutaka Ogasawara**
Corporate Officer,
Chief of FC and
WS Business Headquarters

## Priority Initiatives for FY2024

As the electrification of mobility transforms functional components (FC) that support the basic automobile functions of driving, turning, and stopping, we are proceeding with a comprehensive strategy that can flexibly address market trends and the multi-pathway strategic needs of OEMs.




## Initiatives for Gasoline Vehicles, HEVs, and PHEVs

In recent years, regulations on fuel evaporative emissions (evaporation gases) have been tightened in various countries and regions worldwide to prevent global warming and improve air quality. There are also growing demands to address volatile organic compounds (VOCs), which are released into the atmosphere from vehicle fuel tanks and pipes. In response to these tightening regulations, we are developing products to control the evaporative emissions and expanding our product lineup. Specifically, the core fuel system products in the FC business, including plastic fuel filler pipes, fuel caps, and fuel valves, play a central role in our technology.

To address the diverse regulation requirements in the global market, we are building a framework to carefully research and analyze legal and regulatory trends and reflect these in future product design. Through these initiatives, we are able to rapidly provide products that conform with evaporative emission regulations in major markets and meet customer needs.

**Revenue by Region**


### India

In recent years, the automotive market has expanded rapidly against the background of strong economic growth and the expansion of the middle class, becoming a growth market that has drawn worldwide attention. Along with this market expansion, environmental regulations have also gradually been strengthened, such as with the introduction of the Bharat Stage VI (BS-VI) emission standards. Taking into account market trends in India, we are strengthening our production system in anticipation of continued demand for fuel system products.

### Brazil

As the largest economic player in South America, Brazil has an automotive market that continues to grow strongly against the backdrop of stable economic growth and robust consumer demand. In addition, internal combustion engine vehicles still make up more than 90% of the market, and while electric vehicles are becoming more widespread, they are still in a transitional phase.

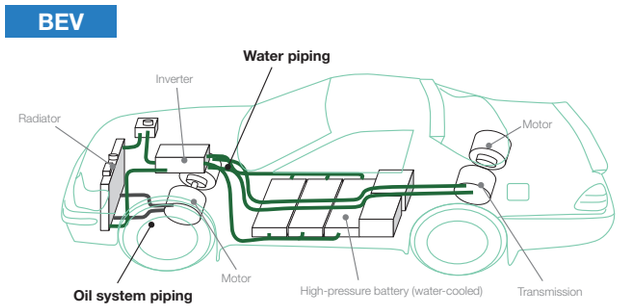
Taking this market environment into account, we have determined that demand for automotive fuel system products will remain strong in Brazil, and are working to strengthen our production system and optimize the supply chain.

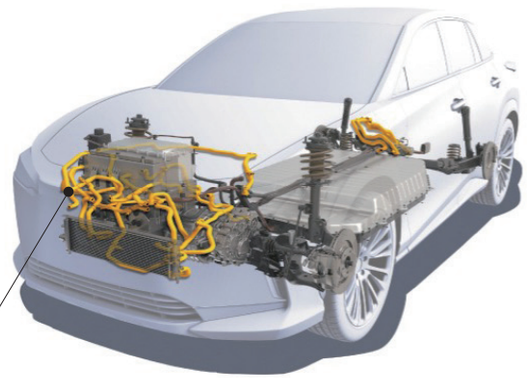
## Initiatives for BEVs

As BEVs become more widespread globally, vehicle thermal management technology is becomingly increasingly important. The batteries in these vehicles generate heat while driving and rapid charging, making stable thermal management an important element in determining vehicle performance, stability, and reliability. With this in mind, we are strengthening efforts to develop thermal control products, with the aim of establishing technologies that contribute to a society built on next-generation mobility.

### Cooling Piping

We are applying the materials technology, molding technology, and design expertise accumulated over the years in the field of fluid control components, such as rubber hoses and plastic tubes, to promote optimal product development for BEV cooling systems. In particular, for battery cooling, in addition to making piping parts lighter and more durable to improve coolant circulation efficiency, there is increasing demand for flexible layouts to allow greater freedom in vehicle design. In addition to battery pack cooling, our products are also used in the thermal control of electric units such as inverters and motors, contributing to enhancing overall thermal management of BEVs.



Cooling Piping

Maintaining optimal battery temperature increases battery life and extends the driving range of the vehicle.

### Global Expansion

To meet growing global demand for BEVs, we are focusing on strengthening development and production systems. To enable product design tailored to the needs and vehicle specifications of different automakers in different regions, we will continue to expand our development bases and build local production systems to optimize quality, cost, and delivery times. Through these initiatives, we intend to establish stable supply systems for BEV products in the major markets of North America and Europe to realize global business expansion.

Going forward, we will continue to develop products by fusing materials, molding, and fluid control technologies to effectively meet the increasingly sophisticated thermal management requirements arising from the evolution of BEVs. In addition, by providing thermal management solutions that both reduce environmental impact and enhance reliability, we will contribute to realizing a sustainable mobility society. As mobility becomes increasingly electrified, we will continue to challenge ourselves to create new value as a partner that does not simply supply components but also enhances overall vehicle performance and value.

## Initiatives for FCEVs

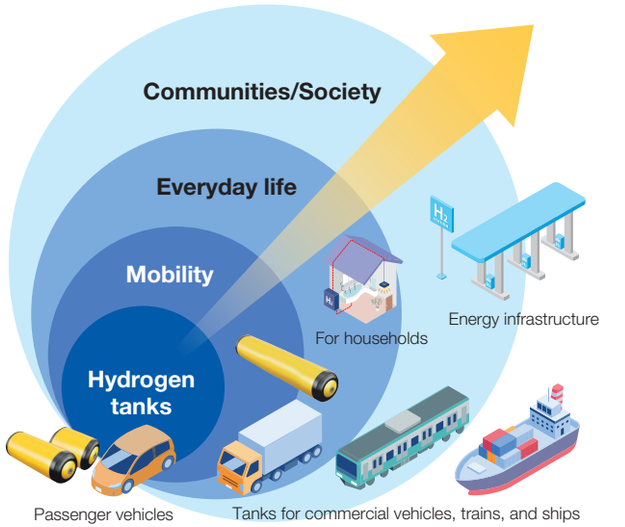
Amid the global trend toward realizing a carbon neutral society, we at Toyoda Gosei are focusing on the utilization of hydrogen, which is attracting attention as a next-generation energy source, and strengthening initiatives in hydrogen-related fields starting with FCEVs. Hydrogen is a clean energy source that emits no $CO_2$ when used. When combined with other renewable energy sources, it enables decarbonization throughout the entire process from manufacturing to utilization, and is therefore expected to play a central role in the future energy infrastructure.

Against this backdrop, we are strengthening our systems to prepare for the realization and expansion of a hydrogen society. In particular, with regard to the development and manufacturing of high-pressure hydrogen tanks for FCEVs, we are leveraging our many years of experience with polymer materials and molding technologies to deliver products that are exceptionally safe, lightweight, and durable. These tanks are used not only in automobiles, but also in hydrogen fuel systems for ships and detachable portable hydrogen cartridges, contributing to the diversity of mobility and expanding the possibilities for hydrogen utilization.

With the tightening of international emissions regulations in the shipping industry, hydrogen's potential as a zero-emission fuel is seeing it trialed in various situations, and our high-pressure hydrogen tanks are gaining attention for their safety during navigation and fuel supply efficiency. Meanwhile, portable hydrogen cartridges allow for the safe and easy transport of hydrogen and can be attached to various types of equipment, enabling the use of hydrogen energy in a wide range of applications, including as a power source that combines fuel cells with hydrogen-fueled cooking appliances. Through these products, we aim to expand hydrogen utilization in the mobility sector while contributing to the transformation of society's overall energy mix.

Looking ahead, we will continue to innovate and expand our product lineup while strengthening our production system to meet growing global demand. By providing these tanks to support hydrogen utilization across various forms of mobility and fields in everyday life, we will continue contributing to the realization of a hydrogen-based society.

### Expansion of Hydrogen Tank Business




### Large High-pressure Hydrogen Tank

These are mainly used in commercial vehicles and ships and can be filled with approximately eight times as much hydrogen as a passenger vehicle.

### Passenger Ship "Hanaria" Equipped with Hydrogen Tank


(Photo sourced from MOTENA-Sea website)

### Portable Hydrogen Cartridge (Provided by Toyota Motor Corporation)

For Japan

For Europe

# Business Strategy | Weatherstrips (WS)

Message from Corporate Officers

**Through customer satisfaction and technological innovation, we are creating the future of the weatherstrip business.**

**Yutaka Ogasawara**
Corporate Officer,
Chief of FC and
WS Business Headquarters

## Review of FY2024

FY2024 was a year of building the foundation for future growth of the weatherstrip business. Through various improvement activities on the frontlines, such as reducing material cost loss and enhancing productivity, we built a more efficient production system.

In addition, with advances in the electrification of mobility and the spread of ADAS, there is growing demand for quiet, comfortable in-car spaces, and weatherstrip products have an increasingly important role to play. We are also working to develop carbon neutral products and new technologies to support future mobility. We are making steady progress in ensuring we are ready to address future market needs.

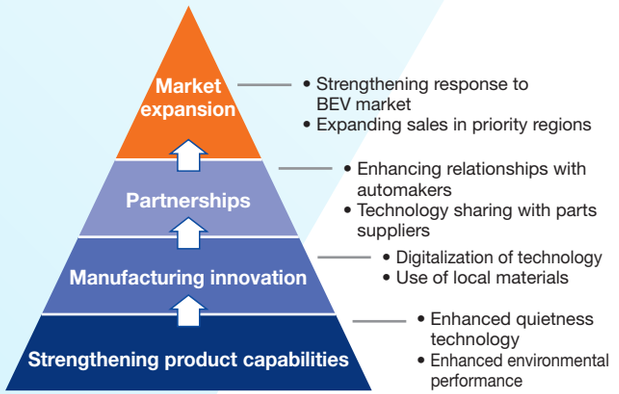
Driven by the spirit of innovation and challenge in FY2025, we will contribute to the future of a mobility society through our weatherstrip business.

## Sales Expansion Strategy

Our weatherstrip products have excellent quality and durability, and are widely acclaimed by global automakers. We will implement the following measures as part of our future sales expansion strategy.

First, we will focus on new product development and resources in regions where growth is expected. By assessing market prices and implementing pricing strategies to add value to existing products, we can achieve higher customer satisfaction and sustainable growth.

Next, we will accelerate our sales expansion in emerging markets. In particular, we are strengthening our presence in India, Brazil, and other emerging markets with significant scope for growth in the automotive industry, which will enhance our overall global business foundation. We expect sales of weatherstrips to continue to grow strongly in these regions. We will develop products tailored to local needs and enhance our competitiveness. In addition, we will strengthen our cooperative relationship with local automakers and aim to expand our market share.



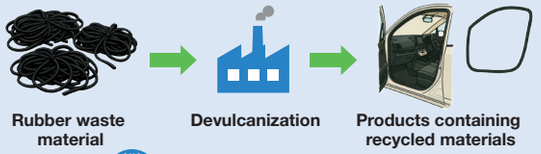

Furthermore, we will actively participate in exhibitions and industry events to widely promote the appeal and added value of our products. Through these initiatives, we aim to strengthen product recognition and stimulate purchase intent. We will also continue to provide product information in a timely manner and further enhance communication with our customers.

Finally, we will strengthen our partnerships. We will deepen cooperation with domestic and overseas automakers and parts suppliers and promote collaborative development and technology sharing. In this way, we aim to increase the added value of our products and expand our market share. In particular, we will strengthen our presence in the BEV market, and propose weatherstrips with outstanding quietness and environmental performance.

Through these measures, we will work together as a business division to improve customer satisfaction. By pursuing innovation and growth, we will create new value through the weatherstrip business and continue to lead the world.

### Rubber Recycling Business

We devulcanize waste rubber generated during the manufacturing process and recycle it into new products. By leveraging our ISCC PLUS certification, we are promoting the expanded sales of products incorporating recycled materials that enhance both environmental value and competitiveness.




**ISCC PLUS certification**
**Our commitment to environmental value and competitiveness**

Business Strategy | Weatherstrips (WS)

## Development Strategy

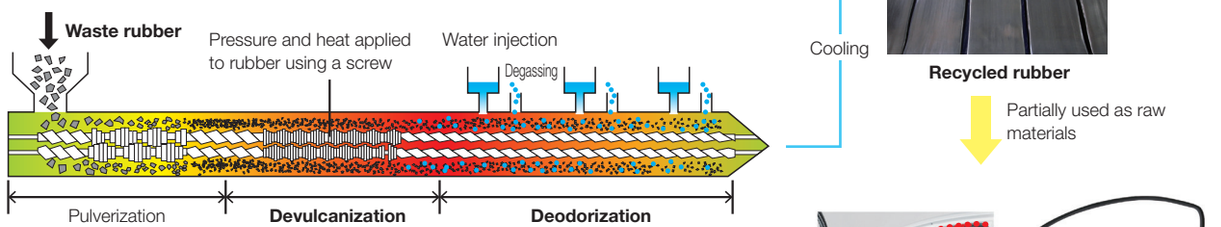
We are constantly pursuing technological innovations in our weatherstrip products to achieve both high quality and environmental performance. Our development strategy for the future aims to realize a sustainable society and maximize business value, based on the four pillars of reducing environmental impact, improving comfort, incorporating smart technology, and expanding globally.

### Reducing Environmental Impact

First, we will accelerate the development of materials that have reduced environmental impact. We are forging ahead with initiatives to take full advantage of our rubber devulcanization and recycling technologies, too. In October 2024, we began operation of our second rubber devulcanization and recycling line at Morimachi Plant in Shizuoka Prefecture, doubling our production capacity to 1,200 tons per year. Our technology enables the production of high-quality recycled rubber that retains its elasticity and strength, whilst also significantly reducing odors compared to conventional methods. In FY2025, we increased the proportion of recycled content in new materials to 20% and began making use of them in more of our products. Going forward, we will expand this approach to non-EPDM rubbers and other components, and develop technologies aimed at recovering and recycling waste parts, contributing to the establishment of a resource-recycling society.

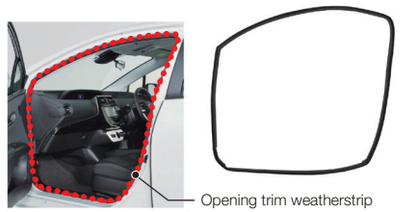
**Our Rubber Recycling Technology**

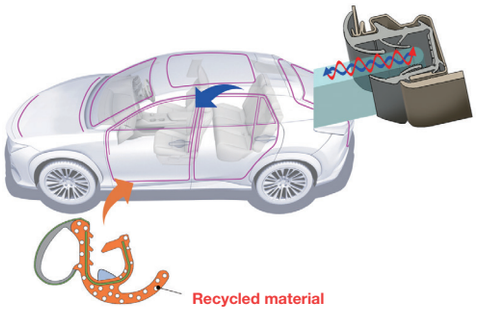
By applying optimal pressure and heat, molecular bonds that give rubber its elasticity are broken, **enabling fast recycling of waste into high-quality rubber**




### Improving Comfort

Next, we will develop technology to enhance product performance. In particular, strengthening quietness technology is important with the growth of the BEV market. We continue to develop products, such as vibration-reducing glass runs, which uses impedance matching technology, and opening trims that reduce wind noise, which set us apart from the competition in terms of quietness. These products efficiently reduce mid- to high-frequency noise, contributing to realizing a comfortable in-car space. In addition, in conjunction with other Toyota Group companies, we are offering quietness solutions across the entire door structure and optimizing the sealing structure to suit the performance characteristics of each vehicle. Looking ahead, we will also propose new solutions that make vehicles spaces comfortable and relaxing, even when on the move, by applying sound management technology throughout the entire vehicle.




### Incorporating Smart Technology

We are also actively working to transform our manufacturing plants into smart factories with cutting-edge technologies such as IoT and AI at the core. By incorporating these technologies, we will digitalize tasks that had previously relied on human experience and intuition, enabling more accurate and efficient process management.

### Expanding Globally

Finally, we will strengthen technological development globally. We will concentrate development functions in Japan while developing product specifications and process design tailored to the characteristics of each region. In particular, in India and Brazil, we will develop competitive products by utilizing local materials and increasing line capacity.

Through these initiatives, we will not only supply parts but also strengthen our role in contributing to the overall performance of vehicles and user experience while further deepening trust with our customers. We will continue to develop the rubber technologies we have cultivated since our foundation, address social challenges, and enhance corporate value, thereby maintaining a strong presence in the mobility society of the future.

## Regional Strategy

As we expand the weatherstrip business globally, we will conduct flexible business operations tailored to the market environment and customer needs in each region. In FY2025 and beyond, we aim to strengthen product development and our production system by harnessing the unique characteristics of each region. Our main focus will be on Japan, North America, India, and Brazil.

### Japan

Taking advantage of the technical capabilities and quality control know-how we have built up over the years, we are proceeding with the development of products that excel in comfort and environmental performance. One of our main areas of focus is BEVs, for which we are developing sealing structures that improve quietness and eco-friendly products utilizing recycled materials. Head office will take the lead in providing technical support to global production locations, as well as spearheading development initiatives. In addition, we will leverage IoT and AI to advance automation and labor-saving processes at manufacturing sites, thereby ensuring stable quality and improving production efficiency.

### North America

While maintaining stable order volumes, we will continue to make improvements to address issues related to manufacturing costs and logistics. By optimizing product specifications to meet local needs and streamlining production layouts, we will make supply systems even more competitive. We are working to enhance customer satisfaction by introducing products that are eco-friendly and improve comfort.

### India

We recognize India as an important market with expected future growth, and we will develop competitive products by utilizing local materials and strengthening line capacity. We will advance product development to meet local needs with an emphasis on balancing quality, cost, and delivery time, and aim to build a stable production system that meets global standards.

### Brazil

We have earned high acclaim for our product quality, and are expanding our business based on trust built with local customers. In addition to utilizing local materials and expanding production capacity in order to meet the local procurement needs of our customers, we will build a sustainable product supply system by incorporating environmentally-friendly technology. Looking ahead, we will create further added value by utilizing recycled materials and developing new products.

In other regions, we will continue to operate our business in accordance with local market conditions. For example, in Europe, where compliance with environmental regulations is emphasized, we are advancing the use of recycled materials and renewable energy. In the ASEAN region, we continue efficient business operations focusing on selective ordering utilizing existing facilities. In China, we are considering restructuring our business to respond to changes in the market environment.

Our regional strategies are connected to the enhancement of corporate value by improving the comfort, environmental performance, and productivity of our products. Through optimal resource allocation worldwide, we aim to achieve sustainable growth and stable business operations. By building a business foundation rooted in each region and creating value through innovations in technology, our weatherstrip business will continue to contribute to the mobility societies around the world.

**Revenue by Region**