

Sustainability Report 2019-2020



# Bridgestone at a Glance

# Bridgestone, founded in 1931, is the leading company in the tire and rubber industry.

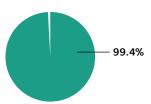
### **MAJOR PRODUCTS AND OPERATIONS**

Bridgestone Group's main businesses include:

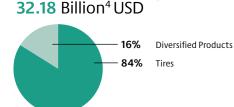
- Tires and tubes for passenger cars, trucks, buses, aircraft, construction and off-road mining vehicles, industrial and agricultural machinery, motorcycles, scooters and other vehicles;
- Automotive parts, retreading materials and services, automotive maintenance and repair services, raw materials for tires and other products;
- Diversified Products including chemical and industrial products, commercial building products and roofing materials, sporting goods, bicycles and other products; and,
- Solutions Business that is leveraging the potential for more tightly integrated elements of the Group's portfolio. The Group is working on new "solutions" service packages by combining maintenance services, IT/sensing technology, tires and diversified products to meet the needs of customers in mining, fleets and agriculture.

# MANUFACTURING LOCATIONS WITH ISO CERTIFICATION

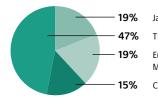
ISO 9001 Certified<sup>1,2</sup>



# 2019 CONSOLIDATED NET SALES<sup>1</sup> **3,525.6** Billion JPY /

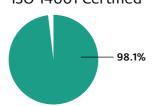


# 2019 SALES BY MARKET<sup>1,5</sup> More than 150 Countries



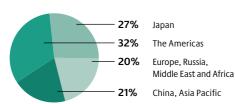
The Americas Europe, Russia. Middle Fast and Africa China, Asia Pacific

ISO 14001 Certified<sup>1,3</sup>



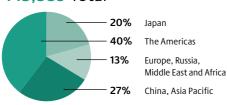
# **2019 TIRE PRODUCTION VOLUME** (TONNAGE OF RUBBER)1,5

**1.84** Million Tonnes



# EMPLOYEES<sup>1,5</sup>

143.589 Total



### SUSTAINABILITY RECOGNITIONS

Bridgestone was named to highly regarded environmental, social and governance (ESG) indices that are designed to measure the performance of companies demonstrating strong ESG practices:

- Bridgestone was named to the Dow Jones Sustainability Asia Pacific Index for the 10th consecutive year.
- · Bridgestone was selected as a constituent of the FTSE4Good Index Series for the second consecutive year. The Company was awarded perfect scores in the environmental areas of climate change, water use, and environmental supply chains, earning the highest score in environmental dimension within the Automobiles and Parts sector.
- · Bridgestone was named to the STOXX Global ESG Leaders Index.

In addition, Bridgestone selfreported its environmental data to CDP, the most comprehensive collection of self-reported environmental data in the world, and received the following scores:

- CDP Climate Change: A-
- CDP Water Security: B
- CDP Supplier Engagement: A









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### **ABOUT THIS REPORT**

This report covers the initiatives of the Bridgestone Group, which includes subsidiaries and affiliates around the world.

Throughout this report, Bridgestone or the "Company" refers to the Bridgestone Corporation, while "the Bridgestone Group," or "the Group" refers to all group companies.

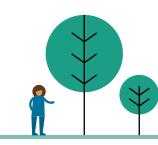
Bridgestone Corporation is the parent company of the Bridgestone Group, which includes the following Strategic Business Units (SBUs).

- Bridgestone Americas (BSAM) including the United States, Canada, Latin America, the Caribbean and Liberia;
- Bridgestone China Asia Pacific (BSCAP);
- Bridgestone Europe, Russia, Middle East, India, and Africa (BSEMIA):
- Bridgestone Japan (BSJP);
- Bridgestone Japan, including Japan Tire, Diversified Products Solutions Business, G-MAA Solutions Business (Mining, Aircraft, Agriculture) and Sports/Cycles Business.

This report primarily covers the 2019 calendar year, with some additional information from late 2018, early 2020 and beyond according to the content of our Mid-Long Term Business Strategy. In preparing the report, the Bridgestone Group referenced the Reporting Principles and Disclosures of the Global Reporting Initiative (GRI) Standards, as well as the International Integrated Reporting Framework of the Integrated International Reporting Council. The Bridgestone Group's most recent GRI-referenced Sustainability Report was published in 2019. The Group intends to continue publishing an annual Sustainability Report.

Additional information is available on the sustainability website.





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<sup>&</sup>lt;sup>2</sup> 154 sites are targeted for ISO 9001 certification/153 sites are certified (99.4%). The Bridgestone Group requires all manufacturing locations in which it has 50% or more share ratio to achieve ISO 9001 certification

<sup>3 154</sup> sites are targeted for ISO 14001 certification/151 sites are certified (98.1%). The Bridgestone Group requires all manufacturing locations with 50 employees or more to achieve ISO 14001 certification

Based on the ¥109.56 to USD\$1.00, the approximate year-end rate.

<sup>&</sup>lt;sup>5</sup> Approximate percentage.

# Bridgestone's Past and Future

# MISSION Serving Society with Superior Quality

Bridgestone, founded in 1931, has grown into a global tire and rubber and solutions company. It has done so through ceaseless efforts and strategic measures, including mergers and acquisitions.

In 1968, the company motto (Mission), "Serving Society with Superior Quality," was created. In 2011, Bridgestone redefined the Bridgestone Essence so all employees around the world follow common values. Today, the Group's Mission & Foundation Framework (the Bridgestone Essence; Safety, Quality & Environmental Mission Statements; and its Global CSR commitment, *Our Way to Serve* started in 2017), remains unchanged and continues to guide the business forward.

### VISION

Toward 2050, Bridgestone continues to provide social value and customer value as a sustainable solutions company.

As the Bridgestone Group looks forward to the 100th anniversary of its founding in 2031 as a milestone for its progress, it will continue to provide social and customer value through 2050 and beyond. It is important to note that "Serving Society with Superior Quality" (its Mission within the Bridgestone Essence) is always a crucial foundation in fulfilling the Group's vision for the future.

1931 -

# **BRIDGESTONE 1.0**

# **Foundation**

# Tire & Rubber

# MANAGEMENT

Founder's charismatic management

### **CORPORATE PHILOSOPHY**

Bridgestone's DNA



Corporate Motto (1968)



The Deming Prize (1968)

# 1988 -

# **BRIDGESTONE 2.0**

# A Global Company

# Tire & Rubber X Tire Centric Solutions

# MANAGEMENT

Global Management team Global Executive Committee (Global EXCO) started (2013)

### CORPORATE PHILOSOPHY

Evolved with changing times and business expectations



Refined the

Essence (2011)



Statement



Statement





(2017)

# **BUSINESS**

Globalization

Merger (1988)

Start solutions business — preparation for Bridgestone 3.0

bandag



Merger (2007)



Acquisition (2019)

# 2020 -

# **BRIDGESTONE 3.0**

# A Sustainable Solutions Company

# Tire & Rubber X Tire Centric Solutions X Mobility Solutions

### NEW CHAPTER

2020 as Bridgestone's starting point for new value creation toward 2050 and beyond

### SUSTAINABILITY

A core management principle

# GLOBAL DEVELOPMENT OF BRIDGESTONE T&DPaaS

The Bridgestone Group will promote "Bridgestone T&DPaaS," a unique solutions business platform and provide solutions to solve issues of society and customers. The Group will build a sustainably based business model and promote a new growth strategy, evolving into a solutions business leveraging the strengths of its tire and rubber business.

Toward 2050, the Bridgestone Group will provide continued social and customer value as a sustainable solutions company.



# Creating Value for Society and Our Customer



As we progress toward our 2050 vision, we will become a sustainable solutions company that provides social and customer value.

Our Mission, "Serving Society with Superior Quality," based on the philosophy of our founder, will remain essential to our foundation.

Today, we live in an era of global change, the magnitude of which has never been seen. In the past, many industries faced "once in a century" fundamental shifts. However, through new technologies and solutions, the effects of rapid urbanization, exploding populations in certain areas and aging populations in others, it is likely that the changes in the auto industry in the next 10 years will exponentially outpace all the industry's changes during the past 100 years. Accordingly, we must anticipate these changes and turn them into opportunities by delivering ever more ambitious and innovative products, services and solutions.

Although it was introduced more than 50 years ago, our Mission has never rung truer. Also informing our efforts is the Group's corporate social responsibility (CSR) commitment, *Our Way to Serve*. It includes our three Priority Areas of Mobility, People and Environment and the six Management Fundamentals¹ that outline how we operate our business. *Our Way to Serve* is foundational to our sustainability journey and impacts every aspect of our business and the overall value we are creating for society and our company. Examples of how we have embraced these changes can be seen in our 2016 formation of the Global Solutions Division, and again in 2019 when we acquired Webfleet Solutions and established our digital solutions business. *Our Way to Serve* affirms our focus on innovations that contribute to society's advancement, as we work to create new value for our customers, partners and the world.

As I reflect on my more than 40-year Bridgestone career, I'm proud of our rich history and progress toward becoming a sustainable company. For example, in 2019, we were again named to the prestigious Dow Jones Sustainability Index and FTSE4Good Index Series. My vision for the Bridgestone Group's future builds upon these past successes and puts our social and customer value proposition front and center.

# OUR NEW CHAPTER TO BE A SUSTAINABLE SOLUTIONS COMPANY

As we look toward 2050 and beyond, we have a vision for the Group's future that builds upon our rich history and keeps our social and customer proposition at the forefront. To realize our vision toward our next chapter, we have established a new Mid-Long Term Business Strategy. Placing sustainability at the heart of our management principles, we will evolve into an advanced mobility and sustainable solutions company. We will take full advantage of the strength of our knowledge, experience and expertise in tires and rubber to accelerate our growth strategy aimed at co-creating social and customer value.

To do so, we developed Bridgestone Tire and Diversified Products as a Solution — or Bridgestone T&DPaaS — a unique solutions business platform that supports the society's rapidly evolving mobility needs with Dan-Totsu (the clear and absolute leader) products, services and networks. Our Mid-Long Term Business Strategy will be executed locally, based on the unique needs of each region, to accelerate achievement of our goal to contribute to the advancement of a sustainable society that supports customers, partners and our company.

Compliance, Fair Competition; Business Continuity (BCP), Risk Management; Human Rights, Labor Practices; Safety, Industrial Hygiene; Procurement; Quality and Customer Value

We also have embarked on the next phase of our activities to contribute to a healthier environment. In 2011, we published our enhanced Environmental Mission Statement, "To help ensure a healthy environment for current and future generations..." Within that Mission Statement, we established three guiding objectives: (1) exist in harmony with nature, (2) value natural resources and (3) reduce CO<sub>2</sub> emissions. In 2012, we established our 2050 long-term environmental vision, with goals related to operating in balance with nature, utilizing 100% sustainable materials and contributing to a globally agreed-upon CO<sub>2</sub> reduction target.

To keep us on track toward our 2050 environmental vision, we also developed mid-term 2020 milestones to reduce our water withdrawal and  $CO_2$  emissions. We are proud to have achieved these milestones.

Now, we are ready to further our commitments by establishing our 2030 milestones en route to fulfilling our 2050 environmental vision. By 2030, we will continue to improve our environmental performance, in alignment with stakeholders' expectations, by:

- Remaining committed to our Environmental Mission Statement and our three guiding objectives;
- Embracing the concept of decoupling or achieving continued positive business growth without a corresponding increase in negative environmental impact;
- Accelerating our adoption of circular economy principles across our business; and,
- Reducing CO<sub>2</sub> emissions, across the product lifecycle and entire value chain, which includes our customers and partners.

In 2020, we established the Global Sustainability Committee<sup>2</sup> to ensure the successful cultural, strategic and operational integration of *Our Way to Serve*. For more information, see the Global Chief Sustainability Officer's message on page 22.

Our next chapter, with its focus on our expanded commitment to value creation, formally began in 2020, the same year we are celebrating the opening of Bridgestone Innovation Park in Tokyo. This world-class space inspires and guides us into that exciting next chapter. It will empower co-creation with internal and external stakeholders and the development of new solutions leveraging innovations in technology, business models and design.

# OUR COMMITMENT TO SUPPORT SOCIETY

As I prepare this message in May 2020, the coronavirus is having a significant impact on global society. As we have always done, we are working hard to make sure our employees are safe and helping

our communities. More than ever, it is essential that we continue our work toward the United Nations Sustainable Development Goals (SDGs). We take this responsibility seriously as we create solutions that make cities and life more inclusive, safe, resilient and sustainable.

One of the results of the pandemic is the postponement of the Olympic and Paralympic Games Tokyo 2020 to protect the health of the public and athletes. Our commitment to the Olympic and Paralympic Movements does not change. The Tokyo 2020 Games are pursuing a sustainable goal of "Being Better, Together for the planet and people." We share this vision of a more sustainable society and look forward to helping the Games unite the world when they return to Tokyo, our global headquarters city, in 2021.

Thank you for your interest in the Bridgestone Group and *Our Way to Serve*. We see tremendous business and social opportunity in co-creating new value with our employees, partners, customers and others. We're pleased to share more about our strategy and approach within this Global Sustainability Report.

Shuichi Ishibashi

Member of the Board Global CEO and Representative Executive Officer

<sup>&</sup>lt;sup>2</sup> Formerly the Global CSR Enhancement Committee

# MID-LONG TERM BUSINESS STRATEGY



# MID-LONG TERM BUSINESS STRATEGY

# Sustainability as a Core Business Driver; Evolving the Business to Create Social and Customer Value

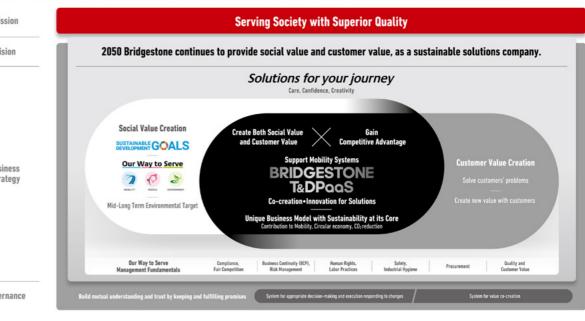
As the Bridgestone Group works toward its vision to become a sustainable solutions company, it recently introduced its Mid-Long Term Business Strategy. The Group's Mission, "Serving Society with Superior Quality," based on the philosophy of its founder, remains foundational to its business and goal to create social and customer value toward 2050 and beyond. The Group has marked 2020 as the start of its third foundation — Bridgestone 3.0 (see pages 3-4) — and its Mid-Long Term Business Strategy demonstrates how it is embarking on this new chapter.

The Bridgestone Group intends to drive innovation that provides solutions, taking full advantage of its strengths and core competencies to solve customer issues and contribute to improving people's quality of life. The Group will create new value for society by addressing social issues and positively contributing to the achievement of the SDGs, "a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere." By creating, balancing and expanding its social and customer value, the Group will gain its competitive advantage. It will continue to grow with its partners and further contribute to a sustainable society. This is the Bridgestone Group's exciting

new growth strategy, where sustainability is embedded as a core business driver.

To achieve these ambitious goals, the Bridgestone Tire and Diversified Products as a Solution (T&DPaaS) is its unique, core solutions platform to support the evolving world of mobility. Through Bridgestone T&DPaaS, the Group will expand its solutions business while also strengthening its core tire and rubber business. The Group's new brand message, "Solutions for your journey," explains this commitment.

# Mid-Long Term Business Strategy with Sustainability at its Core Y2020~Bridgestone 3.0 (The 3rd Foundation)



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### MID-LONG TERM BUSINESS STRATEGY

# Creating and Amplifying Value Through Bridgestone T&DPaaS

### LEADING A GLOBAL REVOLUTION IN MOBILITY

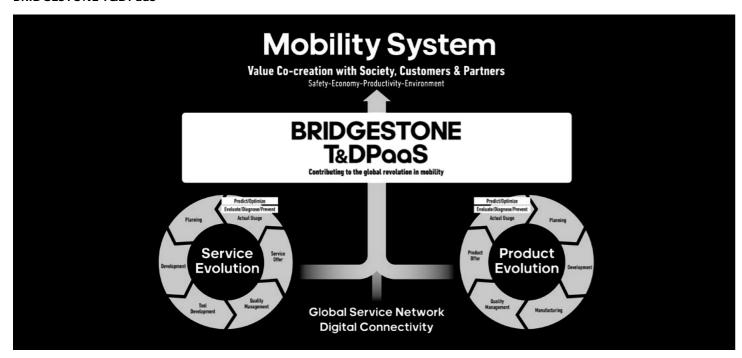
Tires have unique value. As the only part of a vehicle that touches the road, tires impact the critical functions of driving, turning, braking and transmitting desired vehicle performance to the road. Tires have evolved significantly from their origin as a way to propel



vehicles. Vehicles continue to progress and so do tires. As cars become smarter and more connected with information by digital technology, tire systems will connect with mobility systems and support enhanced performance.



### **BRIDGESTONE T&DPaaS**



To succeed in its rapidly changing industry and truly transform the Bridgestone Group for the next generation, its Mid-Long Term Business Strategy will accelerate growth by creating new value for society and customers. The Bridgestone Tire and Diversified Products as a Solution (Bridgestone T&DPaaS) platform takes full advantage of the strength of the Group's knowledge and experience in tires and rubber to develop solutions that fully link the "Real x Digital" worlds.

With this knowledge, the Group delivers Dan-Totsu (the clear and absolute leader) products and offerings like innovative tire design, predictive maintenance service and strong service channels. This unique combination of in-person and digital approaches allows the Bridgestone Group to analyze and utilize large volumes of data to co-create new value for society, customers and partners.

### **EVOLVING TO A SOLUTIONS BUSINESS BY LEVERAGING THE STRENGTHS OF THE TIRE AND RUBBER BUSINESS**

The Bridgestone Group is committed to actively addressing societal and tire industry issues on its journey to become a sustainable solutions company. It sees tremendous opportunity in the many changes business and society face. To create these

opportunities, the Group is focused on developing advanced solutions that contribute social and customer value, while further strengthening its tires and rubber business.



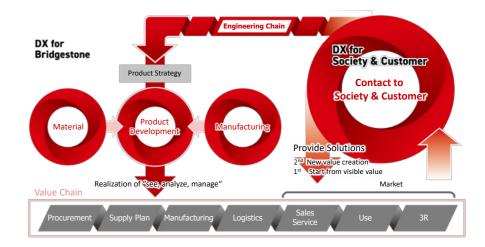
- CORE BUSINESS: THE TIRE & RUBBER BUSINESS AS A BASE OF THE BRIDGESTONE GROUP'S BUSINESS STRATEGY The Group continues to further strengthen its business of producing and selling products.
  - (Business-A) Tire & Rubber business: Business to produce and sell high-value added products (Dan-Totsu products)
- GROWTH BUSINESS: EVOLVING TO SOLUTIONS BUSINESS TO CREATE AND SELL "VALUE" BY LEVERAGING TIRE- AND MOBILITY-RELATED DATA

The Group is transforming into a solutions business that creates and sells new "value" by utilizing tire- and mobility-related data, leveraging the strengths of the tire and rubber business.

- (Business-B) Tire Centric Solutions business: Business to provide value-added products through products and tire-related data.
- (Business-C) Mobility Solutions business: Business to provide new value through products, tire-related data and mobility-related data

# AMPLIFYING THE VALUE OF EACH BUSINESS

Through digital transformation (DX), the Bridgestone Group analyzes the data gained through its solutions business and combines it with information gained through its "Genbutsu-Genba" decision-making process based on verified, on-site observations. By doing so, the Group creates knowledge it will use to innovate and grow its tire and rubber business by addressing challenges faced by society and customers. This powerful combination amplifies the value of each business. Together, they lead the business and growth strategies of the Group.



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# **Creating Social and Customer Value**

# Creating social and customer value through the Business-A "tire and rubber business"

### THE HISTORY AND VALUE EVOLUTION

Over the years, tires have evolved to improve mobility. From early wooden wheels used on horse-drawn wagons, to smoother riding pneumatic tires, to radial tires that support higher speeds and enhanced performance, the safety and economy of tires has continued to advance. In recent years, tire production and design have improved even further to reduce CO<sub>2</sub> emissions and better conserve natural resources as society moves to a more sustainable and circular economy.

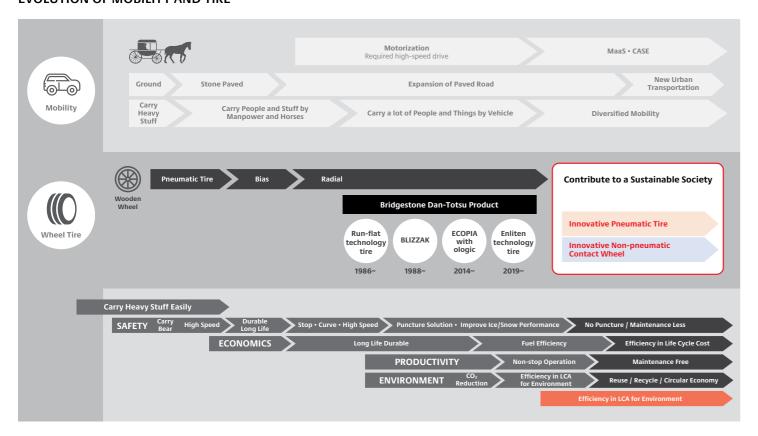
As tires have continued to evolve, the Bridgestone Group has continued to strengthen the value it delivers to society and customers by improving the safety, environmental performance, economy and productivity of its tires. These improvements have been and continue to be driven by the Group's commitment to Dan-Totsu (the clear and absolute leader) products and its longestablished Mission of "Serving Society with Superior Quality." For example, run-flat technology allows vehicles to move and stop safely even when tires are punctured. BLIZZAK tires perform exceptionally well on snowy and frozen roads. And ECOPIA with ologic and ENLITEN achieve high-level fuel efficiency with light weight.

Building on its legacy of tire industry leadership, the Bridgestone Group continues to innovate to support an evolving mobile society such as MaaS (Mobility as a Solution) and CASE (Connected, Autonomous, Shared, Electric). Today, it is developing an entirely new concept in pneumatic tires and a non-pneumatic resilient contact wheel to best support mobility in the emerging sustainable, circular economy.

### TIRES THAT PROVIDE SOCIAL AND CUSTOMER VALUE

Tires play an essential role in driver, passenger and vehicle safety. "Tires carry life" — this is a fact that we take extremely seriously and with great responsibility. The Bridgestone Group is proud of its brands that conveys safety, peace of mind, trust and innovation. By maximizing its tire and rubber expertise, along with its Dan-Totsu products and global maintenance service network, the Group will continue to innovate in ways that deliver social and customer value, including tire safety, improved environmental performance, economy and productivity.

# **EVOLUTION OF MOBILITY AND TIRE**



# **ECOPIA**



ECOPIA is one of the Bridgestone Group's Dan-Totsu tire products that contribute to a sustainable society. It's high-dimension performance reduces rolling resistance, which improves fuel efficiency and results in fewer CO<sub>2</sub> emissions. It has superior braking performance in wet and dry conditions. ECOPIA tires also have a long-life and promote a stable, silent and superb ride. ECOPIA with ologic technology further improves fuel efficiency and has been adopted for use in BMW's evolutionary i3 electric vehicle. It also is used in solar cars that won the Bridgestone World Solar Challenge.

# Run-Flat Technology<sup>1</sup>



Run-flat technology tires can operate at a set speed over a predetermined distance, even after air pressure has been lost due to a puncture or other cause. Not only do these tires contribute to improved vehicle safety, they also reduce resource use by eliminating the need for spare tires, which are often disposed of after having never been used. In addition, eliminating spare tires makes vehicles lighter and more fuel efficient. The Bridgestone Group introduced DriveGuard tires, which are equipped with next generation run-flat technology for mass-produced vehicles and can be changed from normal tires<sup>2</sup>, ahead of the market.

- <sup>1</sup> The technology can safely drive on for up to 80km at 80km/h after a puncture (Drivable distance under conditions based on ISO technical standard or specific vehicle tests).
- <sup>2</sup> DriveGuard tires are designed for vehicles equipped with a Tire Pressure Monitoring System (TPMS).

# **BLIZZAK**



BLIZZAK studless winter tires use Bridgestone's acclaimed foamed rubber technology to deliver safe and sure handling on icy roads. Combined with various other technologies, these tires provide peace of mind on slippery winter roads. Because of their longlasting safety performance, BLIZZAK tires are economical to use and beneficial to the environment.

# AirFree Concept



The Bridgestone Group's AirFree Concept has a unique structure of spokes stretching along the inner sides of the tire that support the weight of the vehicle. There is no air in the tires, so they require less maintenance. The worry of punctures is also eliminated, resulting in improved safety. In addition, some of materials used this concept are recyclable. The tires set a new standard for environmental friendliness, safety and comfort. The Bridgestone Group continues listening to customers to develop practical uses for these concept tires.

The Bridgestone Group's products support mobility by providing the right solutions for everything from personal mobility to the lunar rover currently in development.

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# **Creating Social and Customer Value**

# Creating social and customer value through the Business-B "tire centric solutions"

Tires are essential for most means of mobility. Without tires, society has few options for moving from place to place. If a tire is damaged, the driver may be in a dangerous condition, and it may stop logistics. Fortunately, today's tires provide unprecedented performance. However, to achieve this level of performance, appropriate maintenance is essential. This includes regularly inspecting tires for routine wear and monitoring inflation pressure to prevent tire failure. Also, low tire pressure reduces fuel economy and increases tire wear and tear.

The tire centric solutions business of the Bridgestone Group provides new, additional value to consumers by utilizing tire-

Tire Centric Solutions

related data to help prevent performance issues, allowing customers to benefit from maximum use of their tires. Specifically, the Group will work to further reduce the total cost of tire ownership (TCO) by reducing time and labor costs, preventing downtime and supporting safe vehicle operation. Creating this safe, effective mobility infrastructure also creates social value by improving the productivity of tire resources, supporting a circular economy and reducing CO<sub>2</sub> emissions across the value chain.

The Bridgestone Group's Dan-Totsu products, services and maintenance network of its tire centric solutions business will contribute to enhanced mobility and create important social and customer value.

# Preventing traffic accidents and sudden troubles caused by tires CO2 emission reduction by improving tire fuel consumption due to long-term use of tires. Imministring downtime due to tires trained to long-term use of tires. Imministring and the long-term use of tire

# TECHNOLOGY, PRODUCTS AND SERVICES SUPPORT TIRE CENTRIC SOLUTIONS

# Digital Technology

By developing and deploying digital technology, such as the Group's Tirematics system that measures tire pressure and temperature and provides remote monitoring in real time, the Group can monitor and analyze data on the full lifecycle of each tire. Using its unique algorithm, this information allows the Group to accurately evaluate the condition of a tire, predict its remaining durability, determine required preventive maintenance, and prevent downtime from tire damage. Helping drivers operate

vehicles with proper tire pressure also improves fuel efficiency and reduces CO<sub>2</sub> emissions.

# **Retreading Tires**

The Bridgestone Group receives tires that customers have properly maintained and retreads them for reuse. By initially developing durable tires, leveraging digital data to manage their use, and providing appropriate maintenance, it is possible to retread tires several times. This process uses less than one-third of the raw

materials needed to make new tires. Retreading reduces CO<sub>2</sub> emissions and reuses the entire tire casing, a major contribution to resource productivity in a circular economy.



# **Subscription Model**



In Europe, the Bridgestone Group is developing solutions for passenger cars and their owners. The Group's tire subscription service, mobox, includes new, premium tires

and regular tire maintenance to keep drivers safe and operating efficiently. It also includes additional vehicle-related services such as oil maintenance and summer/winter tire switching. This service will expand to other regions in the future.

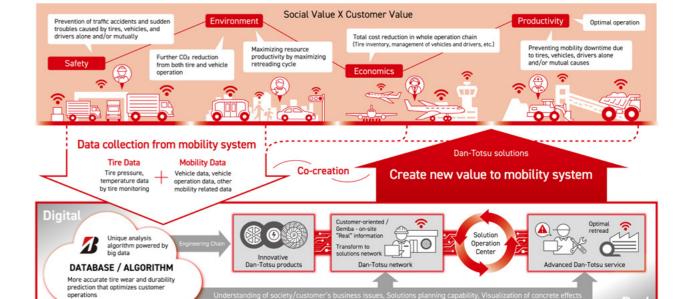
# Creating social and customer value through the Business-C "mobility solutions business"

With recent developments like MaaS and CASE, the mobility industry is facing a once-in-a-century pace of change. As mobility continues to rapidly evolve, it has the strong potential to solve many of the challenges affecting society. The Bridgestone Group's mobility solutions business creates new value by combining its wealth of knowledge about tires with tire and mobility data to contribute to world mobility.

Because the tire is the only part of the vehicle that touches the road, it plays an important role supporting mobility. As the world of mobility continues to evolve, what the customer needs from tires becomes even more sophisticated, complicated and systemized — further increasing the importance and role of the tire.

**Mobility Solutions** 

The Bridgestone Group addresses these needs by creating and providing new value as it connects the real and digital worlds. For customers, the Group's solutions that maximize tire performance help optimize operations and introduce damage prevention measures that avoid downtime, improve vehicle performance and reduce the total cost of ownership (TCO). These benefits are provided by leveraging Dan-Totsu tires, unique digital tire-wear prediction technologies, and real-time monitoring of mobility or road conditions. For society, the value the Group co-creates with customers and partners reduces CO<sub>2</sub> emissions and helps realize a circular economy.



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# **Creating Social and Customer Value**

The Bridgestone Group is creating new value by combining the real and digital worlds. It is leveraging its tire and rubber expertise, combined with tire- and mobility-related data, to solve social and customer issues with Dan-Totsu (the clear and absolute leader) products, services and service networks.

# **Mining Solutions**





Mining is one of the toughest jobs for a tire. Any tire failure brings operations to an immediate halt, greatly decreasing productivity. The Group can provide mines with increased tire life span, high running speed and heavier load weight with its BRIDGESTONE MASTERCORE tire. The tire's enhanced durability in this environment maximizes performance that eliminates downtime from tire-related issues. The Group also helps improve productivity by tailoring comprehensive services for each mine site, offering tire sales, maintenance and repair for mining vehicles, tire fittings and more. This results in improved mine productivity, reduced downtime and lessened environmental impact.

By attaching a sensor to the tire, the Bridgestone Group can monitor the operation of tire data from each vehicle. With this data and its years of expertise, the Group can provide solutions that optimize each mine's vehicle operations, addressing everything from vehicle-operations management to tire-asset management, replacement and rotation. The data also is helping the Bridgestone Group develop even better products. These products increase the life span of tires, improve resource productivity and further reduce CO<sub>2</sub> emissions. This is another example of the Group, together with customers, co-creating social value such as improved resource productivity and reduced CO<sub>2</sub> emissions by maximizing the usage of tires.

In Australia, with its huge mining industry, the Group has established two mining solution centers with these solutions close to customers and plans to expand this approach globally. In this way, the Group provides solutions that contribute to customers' improved safety, environment, economy and productivity by combining Dan-Totsu (the clear and absolute leader) products, maintenance services and service networks.

# **Aircraft Solutions**

The airline industry is another area where tires experience difficult operating conditions, supporting the weight and speed of aircraft while exposed to repeated takeoffs and landings. Creating an aircraft tire demands the utmost technological capabilities. However, aircraft tires don't always need to be replaced with new tires — it is safe and common to use retreads where tire treads are replaced after a few hundred takeoffs and landings. But, because the rate of tire wear varies based on a variety of conditions, it is crucial that airlines properly conduct regular tire inspections and maintenance and have robust tire inventory management plans.

Bridgestone is collaborating with Japan Airlines (JAL) to realize greater accuracy in aircraft tire management and maintenance plans by combining JAL's aircraft insights and flight data with the Group's tire insights and digital tire-wear prediction technologies. In doing so, Bridgestone creates social and customer value. Customers benefit from optimizing tire assets, safe flight operations and improved maintenance efficiency. Society benefits from improved resource productivity and reduced CO<sub>2</sub> emissions from manufacturing.

This solutions business is the Group's unique model, based on the various findings the Group's field engineers identified by working closely with customers. We will continue to expand this as a business that creates social and customer value.

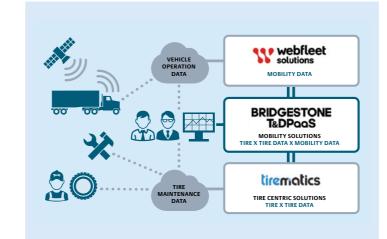


# **Fleet Solutions**

The Bridgestone Group supports fleet customers by considering their unique needs and providing high-quality products, services and a service network that improve safety. The Group helps operators manage new tire inventories and monitor tire maintenance during use. By using the Internet of Things (IoT) and other digital tools, customers can manage and analyze information throughout each tire's lifecycle to operate safely by preventing tire-related issues. The retreads the Group provides also reduce customers' total cost of ownership (TCO) and environmental footprints.

For example, the WEBFLEET service from the Group's Webfleet Solutions business supports transportation operation and contributes to improved safety, efficiency and productivity of drivers and operators by managing various data related to vehicle operations. The Group also contributes to improved fuel efficiency and reduced CO<sub>2</sub> emissions by streamlining operations. To date, 900,000 vehicles have used WEBFLEET.

By combining vehicle operations data with the Bridgestone Group's knowledge of tire wear and durability, it can provide a wider range of solutions, including products and services based on customers' unique operating conditions and needs. Additionally, data on vehicle operating and tire usage conditions is being deployed by R&D teams to more rapidly develop high-quality tires that meet customers' evolving needs.



### **VOICE OF THE CUSTOMER**

"WEBFLEET has been a total win-win for us, our insurers, our drivers and the environment. It's one of the best investments we've ever made. The figures speak for themselves:

- 10% reduction in fuel costs;
- 2,000 tonne reduction in CO₂ emissions;
- Approximately ¥171 million/\$1.6 million in insurance claims savings;
- 58% reduction in inefficient or unsafe driving; and,
- Speeding virtually eliminated."

# **Peter Kelly**

Group Compliance and Fleet Manager, Elis



# **MaaS Solutions**

As mobility continues to evolve, how people move is changing as more and more MaaS innovations are introduced. Companies like Bridgestone that offer mobility as a solution are helping to address transportation-related social issues and contributing to people realizing unique, diverse and fulfilling lives.

As society moves to more sophisticated and complicated ondemand, autonomous, high-occupancy rate, multipurpose and electric vehicles, significant improvement is required in tire performance. Until now, drivers often detected various abnormalities, but in the future, unattended operation will make tires a more important factor than ever. Sensors in tires will relay information to the vehicle's ecosystem, requiring a system that supports planned and safe operation. Leveraging experiences gained from mining solutions and aircraft solutions, the Bridgestone Group will continue to contribute significant value to the evolution of mobility systems by maximizing MaaS operations, integrating high-performance tires, preventive maintenance and emergency systems based on sophisticated MaaS detection predication and optimization technologies.

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# Co-creating New Value for the Future

The Bridgestone Group will contribute to the realization of a sustainable mobile society by promoting open innovation and working with partners to fuse technologies from various fields.

# **Advanced Material**

# WORLD'S FIRST POLYMER THAT COMBINES THE FLEXIBILITY OF RUBBER AND TOUGHNESS OF RESIN

The Bridgestone Group created the world's first, next-generation polymer that bonds rubbers and resins on the molecular level. Named SUSYM — a combination of the words "sustain," "symphony," and "symbiosis," — the polymer is a useful tire material. It also is expected to have a wide variety of other useful applications. SUSYM boasts the high levels of durability and resistance found in conventional rubber coupled with substantially higher levels of performance with regard to puncture resistance, repairability and recyclability, and resistance to low-temperature impact. The new polymer also requires fewer resources to produce, contributing to a more sustainable society. The Group is collaborating with a number of companies and organizations, through its Open Innovation Hub or other platforms, to conduct research and development on the application of the SUSYM technology to a wide variety of fields.



# Infrastructure

# CONTRIBUTING TO A LOW-CARBON SOCIETY BY CO-CREATING AN INDUSTRY-ACADEMIA-GOVERNMENT COLLABORATION FOR WIRELESS CHARGING FROM ROADS TO IN-WHEEL MOTORS

Bridgestone is participating in a project to develop practical uses for transferring the in-wheel power generated by in-wheel motors used in electric vehicles. It is collaborating with Hori and the Fujimoto Laboratory of the Graduate School of Frontier Sciences at the University of Tokyo, other companies and research institutes. The Company's role in the partnership is to develop the tire technology to transfer this energy during power charging.



# Structure

### **BLAZING A TRAIL FROM EARTH TO SPACE**

Together with the Japan Aerospace Exploration Agency (JAXA) and Toyota Motor Corporation, Bridgestone is conducting research and development activities for tires to be mounted on a pressurized rover required for human exploration activities on the moon. The Company is contributing to the mission by developing flexible and strong tires that perform in the harsh environment of the lunar surface. Like all tires, these must perform four essential roles:

- 1. Supporting the lunar rover's load;
- 2. Transmitting driving force and braking force;
- 3. Changing and maintaining direction; and,
- 4. Performing on a variety of surface conditions, including slopes and rocky sand.

This technology, developed for the harshest conditions experienced on the surface of the moon, is expected to have wide-ranging applications in the future.



ourtesy of Toyota Motor Corporation

### NEW PLACES FOR CREATING VALUE THROUGH INNOVATION

The Bridgestone Group promotes co-creating new value with communities, customers and partners to encourage new solutions. To do so, it is establishing a new base of innovation with a series of significant construction projects designed to accelerate the Group's transformation into a global leader in advanced mobility and sustainable solutions for future generations.

# **Bridgestone Cross Point**

Bridgestone Cross Point (BXP) at Museum Tower Kyobashi in Tokyo is a place where people, ideas, companies and society intersect to create new value. BXP, which opened June 2020, was designed to foster open collaboration among the Group, its customers and its partners to help drive innovation, design and brand projects that will deliver advanced, sustainable solutions for a world in motion.



Photography: Tomooki Keng

# **Bridgestone Innovation Park**

Bridgestone Innovation Park in Tokyo is a multiyear project that involves a major reconstruction of the Company's existing operations and includes four new facilities set to open over the next four years. It has been designed to foster the flexibility and creativity needed to support a more inclusive and connected society. The first facility is scheduled to open in 2020. The four facilities include B-Innovation, Bridgestone Active Healthy Lifestyle (AHL) Arena, Bridgestone Innovation Gallery, and B-Mobility.



**Overview of Bridgestone Innovation Park** 



**B-Innovation**: Next-generation innovation and collaboration lab empowering joint creation with various internal and external stakeholders.



**Bridgestone AHL Arena**: Barrier-free activity center providing access to sports for people of all ages and abilities, designed to promote a more diverse and inclusive society.

**Bridgestone Innovation Gallery**: Museum dedicated to Bridgestone history and innovation initiatives.

**B-Mobility**: Demonstration and testing facility to promote agile product development.

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# **Corporate Governance**

# The Bridgestone Group is committed becoming "a sustainable solutions company." Our strong governance will enable us to keep this commitment, which will evolve and be continuously enhanced.

Global CEO Shu Ishibashi and Dr. Scott Davis discuss how the Bridgestone's Group's governance will support the achievement

of its Mid-Long Term Business Strategy and its evolution into a sustainable solutions company.



**Scott Trevor Davis, Ph. D.** Independent Director



Shuichi Ishibashi Member of the Board Global CEO and Representative Executive Officer

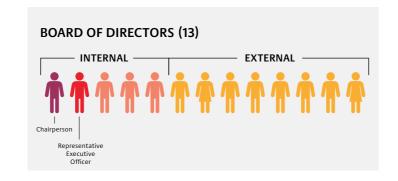
# Governance as the means for promoting mutual understanding and trust

**Dr. Scott Davis:** On the first sentence of this Sustainability Report, you state that the Bridgestone Group's mobility solutions strategy embodied in the Mid-Long Term Business Strategy is a promise to create great opportunities by realizing transformative synergies that leverage the skills and assets of a range of stakeholders. It is an invitation to join in and take a stake in the future. Making and keeping such a promise will require an understanding of and commitment to good governance. As CEO, what is your approach to governance?

**Global CEO Shu Ishibashi:** Good governance provides us with the foundation for working constructively with a wide range of stakeholders. It ensures that we can understand and trust each other.

**Davis:** The mobility solutions strategy holds great potential for both transforming mobility and facilitating the involvement of a wide range of stakeholders in the process. Is the Bridgestone Group's governance up to the task?

**Ishibashi:** Yes, for two reasons. First, our governance is a work in constant progress. It was initially designed when the company was established and has constantly evolved since to meet the needs of changing expectations and demands. The Bridgestone Group's governance developed as it transitioned from family to team management, Japan-centric to global management, and following the introduction of external directors, who now hold the majority of board seats. Our objective is to ensure that its governance policy and structure is fully capable of respecting and heeding the opinions and positions representative of the diverse range of people, communities and organizations with a stake in our business.



The second reason I'm confident in our governance we have embodied our mission of "Serving Society with Superior Quality" in the *Our Way to Serve* approach to corporate social responsibility. Our diversity, inclusivity and objectivity, combined with the structures that have been put in place to work toward the achievement of the *Our Way to Serve* goals, ensure that we are constantly aware of what we are doing and questioning what we should be doing to achieve our goals.

**Davis:** So you are saying that respect is needed to create inclusion out of diversity.

**Ishibashi:** Conflict will naturally emerge in management as regional and global needs are prioritized and balanced. If people do not see the big strategic picture, this conflict cannot be effectively managed.

Another critically important point is for everyone to be able to understand and respect the position of others. Our executives respect each other. Within this culture of respect, they understand regional differences in priorities and are able to debate and develop strategies for moving forward as a whole. This has become a significant strength for managing the Bridgestone Group as a global corporation and this is made possible by good governance.

# Governance to determine the right way forward

**Davis:** The Bridgestone Group is a large global organization with people engaged in a wide range of functions with their own specific requirements and concerns. Gaining the understanding and commitment of the various divisions and members throughout this organization will be a critical part of ensuring the success of the mobility solutions strategy. Getting everyone on the same page and facing the same direction will also require good governance. How do you intend to achieve this?

**Ishibashi:** From the very earliest stages of my career, I have believed that it is important to have an eye on both the details and the big picture — to be able to see things from, as we say in Japan, the perspective of "both the bird and the worm."

To deliver solutions we must understand the problems as well as the needs of our customers — perhaps even better than they do — and work together to achieve results. Of course, we have the Board of Directors and the Global EXCO as the highest body of global business execution. We also have processes in each region where we can deliberate and decide what must be done locally. We will continue to value those who make contributions to the business in the various ways that they have done until now

because everyone's contribution is a contribution for enabling mobility. We will also use our communication channels (town halls, TQM activities, etc.) to come together to discuss what is possible for us as a global and diverse organization. I have a favorite saying in Japanese: "those that ride in the palanquin, those that bear the palanquin, all are supported by the one that makes the bearer's sandals — both the least and yet the most important thing of all — the sandals." I take pride in the fact that our business enables the whole mobility industry. Tires, which as individual products have added value by facilitating the transportation of individuals and things, will now create value by enabling the realization of mobility solutions.

# Governance to create mutually beneficial trust and support value co-creating partnerships

**Davis:** Implementing the mobility solutions strategy will allow the Bridgestone Group to interact with a wider and different range of stakeholders. How will this affect the demands and expectations of governance at the Group and how should it meet these expectations?

**Ishibashi:** Up until now, we have worked together primarily with customers. As we move forward, all our capabilities as an organization have to be carefully aligned and we must share a common understanding of how we can continue to support and work with these partners to strengthen mutual trust. Effective corporate governance is an essential part of this. We will earn trust by contributing to society's shared vision of what must be done. This will require governance for co-creation. I have no illusion that realizing such a level of governance will be an easy task.

**Davis:** What message regarding governance do you want stakeholders to take away from this Sustainability Report?

**Ishibashi:** I want everyone to know that we are constantly investing our time and resources into developing our governance so that we may achieve our vision of mobility solutions and, in doing so, continue to be a trustworthy partner. Our mobility solutions strategy will only be successful if we earn and keep our partners' trust and if they in turn see fit to partner with us in co-creating value that leads to a better future. Good governance is part of our effort to co-create sustainability for the future.

Details of the Bridgestone Group's Corporate Governance are available <u>online</u>.

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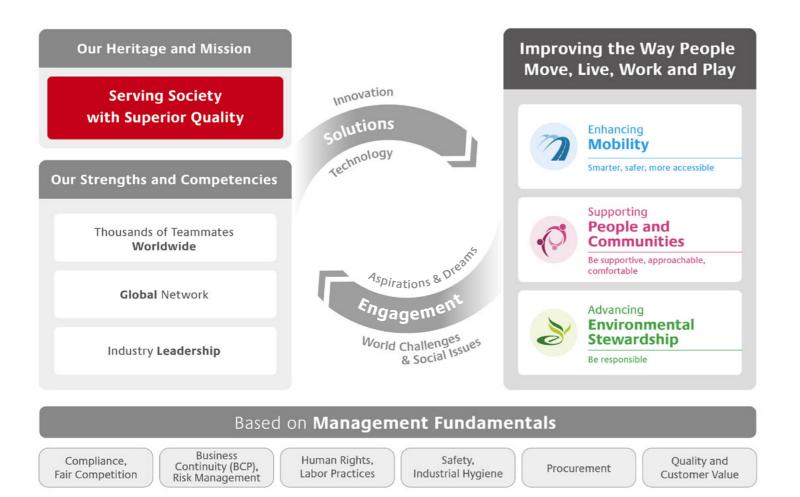
# **Our Way to Serve**

**GUIDED BY OUR WAY TO SERVE** 

Introduced in 2017, *Our Way to Serve* is the Bridgestone Group's framework to help realize a sustainable society. The Group is doing so by:

- Integrating sustainability into its culture, business strategy and operations;
- Co-creating new social and customer value with communities, customers and partners; and,
- Sustainably providing value by balancing societal and customer needs and expectations.

Our Way to Serve focuses on three Priority Areas — Mobility, People and Environment — to help improve the way people move, live, work and play. Underpinning these commitments are six Management Fundamentals that articulate the high standards the Bridgestone Group has set for itself as a responsible and ethical business. The Group regularly engages with a wide variety of stakeholders to better understand worldwide challenges and social issues.



# FRAMEWORK TO REALIZE SUSTAINABLE SOCIETY

# Our Way to Serve is Core to Realizing the Mid-Long Term Business Strategy



# A Message from Christine Karbowiak

Executive Vice President and Executive Officer

Member of Global EXCO

Responsible for Public Relations, Government Relations and Sustainability · Global CSTO\*

Global Sustainability Committee Chairperson

\*Chief Sustainability Officer

As you can see by reviewing contents of this Sustainability Report, the Bridgestone Group is continuing to work vigorously toward its vision of a sustainable society by providing value to society and customers. And while managing Environmental, Social and Governance (ESG) issues in a responsible way has long been a commitment and a hallmark of the Group, today, proactively addressing these issues is more important than ever.

To meet the expectations we have of ourselves and that others have of the Group, and to realize our Mid-Long Term Business Strategy, we see the *Our Way to Serve* sustainability framework as fundamental and continue to prioritize it in all that we do. Through this framework, we are able to address three key components necessary to co-create new value for society with communities, customers, and partners, namely a sustainability business model, trust and Management Fundamentals. We're operationalizing this framework by developing and promoting a sustainability business model that allows us to co-create social and customer value and ensure a competitive advantage. Also, as an industry leader, we're engaging with stakeholders to further understand their expectations with respect to our role, and to turn that understanding into action.

Successful co-creation of social and customer value will require great levels of trust from our stakeholders. We will be guided by this framework as we continue to build trust with stakeholders and society at large.

Essential to this work are the Bridgestone Group's six Management Fundamentals that guide how we responsibly and ethically approach the creation of social and customer value. Our Management Fundamentals address important topics such as human rights, safety and responsible labor practices all along the value chain. For example, in 2018 we introduced our Global Sustainable Procurement Policy, Global Human Rights Policy and Code of Conduct. We'll continue to be guided by the values inherent in our Management Fundamentals as we advance the *Our Way to Serve* Priority Areas of Mobility, People and Environment.

### **CULTURAL INTEGRATION**

As reflected throughout this Sustainability Report, the Group continues to incorporate *Our Way to Serve* into our corporate culture, values and brand in order to ensure that it becomes an integral part of employees' lives, in all that they do, every day. And we are making good progress on that front, as our 2019 employee survey showed that 97%' of those who responded to the survey are aware of the framework. We also continue to raise awareness of our Priority Areas and Management Fundamentals through the annual Bridgestone Group Awards which recognize outstanding work that is aligned with the *Our Way to Serve* framework.

### STRATEGIC INTEGRATION

As the Bridgestone Group continues to implement the *Our Way to Serve* framework in order to support the establishment of a sustainable business model designed to achieve its Mid-Long Term Business Strategy, we will continue to align sustainability initiatives with our overall business goals and strategy across the value chain. Doing so delivers value for society and customers as we engage in collaborative projects such as the Global Platform for Sustainable Natural Rubber and the Tire Industry Project. Bottom line, what's good for society is good for business. I am also pleased to report that the Bridgestone Board of Directors is fully engaged in this sustainability journey and has requested regular reports from the Company as to its progress; it was my privilege to provide the most recent such report in my role as the Global Chief Sustainability Officer in November 2019.

### **OPERATIONAL INTEGRATION**

Our Way to Serve is led holistically and globally by the Global Sustainability Committee (GSC, formerly the Global CSR Enhancement Committee) with working groups of crossfunctional, cross-regional leaders responsible for operationalizing the Bridgestone Group's sustainability framework. The Global Sustainability Committee reports to the Global EXCO.

The Group also established a Global Sustainability Function with members from each region to activate its sustainability journey to ensure the successful cultural, strategic and operational integration of *Our Way to Serve*. My mission as Global CSTO and Global Sustainability Committee chairperson is to direct the Group's sustainability strategy, advancing its recommendations to the Global EXCO, the highest level committee overseeing the Bridgestone Group's business strategy and execution.

We at the Bridgestone Group are proud of the progress we've made on our sustainability journey and we are excited about the progress yet to come.

<sup>1 16,675</sup> employees responded to the online survey. (respondents are those employees who have email addresses and most are managers and staff).















# **PEOPLE**

The Bridgestone Group's People Priority Area mission is to "employ its strengths to support communities and enhance the way people live, learn and work." It is doing so by contributing to a safer society, supporting accessible and inclusive education, and promoting healthier communities.

The Bridgestone Group conducts business in more than 150 countries, employs over 140,000 people and interacts with diverse cultures and local communities throughout the world.

These local communities face a variety of unique issues, including income disparity and poverty. To realize the Group's vision toward 2050, it strives to co-create social and customer value by working with diverse stakeholders to improve the quality of life for people in these local communities and its employees. It does so by contributing to a safer society, supporting accessible and inclusive education, and promoting healthier communities.

After inventorying existing programs and considering local, regional and global needs, the Group's future People Priority Area efforts will be directed toward contributing to a safer society by focusing on disaster and emergency relief efforts; supporting accessible education for next generations; and promoting healthier communities by introducing initiatives that align with the agenda of the World Health Organization to meet global and regional challenges. Road safety is a key initiative within these three goals and will be a key area of focus moving forward.

As a tire company, road safety is at the core of the Bridgestone Group. For example, its WEBFLEET fleet management solution provides all the information fleet managers need to protect drivers by managing their inventories and optimizing operations. In addition, monitoring and analyzing driver behavior supports driver wellbeing and prompts safe driving. Overall, WEBFLEET creates value for its customers and societal value by improving the quality of life for drivers doing physically and mentally demanding work.

Additional examples of how the Bridgestone Group is creating social and customer value across the People Priority Area of its Our Way to Serve CSR framework are included on the following pages.

# SUPPORTING ACTIVE AND HEALTHY LIFESTYLES

The Bridgestone Group aims to become a leading model of an inclusive society by promoting active and healthy lifestyles. By addressing a variety of social issues, including helping the elderly and those with physical challenges more fully engage in physical activity, the Group is co-creating value with communities and partners. For example, the Bridgestone AHL Arena, scheduled to open in March 2022, will be a barrier-free activity center leveraging cutting edge-technology and science to encourage social participation by all. Multiple stakeholders, including other companies, a research institute and other partners are collaborating with the Bridgestone Group to support all people within the community.

### **BRIDGESTONE RUBBER ACTUATOR**

The Bridgestone Group, the University of Tokyo and other companies are partnering on the development of a high-powered artificial "muscle," or actuator that generates motion and power, using the Group's tire and rubber technology. The actuator is lightweight, durable, and able to move smoothly with great power, making it ideal for applications that support walking and playing, training, light labor and robotic arms.





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# PEOPLE

# Contributing to a Safer Society

In Vietnam, where 70% of the population resides in coastal areas and low-lying deltas, communities are extremely vulnerable to river and coastal flooding. Because of a lack of key infrastructure, including bridges, children are unable to safely commute to school without crossing dangerously high rivers using wooden rafts or even ropes made of plastic bags. Bridgestone Tire Manufacturing Vietnam Limited Liability Company's Bridge to Knowledge campaign pledges to build 20 bridges across flood-prone Vietnam by 2030 and to maintain the bridges for 10 years. Already, in 2019, Bridgestone completed two bridges in the Dak Lak and Dien Bien provinces, improving conditions for 3,927 community members and helping 335 children get to school safely. More bridges are underway in other provinces. The project gives disadvantaged members of the community access to inclusive education and creates safer mobility options — which in turn help to build a thriving local economy.

To help ensure safe mobility on the road and reduce the number of traffic accidents, Bridgestone India Private Ltd. focused on developing truck driving skills and providing a vision correction program for truckers. The Group implemented both initiatives with the help of its employee volunteers. To date, 450 youths have been trained as skilled commercial drivers, 6,250 truckers have undergone vision check-ups and treatment, with 2,520 spectacles distributed to truckers for vision correction. Additionally, the program provided counseling sessions focused on adopting healthier lifestyles.

To help prevent damage from seismic shock due to earthquakes, the Bridgestone Group supplied its cutting-edge seismic isolation bearings for two newly-constructed permanent venues that will host competition during the Olympic and Paralympic Games Tokyo 2020 (rescheduled for July 2021). The bearings were installed beneath the roof instead of under the foundation to help lower the burden placed on the roof's structural support elements.







### PEOPLE

# Accessible and Inclusive Education

As the Bridgestone Group expands education and training opportunities to help people develop life and career skills, the greatest impact it can have is with road safety education.



In 2019, this work came to life through multiple programs around the world:

- In Vietnam, the Group collaborated with primary school teachers to educate more than 3,000 students in Hanoi and Ho Chi Minh City on traffic laws and safety tips.
- Employees from eight countries and 13 sites in Bridgestone
  Europe, Middle East and Africa shared personal stories of
  near-miss situations. Stories were translated, illustrated, some
  of them put into videos, and all posted online to be seen and
  shared with anyone to learn from these experiences and avoid
  similar situations. About 3,800 people visited the website.
- In Poland, more than 33,000 children in about 300 kindergartens around Poznan have learned about auto safety since 2008. Employee volunteers share important information on using car and booster seats, how to be a safe pedestrian and other safety-related information.
- The Bridgestone Traffic Education Project debuted in Brazil in 2018 to raise awareness of road safety with young children and teenagers. Since then, more than 6,000 students in five schools across the country have learned about creating a safer driving community. BSAM also gave its Interactive Road Game to local Departments of Education to further this important training.

In Turkey, Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş. (Brisa), Bridgestone's affiliated company, is helping disadvantaged and underprivileged people secure employment as tire service technicians. Since 2010, Brisa has trained about 5,000 students. Most recently, two innovative new programs trained 26 women technicians, the first women in the tire sector to work in local dealers, and at least 50 people currently in prison are receiving technician training to help them reintegrate into society. Additionally, more than 5,000 students have taken free courses offered in vocational high schools; 65 of these students now work with Brisa dealers.



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# PEOPLE

# **Promoting Healthier Communities**

The Bridgestone Group works to ensure access to the resources people need to live healthier lives. One of the primary ways it does so is by encouraging employees and other stakeholders around the world to volunteer to help strengthen communities.

In 2019, BSAM held its first Volunteer Week. From Dec. 2 – 8, 2019, about 475 employees across the region volunteered nearly 1,600 hours. Volunteers cleaned more than 15 public sites and waterways; prepared, packaged and donated almost 18,000 meals; and provided needed clothing and toys to almost 1,000 individuals and families.

- "At Bridgestone, we have always embraced our responsibility to improve the ways in which people move, live, work and play. The results of the 2019 Bridgestone Americas Volunteer Week demonstrate the impact an organization can have when its employees work together to serve their communities."
- Chris Karbowiak, Global CSTO

Halfway around the world, Bridgestone employees volunteer with children who lost their parents or guardians in the 2011 earthquake and tsunami. Led by the Ochanomizu Academic Association, volunteers spend quality time building important relationships with these children. Bridgestone also offers its recreational facilities for Association camps and other activities.

To encourage healthier communities in the region and join the fight against cancer, BSCAP collaborated with the Breast Cancer Foundation (BCF) to develop a first-of-its-kind nursery rhyme campaign titled "Molly Monkey Sings and Saves." The campaign uses the familiar tune of "Wheels on the Bus" to illustrate how to conduct a breast self-check, serving as an important reminder for women to take charge of their health through regular self-examination.

More than 5,000 participants in Singapore's Pink Ribbon Walk learned of the campaign that encourages children to remind their mothers of this important health check.

As a firm believer in the power of sports to excite and unite, BSCAP also launched a regional step challenge to encourage employee fitness by unlocking donations to UNICEF and societies and foundations related to cancer. For the first time, employees used the Bridgestone Group's BS-Fit mobile app, which enables them to track their steps and maintain health. More than 20,000 employees participated, logging more than 15 billion steps and unlocking donations of USD 113,000.

Within its own operations, BSAM works to create a diverse and inclusive workplace by offering five employee resources groups (ERGs). Open to all, ERGs support employees, create opportunities to engage in community-service volunteerism, and offer learning and development opportunities. ERGs include:

- BRAVO community of veterans and veteran supporters;
- · BWIN helping female employees thrive and lead;
- BNEXTGEN supporting the growth and development of young professionals;
- BProud! encouraging an environment of inclusiveness and collaboration: and.
- BOLD empowering an inclusive community of Black/Africa American employees and allies.



# **TOPICS**

# Our Way to Serve During the Pandemic

The COVID-19 pandemic has resulted in significant loss and countless challenges for people everywhere. It also has created opportunities for people to help one another and demonstrate kindness during dark moments.

Since the onset of the pandemic, a spirit of collaboration has flowed through every corner of the Bridgestone Group. Employees moved quickly to support each other, their customers and communities. These actions demonstrate the universal concept of "glocal" that the Bridgestone Group adopted several years ago. Acting "glocally" allows it to work across the organization to enhance the wellbeing of employees and communities where it operates by understanding their local needs. For example:

- Manufacturing facilities donated personal protective equipment for local medical professionals and first responders.
- Retail locations remained open to provide critical auto and tire services for frontline workers, while also adapting to create the safest possible customer experience.
- Teams donated food and other essentials to underserved communities.
- The Group donated tires for emergency equipment and frontline health care workers.

As of May 1, 2020, the Bridgestone Group has donated or raised nearly \$1.3 million for global COVID-19 relief efforts. Here are just a few of the many examples from each region:







<sup>1</sup> Including donations from our customers and partners for Boys and Girls Clubs of America through the Driving Great Futures program.

### **AMERICAS**

- The Bridgestone Group volunteers in several locations used 3D printing to produce face shields for health care and other front-line workers. As of June 9, they provided more than 5,800 face shields and more than 700 ear savers to local medical professionals.
- Bridgestone Retail Operations donated \$840,000¹ to the Boys & Girls Clubs COVID-19 Relief Fund.
- Bridgestone Mexico, Costa Rica, Ecuador, Brazil and Argentina supported local programs to provide food and hygiene products for more than 2,300 families in need.

### EUROPE, RUSSIA, MIDDLE EAST, INDIA AND AFRICA

- The Group provided health care workers with free emergency tire repair in Spain, vehicle sanitizing services in Ireland, and protective vehicle covers in France.
- In India, the Group prepared and provided food and other essentials to 9,500 stranded truck drivers trying to reach home during the nationwide lockdown.
- BSEMIA launched its B-Well@Home platform to provide employees and their families with movement, nutrition, mindfulness, sleep and effectiveness tips.

# JAPAN

- Bridgestone produced 100,000 non-medical masks per week for internal use and donated 300,000 masks to local governments where its facilities are located.
- The HQ office, together with Bridgestone China, donated \$430,000 to the China Charity Federation and other provincial charity organizations to assist with COVID-19 relief and recovery efforts in select municipalities throughout China.

### ASIA, OCEANIA AND CHINA

- The Bridgestone Group hosted blood donation drives in Taiwan and Thailand, collecting 130,200 cubic centimeters (ccs) of blood.
- In Vietnam, the Group produced 20,000 coloring books for partners and employees to help keep children engaged during the lockdown. They also donated more than \$6,500 to the Vietnam government to combat COVID-19.
- BSCAP locations used social media to provide tips and useful information to encourage people to stay safe and healthy.

As a responsible industry leader, the Bridgestone Group will continue to help the communities where it operates remain strong as everyone around the world fights the global pandemic.

27 | People | Promoting Healthier Communities Sustainability Report 2019–2020 28 | Topics | Our Way to Serve During the Pandemic Sustainability Report 2019–2020















With the social and environmental impacts of climate change, resource depletion and biodiversity loss becoming more pronounced, the Bridgestone Group has established a framework to address these challenges within its operations and to contribute, throughout the product lifecycle and entire value chain, to addressing them within the larger community.



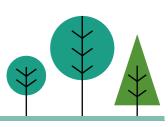
# THE MEANING BEHIND THE ENVIRONMENTAL MISSION STATEMENT

The Bridgestone Group's Environmental Mission Statement includes its unwavering commitment to help ensure a healthy environment for current and future generations...

It aims to create a sustainable society with integrity and in unity with customers, partners and communities. The Group seeks to exist "in harmony with nature" while also developing more efficient technologies and business models that "value resources" and "reduce CO<sub>2</sub> emissions" to address urgent concerns about climate change and resource depletion.

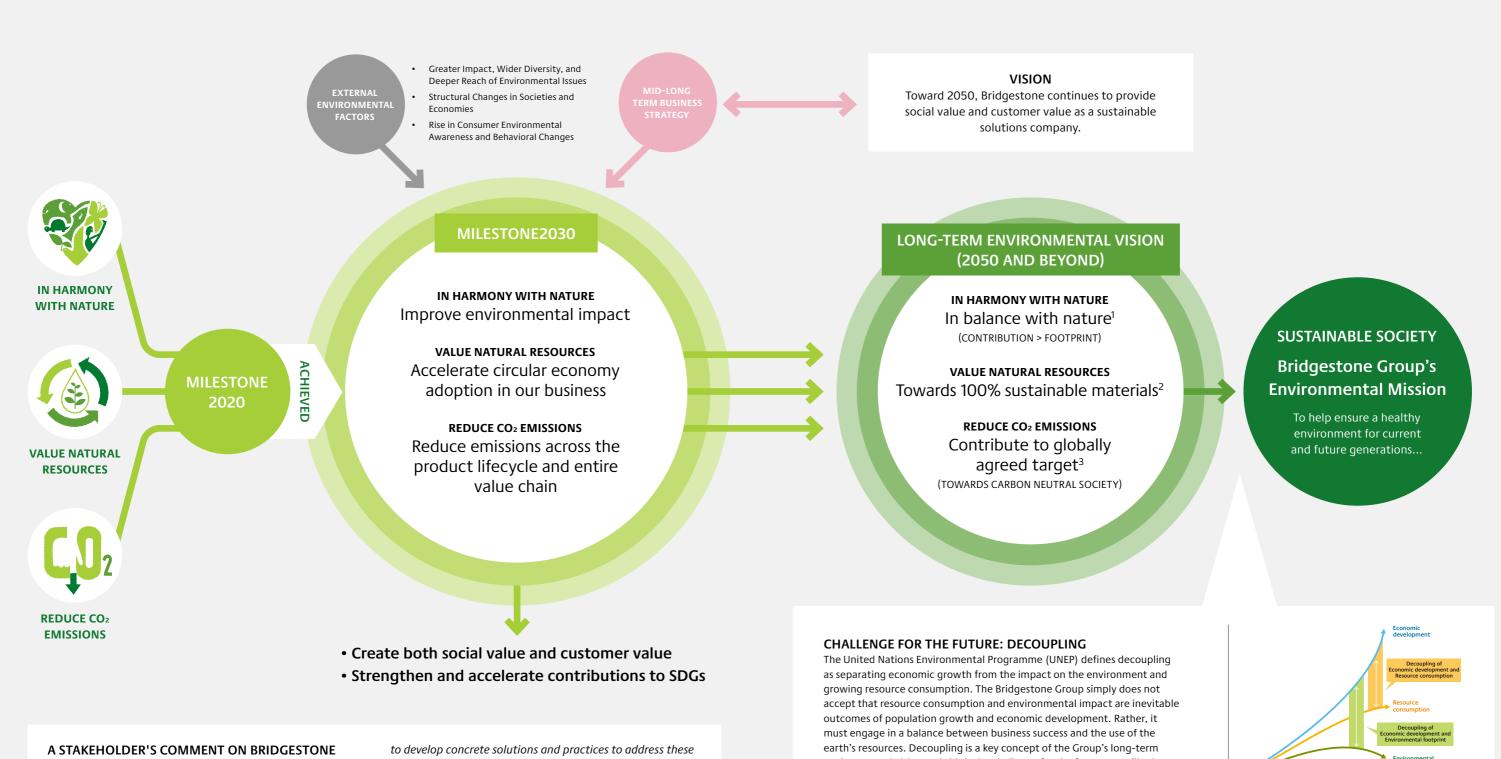
Based on this Environmental Mission Statement, the Bridgestone Group engages with these issues throughout its product lifecycle and value chain.





30 | Environment Sustainability Report 2019–2020

# Working Toward the World of 2050

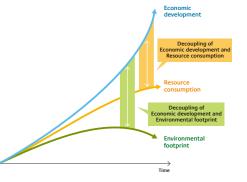


# **GROUP'S LONG-TERM ENVIRONMENTAL VISION AND A NEW MILESTONE 2030**

"Global environmental issues — including deforestation, marine plastic pollution and the climate crisis — are affecting people's lives and businesses. WWF believes that it is essential urgent challenges. As the leading company in the industry, we expect that Bridgestone's work will be implemented with clear goals and timelines in cooperation with its stakeholders toward 2030 and beyond."

- Sadayoshi Tobai, Chief Executive Officer, WWF Japan

environmental vision and this is the challenge for the future we will take on to balance growth and environmental considerations.



- "In balance with nature" is the Bridgestone Group's commitment to contribute to biodiversity through habitat enhancement, environmental education and research.
- <sup>2</sup> The Bridgestone Group defines sustainable materials as those that 1) come from resources with a continual supply, 2) can be used as part of its business over the long term, and 3) have a low environmental and social impact over their lifecycle from procurement to disposal.
- <sup>3</sup> The Bridgestone Group recognizes that the international community aims to become carbon neutral society based on the Paris Agreement (holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels), IPCC reports, and subsequent international debates

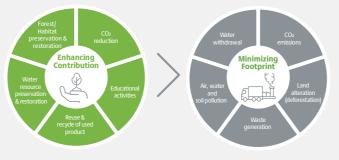
# Long-term Environmental Vision (2050 and beyond)

The Bridgestone Group is reducing its environmental footprint and creating social and customer value with various solutions that contribute to addressing environmental challenges toward its 2050 long-term environmental vision and beyond.



The Bridgestone Group aims to exist in harmony with nature by maximizing its contribution to biodiversity (ecosystems, species and genetic resources) while minimizing the impact of its business activities.

# In balance with nature (CONTRIBUTION > FOOTPRINT)



# ACTI

Minimizing footprint

### • Reduce water with

- Reduce water withdrawal impact in water stress areas
- Reduce waste generated and amounts sent to landfills
- · Request suppliers' consideration of biodiversity

• Reduce CO<sub>2</sub> emissions from operations

# ACTION 2

Enhancing contribution

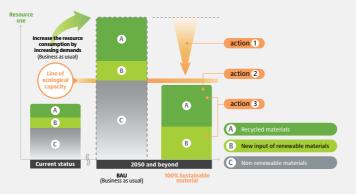
- Develop and expand solutions business to contribute to CO<sub>2</sub> reduction
- Preserve and restore ecosystems around Bridgestone Group facilities
- · Contribute to enhancement of circular economy
- · Introduce biodiversity educational program



VALUE NATURAL RESOURCES

The Bridgestone Group is working toward its goal to minimize resource depletion by implementing sustainable resource use through promoting technological innovation and business innovation.

# **Towards 100% sustainable materials**



ACTION!

Reduce raw material consumption

### **ACTION 2**

Recycle resources & use effectively

### **ACTION 3**

Expand and diversify renewable resources

- Weight-savings technologies
- Durability improving technologies
- Reduction of manufacturing process losses
- Retread technologies and solutions
- Recycled rubber, recycled carbon black, etc.

# · Natural rubber productivity improvement technologies

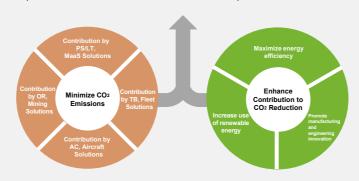
- Diversified natural rubber supply sources (guayule)
- Development of bio-derived raw materials



The Bridgestone Group is working with customers and partners to reduce CO<sub>2</sub> emissions based on scientific modeling of climate trends, emission reduction called for in the Paris Agreement, and other expectations of global society.

# Contribute to globally agreed target

(TOWARDS CARBON NEUTRAL SOCIETY)



# ACTION!

# ACTION 1

Minimize CO<sub>2</sub> emissions

# **ACTION 2**

Enhance contribution to CO<sub>2</sub> reduction

- Maximize energy efficiency
- · Increase use of renewable energy
- Promote manufacturing and engineering innovation

 Provide solutions that contribute to CO<sub>2</sub> reduction via customers' use of the Bridgestone Group's products and services

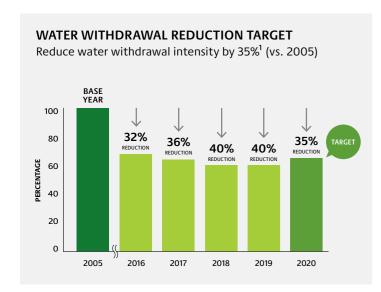
 Reduce CO₂ emissions across the value chain of products including lightening weight, increasing recyclability, etc.

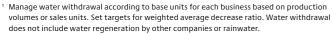
# Achieving Milestone 2020: **Continuing Our Path Forward**

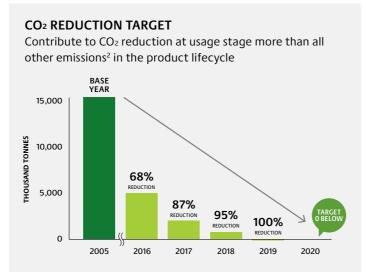
# Achievement of Milestone 2020 and Improvement of Environmental Efficiency

The Bridgestone Group conducted initiatives to achieve mid-term 2020 targets (Milestone 2020) on its way to achieving its long-term

environmental vision by 2050. As a result of its global activities, the Group reached Milestone 2020 goals in 2019, ahead of schedule.







<sup>2</sup> Calculated based on Tire LCCO<sub>2</sub> Calculation Guidelines Ver. 2.0 (April 2012, The Japan Automobile use" means the emissions from product lifecycle stages other than use. (i.e., raw material procurement, manufacturing, distribution and after-use.)

### ACHIEVED SIGNIFICANT IMPROVEMENT OF ENVIRONMENTAL EFFICIENCIES THROUGH ACTIVITIES FOR MILESTONE 20203



WATER WITHDRAWAL INTENSITY 40% REDUCTION



**RESOURCE** PRODUCTIVITY<sup>4</sup> IMPROVEMENT



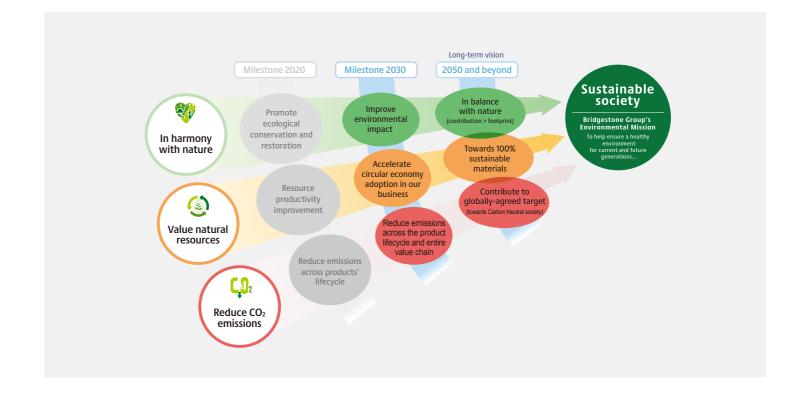
CO<sub>2</sub> INTENSITY (Scope 1 AND 2)

# Working Toward 2030 — Setting New Mid-term Environmental Targets

The initiatives of the Bridgestone Group's Milestone 2020, introduced in 2012, allowed it to build an internal structure to reduce its environmental impact on an ongoing basis. As a result, the Group can now engage in activities with greater speed to reflect the frequent changes in societal conditions.

Since setting Milestone 2020, the Bridgestone Group has seen the adoption of the United Nations Sustainable Development Goals and the Paris Agreement, as well as momentum behind other social movements. Today, environmental issues are one

of the greatest global risks, rising in importance in terms of both risk and opportunity for corporations. Looking at these developments, the Group set a new Milestone 2030, which aims to accelerate its ambition toward "decoupling" to further reduce its environmental impact. At the same time, the Group will promote the circular economy and contribute to globally agreed CO<sub>2</sub> emissions reduction targets through innovation and leading-edge technologies. Through these activities, the Bridgestone Group will be a solutions provider driving common value creation with customers and partners.



3 2019 results compared to 2005

**ECOPIA** 

**FUEL EFFICIENT TIRE** 

# BRIDGESTONE'S ENVIRONMENTAL PRODUCTS, SERVICES & TECHNOLOGY

### RECOVERED CARBON BLACK



RETREADING, FLEET SOLUTIONS



# **TECHNOLOGIES FOR SOLUTIONS**



Double network concept rubber







Reversible Crosslink Rubber<sup>3</sup>

EVOLVING INTO AN ADVANCED MOBILITY AND SUSTAINABLE SOLUTIONS COMPANY

ologi@

<sup>4</sup> Resource productivity means doing more with less, based on sales per raw material use

Rubber with enhanced strength and durability by adopting specially designed materials.

<sup>&</sup>lt;sup>2</sup> The world's first polymer that bonds rubbers and resins on the molecular level with high levels of durability and resistance

<sup>&</sup>lt;sup>3</sup> Reversible cross-linking technology that enables recycling of rubber materials.



# In Harmony with Nature: Improve Environmental Impact

The Bridgestone Group intends to be even more ambitious in its activities in response to the continued importance of social and environmental issues, and the potential impact on the environment caused by business growth.

# **Key Actions**

- Create and implement water stewardship plans based on <u>Water Stewardship Policy</u> (policies related to the responsible use of water)
- Continuous improvement<sup>1</sup> of water withdrawal intensity
- Continuous improvement¹ of environmental footprint (reduce hazardous/nonhazardous waste, waste to landfill, VOC from solvent use, SOx/NOx)
- Improve supply chain environmental footprint through the Sustainable Procurement Policy
- Enhance activities that contribute to improved biodiversity
- <sup>1</sup> Continuous improvement is ongoing efforts to improve environmental performance year by year (such as 1% improvement) through PDCA cycle.

# **Focused Target**

# Execute water stewardship plan at manufacturing facilities in water stress areas<sup>2</sup> by 2030

The Bridgestone Group has developed its Water Stewardship Policy to help ensure water is available on a socially equitable basis and the water cycle is preserved. It addresses water issues through a stakeholder-inclusive process that involves catchment-, site- and downstream-based actions. It will develop and implement a water stewardship plan based on the Policy, especially at manufacturing facilities in water stress areas.

<sup>2</sup> Manufacturing facilities in water stress area: Manufacturing facilities that have water-related risks due to the locations with the risk of deterioration of fresh water resources in terms of quality and quality.



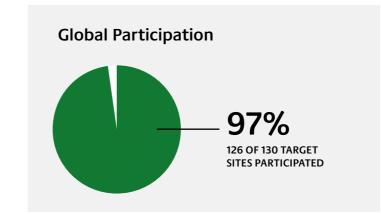
# **Action Examples**

# **Action In Water Stress Area**

The Buenos Aires plant located in the water stress area of Argentina has been working on improvement of efficiency of water use continuously and achieved 56% reduction of water withdrawal by 2019, compared to a 2005 baseline. In April 2019, the plant partnered with a concrete manufacturing company and provided its treated water discharge by reverse osmosis to the company for production usage. This helped reduce net water withdrawal in the water stress area.

# The Bridgestone In Harmony with Nature – Promoting Biodiversity Program

The Bridgestone Group launched The Bridgestone In Harmony with Nature – Promoting Biodiversity Program in early 2019. Through the program, it encourages all manufacturing facilities across the globe to promote activities to conserve biodiversity. Many of its facilities already have initiatives in place, such as educational partnerships, conservation efforts and microhabitats. This program seeks to highlight those facilities for their efforts to achieve measurable annual results.





# **Outputs of Global Activity Summarized in 2019**

380+

FOR ENVIRONMENTAL CONSERVATION AND EDUCATION

14,700+ PEOPLE

PARTICIPATED IN ENVIRONMENTAL EVENTS 62 PARTNERSHIPS

WITH LOCAL SCHOOLS, ETC.

**54** SITES

WITH ON-SITE MICROHABITAT/ WAYSTATION

<sup>\*</sup> Including 130+ events for children/adolescents



# Value Natural Resources: Accelerate Circular **Economy Adoption in our Business**

The Bridgestone Group contributes to the creation of a circular economy<sup>1</sup> by designing and developing products and business models with high resource efficiency, using recycled and renewable resources (material circularity<sup>2</sup>) and accelerating comprehensive initiatives in the effective use of used tires (product circularity<sup>3</sup>).

# **Key Actions**

- Develop and implement roadmap to expand sustainable materials
- · Continuous improvement of resource productivity
- Continuous improvement in product circularity (beneficial next use of used tires)
- Develop and implement policy/roadmap to contribute to single-use plastics reduction

# **Focused Target**

# Increase ratio of recycled and renewable material<sup>4</sup> to 40% by 2030

Though it improved its resource productivity under Milestone 2020, the Bridgestone Group has gone beyond that in seeking to achieve its long-term environmental vision toward 100% sustainable materials. To do so, we will accelerate innovation and improve usage ratios of materials from recycled and renewable sources. In its efforts toward this goal, the Group also is advancing a number of diverse initiatives in other stages of the product life cycle, including long-lived design, using renewable resources, retreading, recycling, repairing and sharing.

Economic growth is expected to increase resource consumption and demand, thereby restricting resource supply and deepening issues of natural resource depletion and soaring resource prices. Smarter, more sustainable use of resources is important not only for addressing environmental issues, but also for society and the Bridgestone Group's businesses. For the Group, realizing a circular economy not only mitigates environmental issues, it also generates new business models and leads to sustainable economic growth.

The Group will create common value with communities, customers and partners across the product lifecycle and entire value chain by developing unique technologies and business models.

# BRIDGESTONE GROUP'S APPROACH TO CONTRIBUTING TO THE CIRCULAR ECONOMY **Material Circularity Product Circularity**

Contribution Area on Circular Economy	Bridgestone Group's Approach	Activity Example
Enhancement of Resource Productivity	Further strengthen competitiveness of Dan-Totsu (the clear and absolute leader) products by Long Life/Resource-Saving Design     Create business opportunities through transformation from resource-consumption dependent business by Sharing, Service/Subscription	New technology for tire weight reduction (Enliten, SUSYM, etc.) Studless tire rental services, etc. Replacement service for automotive parts, subscription model for electric bicycles, etc. Tire maintenance, optimization of product use (Retreading business, Tirematics, EcoValue Pack, Webfleet Solutions), etc.
Enhancement of	Further strengthen competitiveness of Dan-Totsu (the clear and absolute leader) products by utilization of Recycled Material and Renewable Resources	Expanding use of recycled materials (recycled rubber, recovered carbon black, etc.)     Improving productivity of natural rubber, development of bio-derived raw materials (Guayule, etc.)
Material Circularity  Enhancement of	Create values across the product lifecycle by Recycling/Upcycling, Repair/Reuse, etc. and build business models	<ul> <li>Retreading business</li> <li>Aircraft solutions</li> <li>Tire repair services, etc.</li> </ul>
Product Circularity	Create new value by Cascade Recycling	Power generation by waste tire, development of material recycling technology, etc.

An economic system where sustainable products are designed and produced with fewer resources (reduced), where consumption is conducted in a sustainable fashion, and used products and resources es are appropriately recovered, recycled, and reused in order to eliminate resource waste and reduce the risk of environmental destruction.

<sup>&</sup>lt;sup>2</sup> A concept to show circularity of raw materials. The Bridgestone Group uses the ratio of recycled materials and renewable materials to total raw materials as the indicator for Material Circularity.

<sup>3</sup> A concept to show circularity of used products. The Bridgestone Group uses the ratio of used tires from its retail shops that go to beneficial next use as the indicator for Product Circularity

Within total material weight for tire products including tire casing for retreading.



# Reduce CO<sub>2</sub> Emissions: Reduce Emissions Across the Product Lifecycle and Entire Value Chain

With decoupling in mind, the Bridgestone Group set a goal to reduce its absolute volume of CO<sub>2</sub> emissions from its own immediate production activities. In addition, the Group will accelerate its contribution to the reduction of CO<sub>2</sub> emissions through products and solutions. In this way, the Bridgestone Group will pursue CO<sub>2</sub> reductions throughout its product lifecycle and entire value chain.

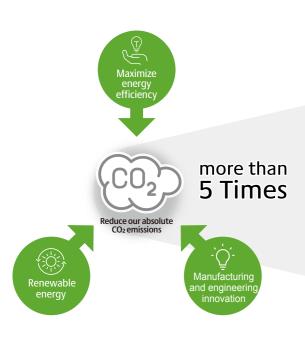
### **Key Actions**

- Develop products and services that contribute to CO<sub>2</sub> emissions reduction
- Continually improve energy efficiency in operations to reduce total energy consumption
- Enhance renewable electricity ratio
- Promote manufacturing and engineering innovation

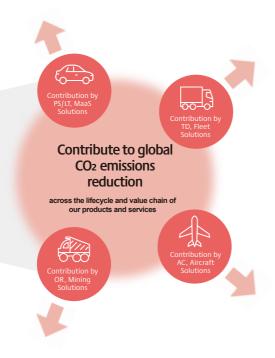
# **Focused Target**

Reduce our absolute CO<sub>2</sub> emissions (Scope 1 and 2) by 30% and aspire to reduce by 50% by 2030<sup>1</sup>

Contribute to global CO<sub>2</sub> emissions reduction across the lifecycle and value chain (Scope 3) of our products and services exceeding five times our operation's (Scope 1 and 2) CO<sub>2</sub> emissions by 2030<sup>2</sup>



The Bridgestone Group will contribute to the reduction of CO<sub>2</sub> emissions during customer use, raw material/procurement, distribution and reuse/recycle phases of the product life cycle by providing customer value through Dan-Totsu (the clear



and absolute leader) products/services. It also will reduce CO<sub>2</sub> emissions from manufacturing. This allows the Group to reduce CO<sub>2</sub> emissions across the product lifecycle and entire value chain.

# **Action Examples**

# Contribution to reduction of CO<sub>2</sub> emitted during customer use

The Bridgestone Group offers revolutionary solutions that contribute to CO<sub>2</sub> reductions by customers and partners across society. The Group's fuel-efficient tires contribute to greater vehicle fuel efficiency and meet a variety of customer needs, including superior levels of low-rolling resistance, lighter weights and other performance metrics. The Group achieved a 23% reduction (from a 2005 baseline) in tire rolling resistance, equal to a contribution of approximately 13.4 million tonnes CO<sub>2</sub> reduction<sup>1</sup>, in 2019.







nt, India Wuxi plant,

# Reducing CO<sub>2</sub> emissions at manufacturing facilities

As one of its efforts towards contributing to a carbon neutral society, the Bridgestone Group is working to minimize its CO<sub>2</sub> emissions by maximizing energy efficiency and expanding its use of renewable energy at manufacturing and other facilities. Three of its tire manufacturing facilities (Bilbao, Puente San Miguel and Burgos) and one tire cord facility (Usansolo), all in Spain, sourced 100% of their electricity from renewable sources in 2018. Additionally, three facilities in Europe (Tatabanya, Hungary, and Stargard and Poznan, Poland) are powered by 100% renewable electricity in 2020. The Wuxi, China plant and the Pune, India plant began using electricity generated by large-scale, solar power generators installed on the facilities' roofs with electricity suppliers in 2019.

# Support of Bridgestone World Solar Challenge (BWSC)

The BWSC is the world's foremost solar car race, which travels 3,000km (1,860miles) from Darwin to Adelaide in Australia. It started in 1987 with the purpose of contributing to the development of solar cars, supporting young engineers, and contributing to the environment through the use of solar power. Participants are challenged to design, build and develop the world's most efficient vehicles. In addition to supporting the competition as a title sponsor, Bridgestone supplies "ECOPIA with ologic" tires to participating teams, contributing to the mobility of society and reducing environmental impacts while supporting young engineers.







Calculated based on Tire LCCO2 Calculation Guidelines Ver. 2.0 (April 2012, The Japan Automobile Tyre Manufacturers Association, Inc.).

<sup>&</sup>lt;sup>1</sup> Base Year: 2011.

<sup>&</sup>lt;sup>2</sup> Base year: 2020.









The Bridgestone Group's Our Way to Serve global CSR commitment focuses on three Priority Areas Mobility, People and Environment — to help improve the way people move, live, work and play. Underpinning these commitments are six Management Fundamentals that articulate the high expectations the Group has for operating as a responsible business. The following pages detail the Group's work within each Management Fundamental.



# MANAGEMENT FUNDAMENTALS

# Compliance, Fair Competition

### MISSION

# Ensure excellence through compliance and integrity

# We build trust with all stakeholders by ensuring that ethical decision-making guides responsible business practices across our operations.

The Bridgestone Group's commitment to compliance and integrity is a competitive advantage that informs all its activities and helps achieve its overall Mission of "Serving Society with Superior Quality." Foundational to this commitment is its Code of Conduct that gives employees, suppliers and others worldwide practical quidance for handling a wide range of ethical issues, including anti-corruption, competition/antitrust, conflicts of interest, and corporate charitable and political donations.

In 2019, the Group continued its global roll-out of the Code of Conduct, introduced in 2018, to ensure that all employees understand that ethical behavior and compliance is expected of everyone. The Group also continued introducing the Code of Conduct to business partners, sharing its expectation of integrity in all interactions.

The Bridgestone Group is simultaneously pursuing multiple channels to ensure compliance with its Code of Conduct,

- Focusing on education and employee engagement. These efforts start at the top, with business leaders regularly speaking about the importance of ethics and compliance and playing active roles in the Group's compliance training and awareness programs. This keeps the Code of Conduct top of mind and creates the desired culture where people are comfortable speaking up if they have concerns.
- Conducting regular global e-learning on the Code of Conduct and the Global Human Rights Policy. The Group reached nearly 49,000 employees, 89.5% of its target audience, in 2019.

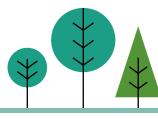
- Encouraging employees around the world to use the different channels and resources outlined in the Code of Conduct for speaking up, including the BridgeLine web-based reporting system and phone hotlines available worldwide.
- Introducing compliance risk assessments to proactively identify and mitigate risks. To help minimize risks associated with third parties with which the Group does business, the Group introduced a third-party screening tool.

As a global company, the Bridgestone Group operates in countries with a wide range of risk profiles, making anti-bribery a central focus of its global compliance program, along with regional compliance education efforts. In mid-2020, the Group will launch a Global Anti-Bribery Policy that builds upon the Code of Conduct. In addition to the guidance and requirements in the Code of Conduct, all regions currently have their antitrust policies in place for their respective regions. In 2020, the Group is working to consolidate existing regional antitrust policies into a Global Antitrust Policy, which is planned to be launched in 2021.

The Group also seeks to mitigate third-party risk by conducting appropriate due diligence, including screenings, based on the risks posed by each third party and geographic region among other considerations.

More information on the Bridgestone Group's global ethics and Compliance program is available online.





# Business Continuity (BCP), Risk Management

### MISSION

# Prevent and mitigate operational risks

# We anticipate, prevent and mitigate risk, and when crises arise, we protect our people, property and profits.

The well-being of the Bridgestone Group's employees and the continuity of its business operations are top priorities. To achieve these goals, it anticipates and mitigates potential risks that could harm people and workplaces and adversely impact business success. The Group shares and implements best practices and educates employees on how they can contribute to these efforts. It also regularly evaluates the risk management and business continuity controls in place.

In 2019, Bridgestone refined its processes for identifying global risks to the Group and highlighted cyberattacks, information leaks and the theft of data as the global priority risks to the Group that all strategic business units should address.

The Bridgestone Group's globally dispersed operations expose it to a broad range of risks. One of these is the risk of pandemics. Since 2013, Bridgestone has formulated business continuity plans (BCPs) to address the spread of new types of influenza and other severe infectious diseases of potentially pandemic proportions. The Group confirmed that these BCPs are working effectively during the COVID-19 pandemic. It will continue to drive toward ever more effective and efficient planning and execution of BCPs.

In 2020, the Group will incorporate a focus on strategic risks in line with its Mid-Long Term Business Strategy, in addition to its current assessment of operational risks. The Group also will further harmonize crisis management across the enterprise.

More information on the Bridgestone Group's approach to Business Continuity and Risk Management is available online.



# MANAGEMENT FUNDAMENTALS

# **Human Rights, Labor Practices**

# MISSION

# Advancing fundamental human rights and responsible labor practices

We will foster an inclusive culture in which all Bridgestone entities and locations adopt and apply ethical labor practices, build trust with our teammates, and model our respect for diversity and fundamental human rights.

The Bridgestone Group continues to embed the <u>Global Human</u> <u>Rights Policy</u> it launched in 2018 across the company. In 2019, the Group conducted regular global e-learnings on the Policy and its <u>Code of Conduct</u>, reaching nearly 49,000 employees, or 89.5% of its target audience.

The Global Human Rights Policy respects international norms such as those reflected in the United Nations Universal Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights, various International Labor Organization Conventions and other globally recognized standards.

The Policy addresses the standards and behaviors that all Bridgestone Group employees around the globe can and should expect from the Group, their managers and fellow employees. It outlines respect for diversity and inclusion, prohibits discrimination and harassment, focus on workplace safety and health, commitment to responsible labor practices, and protection of free speech and association. These expectations are closely aligned with the Group's Code

of Conduct and <u>Global Sustainable Procurement Policy</u> and are embedded into the Group's day-to-day operations, including its due diligence assessments of potential new operations and projects.

To help ensure compliance with the Global Human Rights Policy, the BridgeLine whistle-blowing web-based reporting system and phone hotlines are available worldwide to encourage employees and its stakeholders, which include contractors, suppliers, customers and anyone else, to "speak-up" when they have concerns

The Human Rights, Labor Practices Working Group will partner with the Global Sustainability Function to develop human rights-specific due diligence content as part of the Bridgestone Group's holistic global due diligence process. The Working Group intends to help build awareness of specific contexts and causes of human rights concerns, the relationship between business activities and human rights, and to forge a deeper understanding of the importance of human rights across the value chain.

In 2019, Bridgestone Japan conducted an initial assessment that will serve as its regional approach when the Group addresses emerging human rights issues globally.

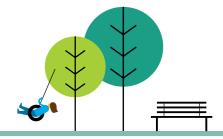
Bridgestone has engaged Lloyd's Register Quality Assurance, an independent third-party institution, to provide gap analysis of its global Human Resource data collection and calculation. The resulting data is anticipated to be available online beginning in the third quarter of 2020.

To realize it's Mid-Long Term Business Strategy, the Bridgestone Group will transform to a truly global Human Resources system with consistent, global standards. This approach will include a jobtype assignment system and job-matching system. The Group also will further advance its global leadership development program. In light of COVID-19, the Group intends to embrace diverse work styles to accommodate each employee's needs. By doing so, it will more fully engage employees, resulting in even greater productivity and added value from each employee.

More information on the Bridgestone Group's Human Rights and Labor Practices is available online.







# Safety, Industrial Hygiene

### MISSION

# Safety First, Always

At Bridgestone, we make safety a business value. Creating a safe working place for all is everyone's responsibility. We promote safety activities throughout the value chain.

The Group refined the Bridgestone Safety Mission Statement in 2012 which applies to employees, contractors and visitors. Proving that safety is a priority of ever-increasing importance, all Bridgestone Group employees received additional safety training in 2019. The Group also introduced two new safety-related key performance indicators (KPI): Safety maturity measures its realization of the Bridgestone Safety Mission Statement and the risk assessment KPI measures the overall safety of new operations, projects and equipment. The Group has begun measuring progress against these KPIs, including awareness levels that are difficult to visualize and will report on its progress in the near future.



The Bridgestone Group's Safety and Industrial Hygiene Working Group also established a global safety management system developed in reference to <u>ISO 45001</u> and introduced 11 common global safety standards. These standards address:

- · Management commitment
- 3S: Seiri, Seiton and Seiso (select and remove, sort and keep clean)
- KY: Kiken Yochi (identify potential hazards in advance)
- Safety rules
- Fire risk assessment (strengthen business continuity by assessing the impact of the fire on the community and customers)
- Contractor management
- Hoist and crane<sup>1</sup>
- · Tire inflation operations
- · Permit-required confined space
- Audit
- · Recurrence prevention

# SAFETY PERFORMANCE

In 2019, across the Bridgestone Group, there were 29 serious injuries<sup>2</sup> and one fatality among employees for the full year at our 4,606 production and logistics sites and retail shops. In 2019, the Bridgestone Group began to globally collect lost-time injury frequency rates<sup>3</sup>. These numbers were 2.96 for employees and 1.99 for contractors<sup>4</sup>.

The Bridgestone Group's safety-related data is verified by Lloyd's Register Quality Assurance, a third-party institution, to ensure the accuracy and transparency of this information. We will also continue to implement global safety standards.

More information on the Bridgestone Group's Safety and Industrial Hygiene initiatives is available online.

- A device that consists of a hoisting device and a traversing device, and uses power to lift a load and transport it horizontally.
- <sup>2</sup> The Bridgestone Group defines serious injuries as amputation (except some first joints of finger or toe), complete loss of vision, fracture (excluding finger, toe, foot, hand or infracture) or hospitalization of more than one month.
- $^3$  Lost-time injury frequency rate = (number of lost-time injuries/total working hours) x 1,000,000.
- <sup>4</sup> This data includes six months, from July to December 2019

### MANAGEMENT FUNDAMENTALS

# Procurement

### MISSION

Create value to society through sustainable procurement practices

We are committed to creating value and continually working toward a sustainable society to realize long-term environmental, social and economic benefits by incorporating the following into the supply chain:

- Transparency;
- Compliance:
- Quality, cost, delivery (QCD) and innovation; and,
- Sustainable procurement practices.

In 2018, the Bridgestone Group introduced its <u>Global Sustainable</u> <u>Procurement Policy</u> that aligns with its goal of using 100% sustainable materials by 2050 and beyond.

### **ENSURING COMPLIANCE**

To better understand the strengths and vulnerabilities of suppliers, the Bridgestone Group worked with EcoVadis to conduct enhanced environmental, social and governance (ESG) risk assessments of the Group's new and existing major Tier 1 suppliers to its tire business. As of March 2020, 48% of the Group's Tier 1 tire material suppliers completed the third-party assessment with EcoVadis. Of suppliers who were reviewed, 55% earned an EcoVadis Medal, which corresponds to confirmed compliance with our sustainable procurement practices.

The Bridgestone Group conducts sustainable procurement seminars in all business regions for certain suppliers based on our sustainable procurement policy and the results of their ESG risk assessment, to help support their efforts to improve ESG activities. In 2019, 65 suppliers attended the seminars in Japan.

### NATURAL RUBBER SUSTAINABILITY

The Bridgestone Group is focused on continually meeting the rising global demand for natural rubber. Doing so, while also addressing key environmental issues and social risks arising from increased natural rubber production, is vital for the Group's sustainable procurement strategy.

It is important to realize that smallholder natural rubber farmers in Southeast Asia produce most of the natural rubber in the world. The Bridgestone Group hosts workshops to help smallholder farmers in Thailand and Indonesia improve the quality of their operations. It also provides Hevea rubber tree seedlings and conducts technical training in key producing countries using the same productivity-improvement techniques the Group developed for its own rubber farms.

In addition to holding an annual conference to deepen understanding of the Bridgestone Group's procurement policies among its natural rubber suppliers, representatives from the Group visited more than 100 approved natural rubber factories to support quality improvement and enhance traceability and sustainability in 2019, and revisited three suppliers with low scores in the EcoVadis assessment to support their ESG activities.

### **COLLABORATING WITH STAKEHOLDERS**

While these initiatives are significant, true supply chain improvement must take place across the industry. Together with other stakeholders, Bridgestone and other tire companies launched the Global Platform for Sustainable Natural Rubber (GPSNR) to transform the natural rubber supply chain for the better. Through the GPSNR, tire companies, including Bridgestone, and other stakeholders are harmonizing standards to improve respect for human rights, prevent land-grabbing and deforestation, protect biodiversity and water resources, improve yields and increase supply chain transparency and traceability. In 2020, the Group will continue working with the GPSNR, NGOs, suppliers, customers and others to continue increasing transparency and traceability in the natural rubber supply chain.

- "Bridgestone has been a key contributor toward our vision of social, economic and environmental sustainability of the natural rubber value chain. As a Founding Member of GPSNR and member of our Executive Committee, Bridgestone is actively involved in the conceptualization and design of critical GPSNR processes such as our assurance system, financial model and grievance mechanism. Together with other members of the platform, Bridgestone participates on several GPSNR Working Groups where, through fruitful discussions and sharing of insight and data, we are making progress in defining GPSNR's objectives and strategies as well as their implementation."
- Stefano Savi, Director, Global Platform for Sustainable Natural Rubber (GPSNR)

More information on the Bridgestone Group's Procurement practices is available <u>online</u>.

# **Quality and Customer Value**

### MISSION

# Creating customer value and trust

To create a global framework in collaboration with all related Bridgestone Group entities and stakeholders to proactively identify, prioritize and address customer quality issues in keeping with the intentions of our founder to "Serve Society with Superior Quality."

Quality is essential for the safety and satisfaction of consumers. The Bridgestone Group established the Quality Mission Statement to engage every employee in contributing to building quality products, services and solutions that exceed customers' expectations.

The Quality Mission Statement enables the future direction of the Bridgestone Group, based on the spirit of its founder, Shojiro Ishibashi, by advancing the Bridgestone DNA and proud heritage of quality and continual improvement to new generations of employees.

Through employee engagement with continuous improvement and innovation, the Bridgestone Group strives to achieve superior quality throughout the entire value chain, across all businesses and globally. To further pursue this aim, in 2017 the Bridgestone Group established the Global Quality Management Committee (GQMC) to strengthen the global governance with regards to the deployment of the Quality Mission consistently across all strategic business units.



The Bridgestone Group also annually hosts a Global Total Quality Management (TQM) Conference for sharing best practices that support its journey toward quality excellence. The conference helps promote quality awareness and increases employees' engagement in TQM. In 2019, more than 270 employees from around the world attended the conference sharing 16 projects from more than 4,500 qualifying entries.

We continue to enhance the TQM Conference by introducing improvements that encourage all employees to participate, regardless of their diverse work styles. Our intent is to provide a resource for best practices that employees can reference as they co-create new value with stakeholders.

### **QUALITY ACTIVITIES FOR THE SOLUTIONS BUSINESS**

The Bridgestone Group's global commitment to quality is instrumental to supporting the journey toward its vision of becoming a sustainable solutions company that provides social and customer value. This commitment is clearly stated in the Group's Mid-Long Term Business Strategy and demonstrated by its efforts to co-create value with customers, partners and society overall.

In recent years, the Group's quality activities for its solutions business have increased in importance. Beginning in 2017 in collaboration with the Pilbara Mining Solution Center in Australia, the Bridgestone Group structured a quality management system for the solutions service network. More recently, in 2019, the acquisition of Webfleet Solutions provided a framework to reinforce the global quality management system to expand and accelerate our quality activities on the new business domains.

We aim to deliver immediate benefits and continuously enhance the value to our customers and society in alignment with the Bridgestone Group's strategy to develop a sustainable solutions business within the Bridgestone T&DPaaS platform.

# NEW QUALITY ASSURANCE SYSTEM UTILIZING BIG DATA

As a part of the Bridgestone Group's quality assurance system evolution, we are now promoting Prediction Technology based on big data leading to higher value for our customers and more efficient Bridgestone internal processes. This information provides useful insights to activate actions at an early stage, improve upstream processes by reducing variations, and predict and enhance product and solutions performances. Finally, by gathering market data and customer feedback, the deployment of prediction technology will allow co-creating higher value for our customers and society.

More information on the Bridgestone Group's commitment to Quality and Customer Value is available online.

# Stakeholder Engagement

The Bridgestone Group prioritizes engagement with stakeholders as it strives to understand their perspectives and to share its point-of-view as well. For example, in January 2020, the Group held a

meeting on environmental, social and governance topics with investors. Learnings from stakeholders help inform the Group's business activities as it continues to sustainably grow its business.

Stakeholder Group	The Bridgestone Group Responsibilities	Communication Channels
Customers	Developing appealing products/services     Providing timely response and support     Providing appropriate information     Effectively managing customer information	Responses to Customer Communication Center inquiries Analysis, database compilation and internal utilization of customer input Bridgestone Innovation Gallery dedicated to Bridgestone history and innovation initiatives Websites and social media Daily sales and service activities (retail stores, dealer channels, online commerce) Customer satisfaction survey Auto shows and exhibitions
Shareholders And Investors	<ul> <li>Providing appropriate and timely information</li> <li>Maximizing corporate value</li> </ul>	<ul> <li>Annual Shareholders' Meeting</li> <li>Corporate Governance Code Report</li> <li>Corporate Governance Report</li> <li>Financial results review meetings</li> <li>Investor relations website</li> <li>Reports based on International Integrated Reporting Framework</li> <li>Individual meetings with investors</li> <li>ESG meeting with investors: ESG meeting was held on January 2020 at Tokyo. Global CSTO presented the Group's sustainability journey to investors</li> </ul>
Business Partners	Ensuring fair and impartial transactions     Communicating Sustainable     Procurement Policy	<ul> <li>Daily procurement activities</li> <li>Procurement policy explanatory forums/Sustainability seminars</li> <li>Development of Sustainable Procurement and Global Human Rights policies</li> <li>Supplier awards</li> <li>Discussions with management (distributor meetings)</li> </ul>
Employees	Respecting human rights Promoting diversity and inclusion, including diverse working styles Developing and utilizing human resources Promoting occupational health and safety, and health and productivity management Facilitating mutual understanding between management and labor	Bridgestone Code of Conduct and Global Human Rights Policy Employee engagement survey Personnel evaluation systems and career development consultation In-house open job application systems Meetings between labor and management In-house newsletters and intranet Employee meetings and trainings Bridgestone Group Awards and other reward systems Internal events related to the Olympic and Paralympic Games
Local Communities, NGOs	<ul> <li>Contributing to local communities</li> <li>Preserving local environments</li> <li>Supporting activities in locations with the Bridgestone Group operating sites</li> </ul>	<ul> <li>Donations and social contributions</li> <li>Facility tours</li> <li>Environmental and safety education activities</li> <li>Sponsorship and aid for local events</li> <li>Olympic and Paralympic sponsorships</li> <li>Disaster relief support</li> <li>Dialogue and collaborations with NGOs</li> </ul>
Government Agencies, Industry Organizations And Education Institutions	<ul> <li>Contributing to the development of a safe and reliable mobile society</li> <li>Supporting education activities</li> <li>Participating in industry economic impact studies and supply chain assessments</li> </ul>	Trade association memberships, committees and conferences Dialogue and collaborations with economic and industry organizations Engagement with government officials Participation in the <u>Tire Industry Project</u> and the <u>Global Platform for Sustainable Natural Rubber operated under the World Business Council fo Sustainable Development Interaction and exchanges of opinion with municipal government agencies Communication, coordination and support of industry-government-academia partnerships</u>

# **Bridgestone Group Awards 2020**

The Bridgestone Group Awards recognize innovation and continuous improvement toward the management goal of being a truly global company and Dan-Totsu (the clear and absolute leader) in all aspects of its business.

All Bridgestone Group organizations and employees are eligible for the Awards, which represent the highest level of recognition within the organization. Based on the Group's CSR commitment, *Our Way to Serve*, the awards include five categories: Achievement, Mobility, People, Environment and Management Fundamentals. The Bridgestone Group Awards 2020 winners are listed below and included within this Sustainability Report.

# **Achievement**

Bridgestone Corporation, Bridgestone Asia Pacific Pte. Ltd., Bridgestone Australia Ltd.

Global Activation of Bridgestone World Solar Challenge (see page 42)



# **Bridgestone Corporation**

Innovative Tough Rubber Development (see page 17)



More information on the Bridgestone Group Awards is available online.

# Mobility

# Bridgestone Europe NV/SA

Solution Journey : Development of New Solution Business Operating Model (see <u>page 14</u>)



# People

# **Bridgestone Retail Operations, LLC**

Automotive Service Educational Program for High School Students

# **Bridgestone Corporation**

Contribution to Local Society with Technology and Teammates

# **Environment**

### Bridgestone Tire Manufacturing (Thailand) Co., Ltd.

Non-Thermal Plasma: A New Technology for Effective Odor Control with New Technology

# **Bridgestone Corporation**

Development of New Technology for Sustainable Use of Rare Resources

# **Management Fundamentals**

**Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş.**Digital Transformation for Effective Operation

### Bridgestone India Private Ltd.

Acceleration of OE Tire Development in India

# **ESG Data**

# See the Bridgestone Group's <u>ESG data</u> online for complete information.

All of the Bridgestone Group's environmental data and a portion of its social data in FY2019 are <u>verified by Lloyd's Register Quality Assurance (LRQA)</u>, a third-party institution, to ensure the accuracy and transparency of this information. The Group has also received gap analysis for part of its social data by LRQA to improve data calculation method and aggregation method.

# **LEGEND**

FY2019 data items in **bold** are those for which assurance is provided by LRQA. FY2019 data items in *italic* are those reviewed through the verification processes by LRQA.



# Environment-related Data<sup>1</sup>

Data item	FY2016	FY2017	FY2018	FY2019	GRI
Materials					
Amount of raw materials used	4,795 thousand tonnes	5,039 thousand tonnes	5,223 thousand tonnes	5,043 thousand tonnes	301-1
Resource productivity <sup>2</sup>	JPY 696 thousand/tonnes (USD 5.97 thousand/tonnes)	JPY 723 thousand/tonnes (USD 6.40 thousand/tonnes)	JPY 699 thousand/tonnes (USD 6.30 thousand/tonnes)	JPY 699 thousand/tonnes (USD 6.38 thousand/tonnes)	301-
Amount of recycled rubber	16,356 tonnes	20,369 tonnes	21,155 tonnes	19,022 tonnes	301-
Energy					
Total energy consumption	44,945 thousand GJ	45,838 thousand GJ	46,441 thousand GJ	44,994 thousand GJ	302-
Energy consumption (fuel) <sup>3</sup>	26,416 thousand GJ	26,932 thousand GJ	27,308 thousand GJ	26,192 thousand GJ	302-
Energy consumption (purchased electricity)	4,650 thousand MWh	4,802 thousand MWh	4,929 thousand MWh	4,850 thousand MWh	302-
Energy consumption (purchased steam)	1,797 thousand GJ	1,630 thousand GJ	1,429 thousand GJ	1,382 thousand GJ	302
Energy consumption per unit of sales	1,347 GJ/JPY 100 million (1,569 GJ/USD million)	1,258 GJ/JPY100 million (1,422 GJ/USD million)	1,272 GJ/JPY100 million (1,412 GJ/USD million)	1,276 GJ/JPY100 million (1,398 GJ/USD million)	302
Total energy consumption (renewable)	-	-	4,350 thousand GJ	4,485 thousand GJ	302
Total energy consumption (non-renewable)	-	-	42,091 thousand GJ	40,509 thousand GJ	302
Water and Effluents					
Total water withdrawal <sup>4</sup>	71,542 thousand m <sup>3</sup>	68,685 thousand m <sup>3</sup>	71,303 thousand m <sup>3</sup>	68,287 thousand m <sup>3</sup>	303
Water withdrawal (surface water)	3,322 thousand m <sup>3</sup>	3,258 thousand m³	2,926 thousand m <sup>3</sup>	3,131 thousand m <sup>3</sup>	303
Water withdrawal (groundwater)	10,061 thousand m <sup>3</sup>	10,209 thousand m <sup>3</sup>	10,328 thousand m <sup>3</sup>	9,719 thousand m <sup>3</sup>	303
Water withdrawal (water supply, industrial water)	19,702 thousand m <sup>3</sup>	18,793 thousand m <sup>3</sup>	18,368 thousand m <sup>3</sup>	17,593 thousand m <sup>3</sup>	303
Water withdrawal (seawater)	38,457 thousand m <sup>3</sup>	36,426 thousand m <sup>3</sup>	39,681 thousand m <sup>3</sup>	37,844 thousand m <sup>3</sup>	303

<sup>1</sup> Data represents all Bridgestone Group facilities for the period of January 1 – December 31 for each year referenced. Part of the data includes estimated figures.

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<sup>&</sup>lt;sup>2</sup> Sales per raw material used.

<sup>&</sup>lt;sup>3</sup> Includes fuels used for in-house power generation

<sup>&</sup>lt;sup>4</sup> The water withdrawal does not include the recycled water from third party and the rainwater

# **ESG Data**

# **Environment-related Data**<sup>1</sup>

Data item	FY2016	FY2017	FY2018	FY2019	GRI		
Emissions							
Greenhouse gas emissions (Scope 1) <sup>5</sup>	1,828 thousand t-CO <sub>2</sub>	1,871 thousand t-CO <sub>2</sub>	1,891 thousand t-CO <sub>2</sub>	1,807 thousand t-CO <sub>2</sub>	305-1		
Greenhouse gas emissions (Scope 2, market-based) <sup>5</sup>	2,448 thousand t-CO <sub>2</sub>	2,327 thousand t-CO <sub>2</sub>	2,264 thousand t-CO <sub>2</sub>	2,138 thousand t-CO <sub>2</sub>	305-2		
Greenhouse gas emissions (Scope 3)°	122,834 thousand t-CO <sub>2</sub>	128,884 thousand t-CO <sub>2</sub>	135,669 thousand t-CO <sub>2</sub>	121,566 thousand t-CO <sub>2</sub>	305-3		
CO₂ emission reduction rate in the operations and products' after-use (from a 2005 baseline)	29%	35%	33%	34%	305-5		
NOx emissions <sup>7</sup>	2,009 tonnes	2,055 tonnes	2,068 tonnes	1,969 tonnes	305-7		
SOx emissions <sup>7</sup>	1,126 tonnes	1,141 tonnes	937 tonnes	850 tonnes	305-7		
Waste							
Volume of waste generated <sup>8</sup>	292 thousand tonnes	303 thousand tonnes	352 thousand tonnes	360 thousand tonnes	306-3		
Volume of recycled waste	263 thousand tonnes	274 thousand tonnes	311 thousand tonnes	308 thousand tonnes	306-4		
Recycling waste rate	90%	90%	88%	86%	306-4		
Volume of waste to landfill	30 thousand tonnes	30 thousand tonnes	41 thousand tonnes	52 thousand tonnes	306-5		
Environmental Manageme	nt						
Sites with ISO 14001 certification <sup>9</sup>	99.4%	98.7%	98.7%	98.1%	-		

- Data represents all Bridgestone Group facilities for the period of January 1 December 31 for each year referenced. Part of the data includes estimated figures.
- 5 Calculated CO<sub>2</sub> emissions as GHG emissions
- <sup>6</sup> Category 8, 13 and 15 are excluded from the 15 categories in Scope 3 of the GHG protocol.
- <sup>7</sup> Emissions from combustion of fossil fuels estimated based on fuel consumption data and corresponding emission factors.
- $^{\rm 8}\,$  Total volume of waste including non-hazardous waste and regulated hazardous waste.
- 154 sites are targeted for ISO 14001 certification/151 sites are certified (98.1%). The Bridgestone Group requires all manufacturing locations with 50 employees or more to achieve

# Social- and Governance-related Data

Data item		FY2016	FY2017	FY2018	FY2019	GRI
	Total	143,616	142,669	143,509	143,589	
	Japan	28,326	28,375	28,793	29,544	
Number of employees	Americas	60,798	59,750	58,998	57,054	102-7
	Europe, Russia, Middle East and Africa	17,240	17,510	17,637	18,501	
	China, Asia Pacific	37,252	37,034	38,081	38,490	
	Total	14	16	9	14	
Global Executive Committee members	Number of foreign members	6	8	5	7	405-1
	Percentage of foreign members	42.9%	50.0%	55.6%	50.0%	
	Total	52	52	52	60	
Executive Officers, Vice Presidents and Officers <sup>1</sup>	Number of foreign members	9	12	10	11	405-1
	Percentage of foreign members	17.3%	23.1%	19.2%	18.3%	
Product safety	Sites with ISO 9001 certification <sup>2</sup>	98.7%	99.0%	99.3%	99.4%	416-1

Data as of December 31 for each year referenced.

- <sup>2</sup> 154 sites are targeted for ISO 9001 certification/153 sites are certified (99.4%). Bridgestone requires all manufacturing locations in which it has 50% or more share ratio to achieve ISO 9001

# Social- and Governance-related Data

Data item	Region	Total	Тор			Other	GRI	
				Management positions⁵	Junior Management positions <sup>6</sup>	Total management positions	staff and positions	
	Japan	11.5%	0.0%	2.0%	2.1%	2.1%	13.9%	
	Bridgestone Corporation	9.0%	0.0%	2.9%	0.0%	2.1%	10.1%	
Female Ratio <sup>3</sup>	Americas <sup>7</sup>	11.7%	21.6%	20.6%	10.3%	12.9%	11.5%	405-1
	Europe, Russia, Middle East and Africa	11.7%	12.6%	17.8%	17.1%	17.2%	11.0%	
	China, Asia Pacific	8.2%	10.0%	10.2%	10.8%	10.6%	7.9%	

<sup>&</sup>lt;sup>3</sup> Data as of December 31, 2019 from 120,612 employers and employees (84 percent of total workforce).

Data item	Data item			
	Total	13		
	Men	11		
Number of directors in Bridgestone Corporation (as of March 24, 2020)	Women	2	102-22	
	Of which independent external directors	8	102-22	
	Men	6		
	Women	2		

Data item		2019	GRI
Directors	Total fees	JPY 216 million/ USD 1.982 million	
Independent external directors	Total fees	JPY 138 million/ USD 1.266 million	102-35
Executive officers	Total fees	JPY 565 million/ USD 5.183 million	

<sup>•</sup>Data on fees for January 1 - December 31, 2019.

<sup>•</sup>The figures above include remuneration paid to three members of the Board who retired during the current period and one Executive Officer who resigned during the current period.

Data item		FY2016	FY2017	FY2018	FY2019	GRI
Industrial Lost-time injuries frequency rate of employees		-	-	-	2.96	403-9
	Lost-time injuries frequency rate of contractors	-	-	-	1.991	403-9
	Number of fatalities of employees	1	1	0	1	403-9
	Number of fatalities of contractors	2	2	1	0	403-9

<sup>&</sup>lt;sup>1</sup> Second half of 2019.

# **Management-related Data**

Data item	FY2016	FY2017	FY2018	FY2019	GRI
Bridgestone Group sales	JPY3,337.0 billion/ USD 28,646 million	JPY3,643.4 billion/ USD 32,242 million	JPY3,650.1 billion/ USD 32,883 million	JPY3,525.6 billion/ USD 32.18 billion	102-7
Rubber production volume	1,800,000 tonnes	1,880,000 tonnes	1,860,000 tonnes	1,840,000 tonnes	102-7
Number of manufacturing facilities <sup>1</sup>	169	164	163	163	102-7

 $<sup>^{\</sup>scriptscriptstyle 1}$  Number of facilities as of April 1 each year. All other data reported as of December 31 each year.

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<sup>&</sup>lt;sup>4</sup> Management positions with a reporting line no more than two levels below the CEO in each company.

<sup>&</sup>lt;sup>5</sup> All managerial position excluding "Top management positions" and "Junior management positions."

<sup>&</sup>lt;sup>6</sup> First-line managers, junior managers and the lowest level of management within a company's management hierarchy <sup>7</sup> Excluding Firestone Natural Rubber Company (Liberia).



# Sustainability Report 2019–2020

# **Bridgestone Corporation**

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