

SUSTAINABLE MOBILITY

HANKOOK TIRE & TECHNOLOGY 10th ANNIVERSARY REPORT 2018/19

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CEO's Message

Distinguished stakeholders,
First of all, I would like to express
my gratitude to all the stakeholders
in our enterprise for your continued
interest and support.



President & CEO
Hyun Bum Cho



Over the past year, we have encountered a number of challenges stemming from the growing uncertainty in global financial markets and fierce competition in the auto industry. In addition, the steady expansion of EV-related industries and segmented and diversified customer needs mean we must proactively respond to a constantly changing market environment.

In response, we formulated strategies to face these challenges with agility and were able to enjoy concrete results, including the launch of our second generation of tires designed for the needs of EVs, the supply of tires for the Audi RS2, and the acquisition of both Model Solution, a Korea-based digital prototype solution company, and the German tire retailer Reifen-Muller. In addition, we ranked first in the annual tire test performed by Auto Bild, a leading German automobile magazine based in Hamburg, proving the well-deserved reputation of the Hankook brand.

We also concentrated efforts on creating social and environmental value. Since the establishment of a company-wide CSR management system, customized activities by region have been conducted within our overseas networks. As the role of companies in protecting the environment and managing supply chain magnifies, we declared an SNR (sustainable natural rubber) policy in response. As a recognition of our efforts at sustainability management, we have been listed on the Dow Jones Sustainability Indices (DJSI) World Class for the third consecutive year.

This year marks the 10th anniversary of our publishing this CSR report. This report will serve as an opportunity for us to look back on our efforts over the last decade and renew our commitment to ensuring sustainable management. Moreover, we would like to proactively communicate with our stakeholders by transparently disclosing last year's performance and this year's targets here in this report. We will not be complacent with our short-term gains, and will continue to pursue our long-term goals through the establishment of our CSR Vision 2030 Roadmap.

Hankook Tire & Technology has been supporting the UN Global Compact and the SDGs and will continue to faithfully implement them in pursuit of the sustainable development of human society. We will also proactively fulfill our corporate social responsibility while enhancing our global competitiveness. Drawing upon our unwavering commitment to sustainable management, we look forward to your interest and support. Thank you.

Hankook Tire & Technology's 10 Years of Milestones

This year marks the 10th anniversary of publishing our CSR report. We would like to share with you our efforts and achievements over the last decade.

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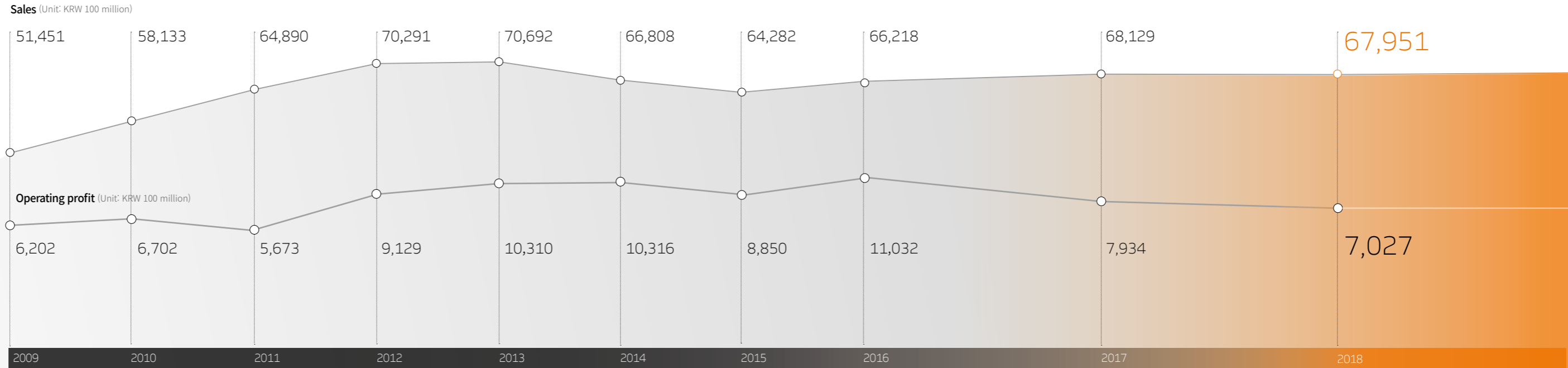
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- Acquired OHSAS 18001 and KOSHA 18001 certification
- Built an integrated EHS management system
- Formulated a framework for corporate philanthropy

- Established a CSR committee at the Hankooktire China Headquarters
- Joined and supported the UNGC
- Listed on the DJSI Korea for the second consecutive year

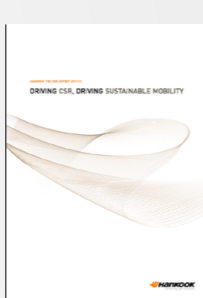
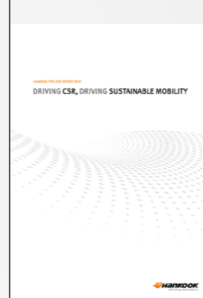
- Implemented a CSR management system at the Indonesia plant and ASEAN-India offices
- Implemented a framework for crisis management at the enterprise level
- Obtained a green company certification at the Geumsan Plant
- Founded the Allkidstra orchestras in Geumsan and Chubu
- Listed on the DJSI Asia Pacific for the second consecutive year
- Selected for Carbon Management Sector Winners by CDP Korea

- Declared our CSR Vision 2020 Roadmap
- Launched a social housing project for those with housing issues
- Established Hankook Donggrami Partners according to the 'subsidiary-type standard business system'
- Listed on the DJSI World for the first time
- Acquired ISO 22301 certification at the Daejeon and Geumsan plants

- Declared a sustainable natural rubber policy
- Declared the E-Circle
- Listed on the DJSI World for the third consecutive year



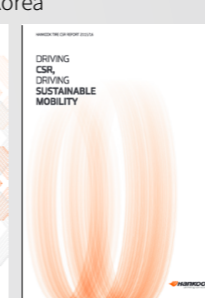
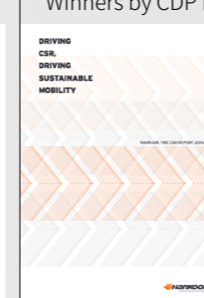
- Established a dedicated organization for CSR management
- Launched the CSR Strategy Committee (management) and the CSR Steering Committee (working-level)



- Listed on the DJSI Korea for the first time.
- Implemented a risk monitoring system (RMS)



- Established a CSR management system at the Hankooktire Europe Headquarters
- Received a special award by CDP Korea
- Listed on the DJSI Asia Pacific for the first time



- Declared human rights management (compliance with the UN Guiding Principles on Business and Human Rights)
- Disclosed our achievements on sustainable value chain and SDGs



- Established a CSR committee at the Hankooktire America Headquarters
- Listed on the DJSI World for two years in a row
- Became the first company in Korea to be included on CDP Supplier Engagement Leader Board
- Acquired ISO 22301 certification at the Hungary plant



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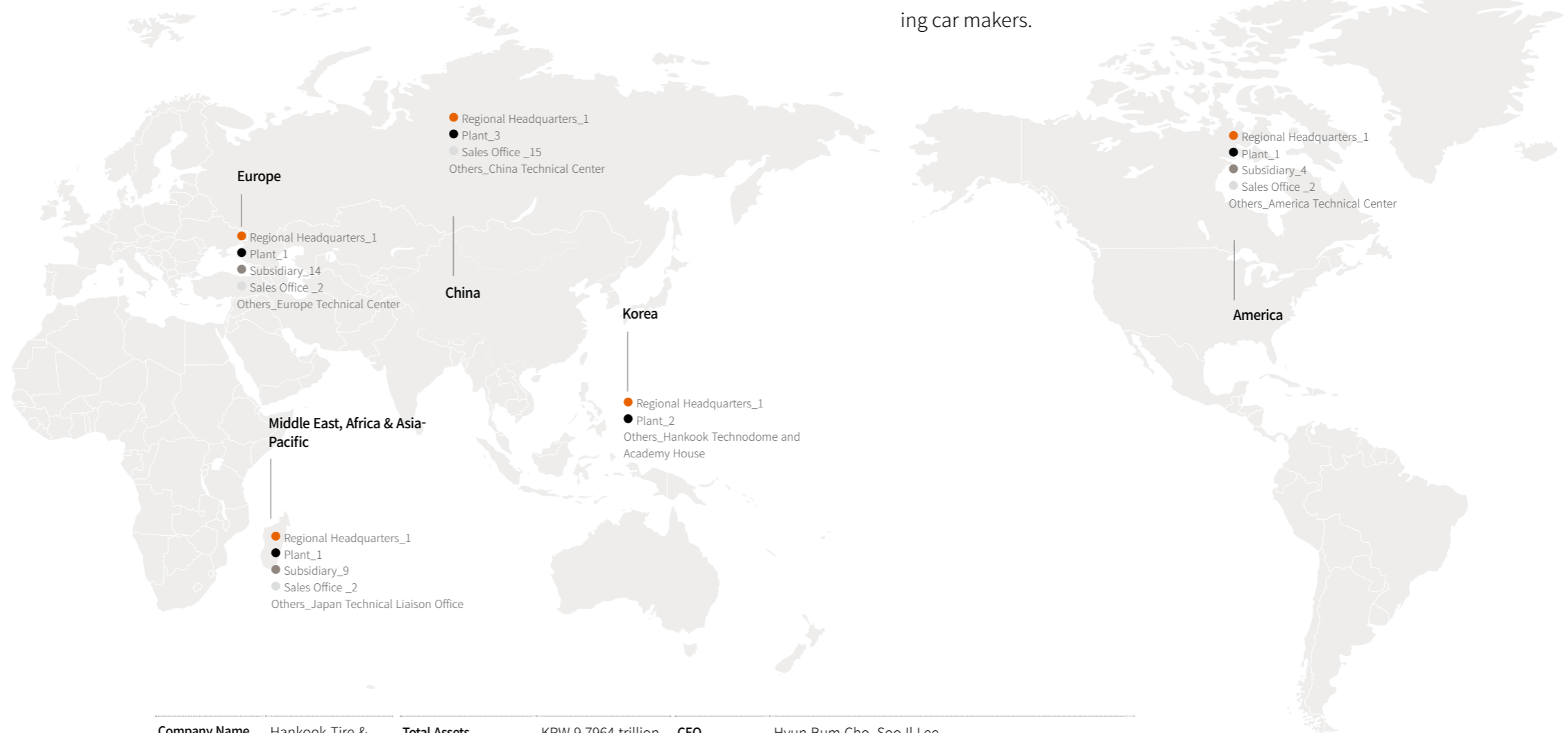
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Company Overview

Since its establishment in 1941, Hankook Tire & Technology has promoted its brand value and strengthened quality competitiveness to achieve technological leadership. As a result, we have grown into the 7th largest tire maker in the world, offering the best possible driving experience to customers in 180 countries.

Global Network

We are implementing customized strategies within our global network consisting of five regions to achieve balanced growth from advanced and emerging automotive markets. To meet different customer needs, our sales network encompasses Europe, the Americas, the Middle East, Africa and Asia-Pacific regions. In addition, 'tire communication channels' (OE tire offices) are being operated in Korea, China, Germany, the US, and Japan for the close cooperation with leading car makers.



Company Name	Hankook Tire & Technology Co., Ltd.	Total Assets	KRW 9.7964 trillion	CEO	Hyun Bum Cho, Soo Il Lee
		Total Equity	KRW 6.7903 trillion	Main Business	Manufacturing, reproducing, processing and selling automobile tires, tubes, and components
Global Sales	KRW 6.7951trillion	Date of Establishment	September 3, 2012 ²⁾	Headquarters	133, Teheran-ro, Gangnam-gu, Seoul, Korea(Yeoksam-dong)
Operating Profit	KRW702.7billion	IPO (Initial Public Offering)	October 4, 2012 ²⁾	Telephone	82-2-2222-1000
Operating Margin	10.3%				

1) OE: Original Equipment
2) The company was established by spinning off the tire business of Hankook Tire Co., Ltd. as of September 1, 2012, and listed on the stock market on October 4, 2012

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Mission & Vision

Mission Frame

MISSION

Future Innovated, Innovation Realized.

Business Principle

- We seek innovation in all aspects
- We think of customers as our top priority
- We grow with our employees
- We fulfill our social responsibilities based on sustainability
- We make an effort to maximize shareholder value

Core Value

- We pursue the Proactive Leadership
- Passion
- Innovation
- Collaboration
- Global

Vision Frame

VISION

The Future Driving Innovator

Moving Forward 2025

- Achieve Premium Brand Position
- Become the Technology Leader
- Change the game with Innovation
- Net Sales 10 billion\$
- EBITDA margin ≥ 20%
- ROIC ≥ 13%

Strategic Direction

- Well Balanced Portfolio
- Premium Brand Elevation
- Technology Leadership
- Market Winning Service
- Innovation DNA

Product



Hankook represents all Hankook Tire & Technology brands both in Korea and overseas. We offer wide-ranging sub-category brands to match the segmentation of vehicle models and products that reach out to diverse customers across the globe.

ventus	Ultra high performance tires and racing tires	Smart	Economical tires for the domestic market
KINERGYECO	Eco-friendly tires for the global market	vanTRA	VAN tires
enfren eco	Korea's first eco-friendly tires	Winter i*cept	Winter tires (Studless)
Dynapro	SUV tires	Winter i*Pike	Winter tires (Stud)



Laufenn was created in an aim to deliver a practical and economical driving experience to drivers and was designed to meet the needs of consumers who pursue a simple yet sophisticated lifestyle. Laufenn has wideranging product brands of S, G, X, and I Fit.



Aurora, which means 'tires that know the road well', is better known among our overseas clients and carries the product brand name 'Route Master'.



Kingstar means 'tires that best fit the road conditions', and carries the product brand name 'Road Fit'.

Sustainable Value Chain

For sustainable growth, we effectively distribute to our stakeholders the economic, social and environmental value created across the entire process of the value chain from R&D to procurement, manufacturing, use of products, recycling and disposal.

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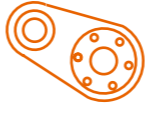



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	R&D	Raw Materials	Manufacturing	Distribution	Use	Recycling & Disposal
Sales KRW 6,795.1 billion	<ul style="list-style-type: none"> Persons in charge of R&D 1,085 persons Percentage of Persons in charge of R&D 5.3% Percentage of R&D expenditures 2.82% Domestic and international registration of new patents 88 items 	<ul style="list-style-type: none"> Procurement of raw materials KRW 2,230.1 billion Raw material suppliers subject to CSR assessment 47 	<ul style="list-style-type: none"> Newly-hired employees : 1,860 persons Training hours per employee 52 hours Training expenses ¹⁾ KRW 1.9 billion Employee salary KRW484.9 billion Recycled waste : 38,701,599kg Percentage of treated water recycling 44.05% Energy consumption intensity: 10.45GJ/ton of finished product GHG emissions intensity 1.006tCO₂-eq/ton of finished product 	<ul style="list-style-type: none"> Advertising expenses KRW 222 billion Global retail network 5,257 stores 	<ul style="list-style-type: none"> Corporate tax KRW 167.3 billion Dividends KRW 55.7 billion Donation to local communities ¹⁾ KRW 3.28 billion Percentage of eco-friendly products (based on quantities) 64.7% 	<ul style="list-style-type: none"> Percentage of end-of-life tire recycling 95.3% Sales of retread tire 8,757 EPR (Extended Producer Responsibility) contributions KRW 2 billion

1) Since the data was calculated based on the consolidated financial statements disclosed in our 2018 business report, training expenses and donation were partially reflected.

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SDG Performance

We are in support of the UN Sustainable Development Goals (SDGs) and committed to addressing environmental and human issues. In particular, we will concentrate on four targets: achieving gender equality and empowering women; promoting economic growth and employment; addressing inequality; and responding to climate change issues



5 GENDER EQUALITY



Achieve gender equality and empower all women and girls

- Provided training on the prevention of sexual harassment to 6,688 employees and conducted monitoring activities
- Established a human rights management system based on the UN Guiding Principles on Business and Human Rights to promote gender equality and empower women



8 DECENT WORK AND ECONOMIC GROWTH



Promote sustained, inclusive and sustainable economic growth, employment and decent work for all

- Made a total of KRW 339,553 million worth of investments in 2018 (unit: KRW million)
 - ① Korea: 187,136
 - ② China: 82,598 (global)
 - ③ Europe: 24,240
 - ④ America: 28,543
 - ⑤ Asia-Pacific: 15,839
 - ⑥ Other regions: 1,196
- Hired a total of 1,860 employees in 2018 (unit: employees)
 - ① Korea: 166
 - ② China: 688
 - ③ Europe: 186
 - ④ America: 745
 - ⑤ Asia-Pacific: 75



10 REDUCED INEQUALITIES



Reduce inequality within and among countries

- Conducted employee volunteer activities: 5,993 employees / 478 activities / 20,403 hours
- Three major Mobility projects for the vulnerable
 - ① Car donation: 50 cars
 - ② Tire donation: 6,253 tires (global)
 - ③ Tuieum Bus: 620 buses
- Operated the DreamWith project for strengthening the capacity of local communities in addressing childcare and youth issues: 14 organization from local communities / 224 participants



13 CLIMATE ACTION



Take urgent action to combat climate change and its impacts

- Reduced 17,408tCO₂-eq annually through activities, including adopting equipment with high energy efficiency, recovering waste heat and improving processes
- Optimized the transportation routes of finished products to reduce GHG emissions
- Launched the low-carbon tire Enfren Eco, with CO₂ emissions reduced by 12% compared to those of existing products (cutting 43 kgCO₂-eq per product)
- Reduced GHG emissions through the sales of key low-carbon products: 3.52tCO₂-eq/ton of finished product, cut GHG emissions through the sales of our low-carbon products: 3.32tCO₂-eq/ton of finished product

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Integrated CSR Management System

Our declaration

Hankook Tire & Technology strives to enhance corporate value and pursue robust and sustainable growth together with its customers, business partners, local communities, and employees by fulfilling its corporate social responsibility. To this end, we aim to promote CSR as the business management foundation upon which our employees act at work. Through enterprise-wide integrated CSR management, we will offer our stakeholders the greatest possible value and lead sustainable development and growth not just in the tire sector, but across the entire mobility industry.

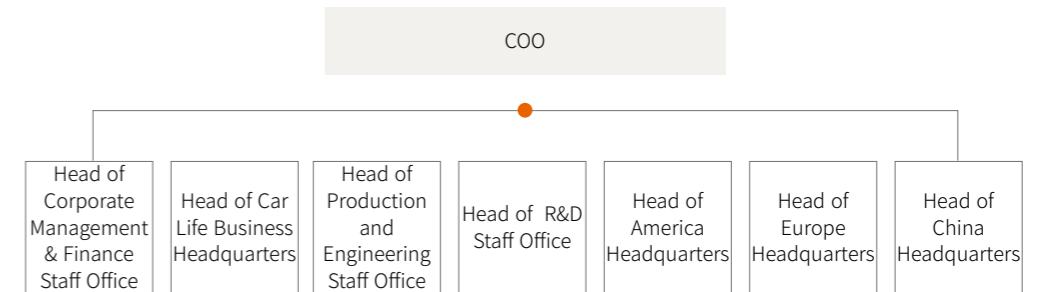
Responsible organizations

Our integrated CSR management system is operated by the CSR Team. This team formulates company-wide CSR policies and plans activities under the supervision of the head of the HR Division. These policies are reported to and approved by management on the CSR Strategy Committee. The team operates the CSR Steering Committee to provide guidance on policy direction to steering committees, monitors their quarterly activities, and discusses issues for their resolution. In order to support the seven sub-committees in their strategy formulation and operations, two working-level employees with related expertise from the CSR Team and the team responsible are assigned to each sub-committee. They present opinions from the perspective of experts at the quarterly committee meetings.

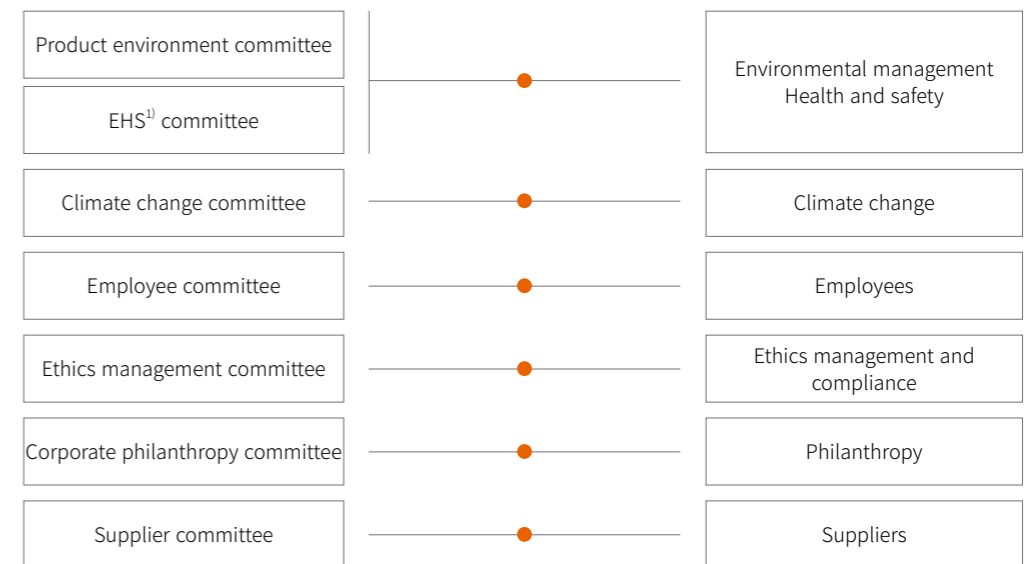
CSR committees

We have the CSR Strategy Committee, CSR Steering Committee, and CSR working-level council. The Steering Committee consists of seven committees in which enterprise-wide CSR activities are conducted. The results are reported to the CSR Strategy Committee to discuss future direction.

CSR Strategy Committee



CSR Steering Committee



1) EHS: Environment, Health and Safety

CSR working-level council



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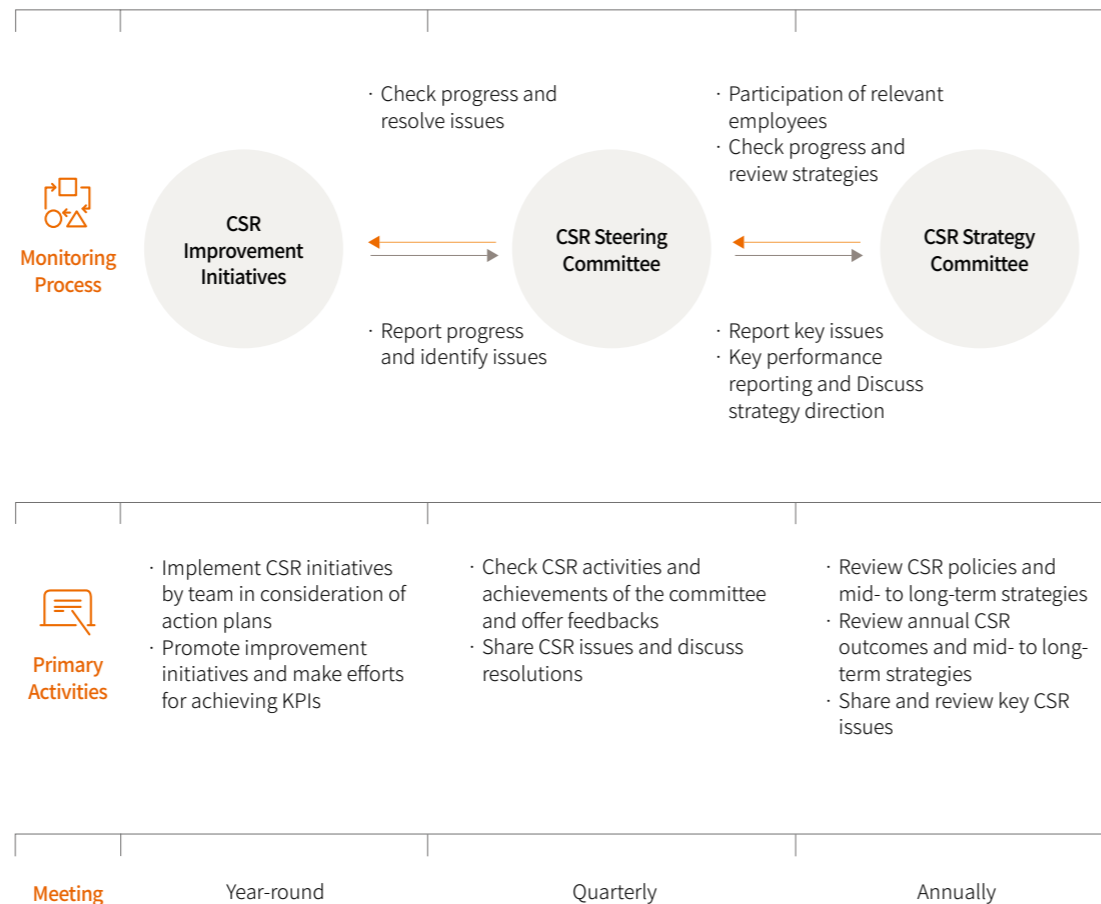
CSR Committee Operation and Monitoring

To ensure integrated CSR management at the company level, the CSR Strategy Committee and the CSR Steering Committee consisting of seven steering committees are operated under the supervision of COO. Pertinent activities are reported and monitored to meet targets in accordance with plans.

We strive to systematically conduct CSR activities at worksites through the integrated CSR management system. The annual CSR Strategy Committee meeting chaired by COO is held in February or March to discuss key issues identified in the previous year, share domestic and international CSR trends, and make decisions on future direction. Based on the decisions, seven steering committees are requested to plan and implement pertinent activities.

Each CSR steering committee operates under the supervision of the heads of pertinent divisions or departments to ensure CSR activities are aligned with business works. With a commitment to realizing the CSR Vision 2020 Roadmap, sub-committees engage in activities according to implementation plans. Quarterly meetings are held at the steering committee level in which related teams discuss issues identified during the implementation of short-/mid-term tasks and set the direction and targets of the next year. The CSR Team monitors meetings and provides guidance on critical issues by analyzing the opinions of internal and external stakeholders and results of external evaluations, and benchmarking leading companies.

Operation and Monitoring of the CSR Committee



2019 CSR Strategy Committee

Date: March 20, 2019

Attendees: A chairperson and members of the CSR Strategy Committee, and the heads of seven steering committees

Agenda

- CSR management status at Hankook Tire & Technology**
 - Reviewing the 2018 DJSI¹⁾ assessment results: identifying items for improvement
- Latest CSR issues**
 - Announcing K-SDGs²⁾
 - Expanding the scope of the policy and initiatives on the use of renewable energy
 - Addressing the issue of an inflow of microplastics into the ocean
 - Strengthening CSR management in the supply chain
 - Conducting CSR activities utilizing IT technology
 - Establishing transparent corporate governance
- CSR 3.0**
 - Reflecting social value
 - Setting mid-/long-term goals for CSR management

1) DJSI: Dow Jones Sustainability Indices
2) K-SDGs: Korean Sustainable Development Goals

In the CSR Strategy Committee meeting in 2019, we reviewed the 2018 DJSI evaluation results in the areas of health and safety, social contribution and product responsibility, shared latest CSR issues, and discussed their potential impact on our business and measures. In the CSR 3.0 session, best practices in terms of business management strategy, qualitative value, and internalization by employees were presented. Participants discussed how to reflect them to the company's business operations. As all of the participants agreed on the necessity for setting targets in the long term, a decision was made to establish mid- to long-term CSR goals.

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CSR Management in Our Overseas Network

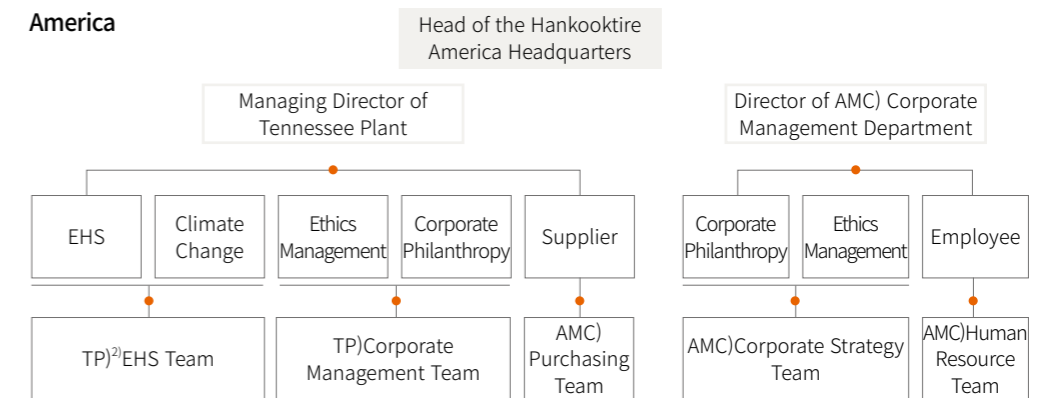
We have expanded the scope of our CSR management and are maintaining related systems across all our overseas networks, including the China Headquarters' CSR committee launched in 2012 and a CSR management system for the America Headquarters established in 2018. CSR activities are planned, implemented, and monitored on an annual basis. Where necessary, the CSR Team provides guidance to support these activities at the company level.

China



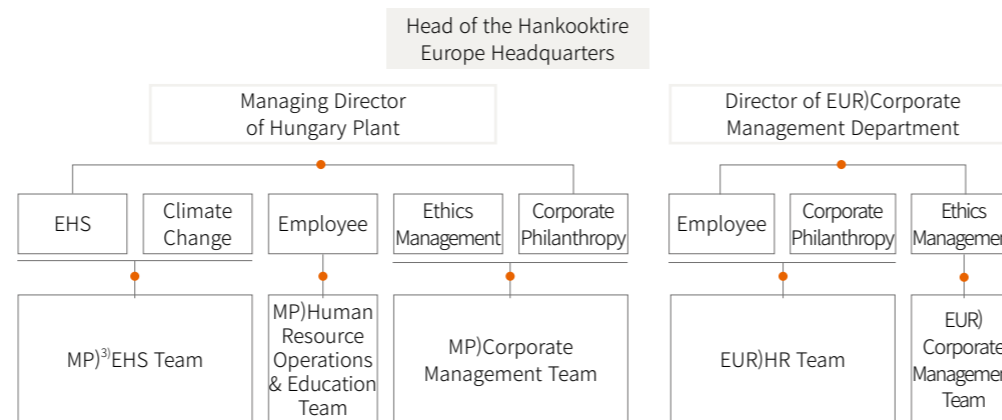
1) HP : Jiangsu Plant / JP : Jiaxing Plant / CP : Chongqing Plant

America



2) TP : Tennessee Plant

Europe



3) MP : Hungary Plant

Indonesia Plant, and the Asia-Pacific, Africa & Middle East Division

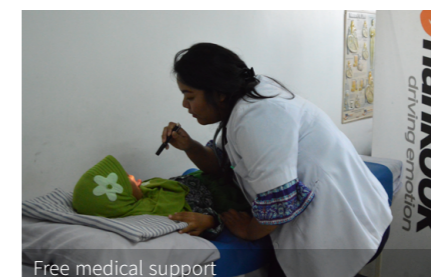


4) IP : Indonesia Plant

Best practices

1.5% decrease of accident KPI at the Hungary plant Our plant in Hungary launches an annual campaign of ten safety rules at worksites to thoroughly manage the work environment. Through the operation of the Work Safety Committee, potential risks factors are identified and addressed to ensure that a culture of safety is established. The plant provides workers from other countries, including Ukraine and Mongolia, with training and tests in their languages. In addition, an EHS Award is given to motivate employees. As a results of its multifaceted efforts, the accident KPI is recorded at 0.67, which is below the target of 0.68.

Customized social contribution activities at the Indonesia Our Indonesia plant is making a lot of efforts to protect the environment and meet the needs of local residents. A wide range of activities are conducted, including providing free food to low income families and free medical support to students in poor hygienic conditions, and launching clean campaigns. In addition, the plant has continued to operate one of our mobility projects, a tire donation program. In 2018, it donated a total of 369 tires.



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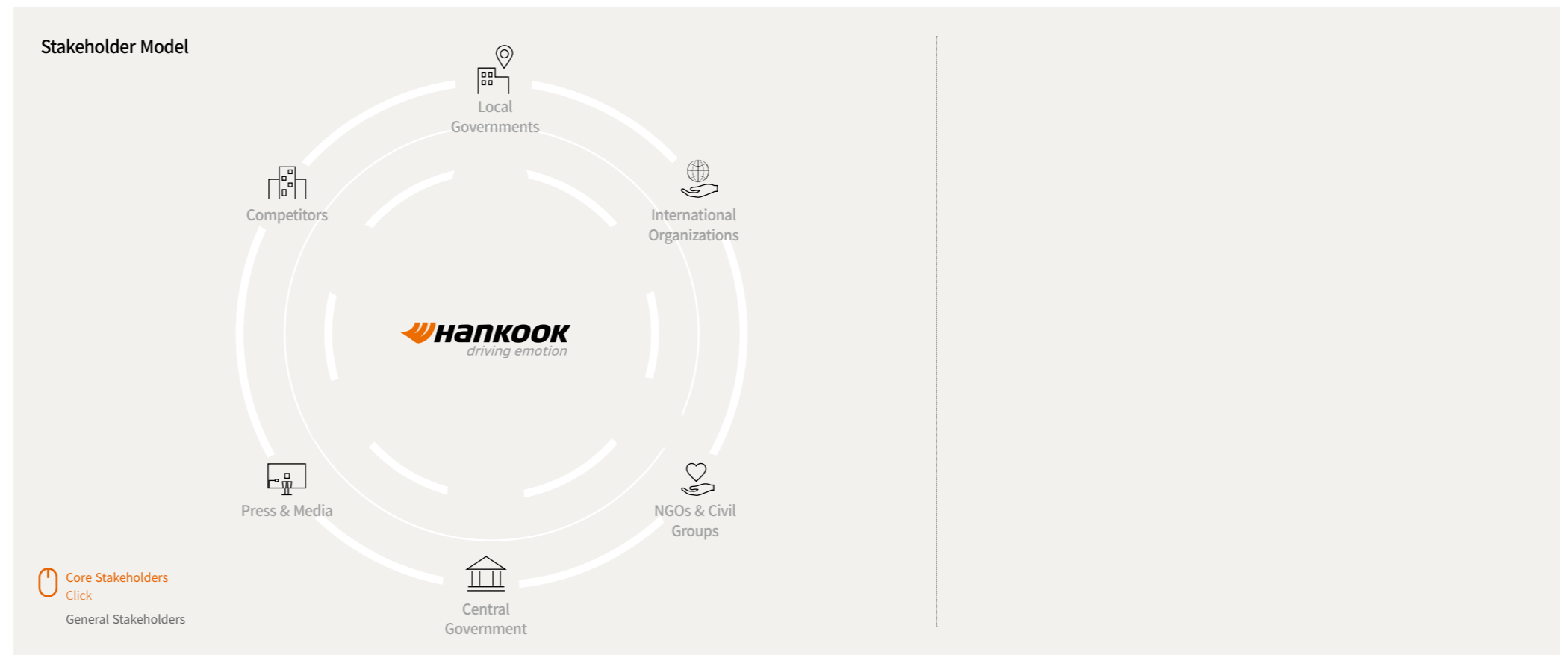
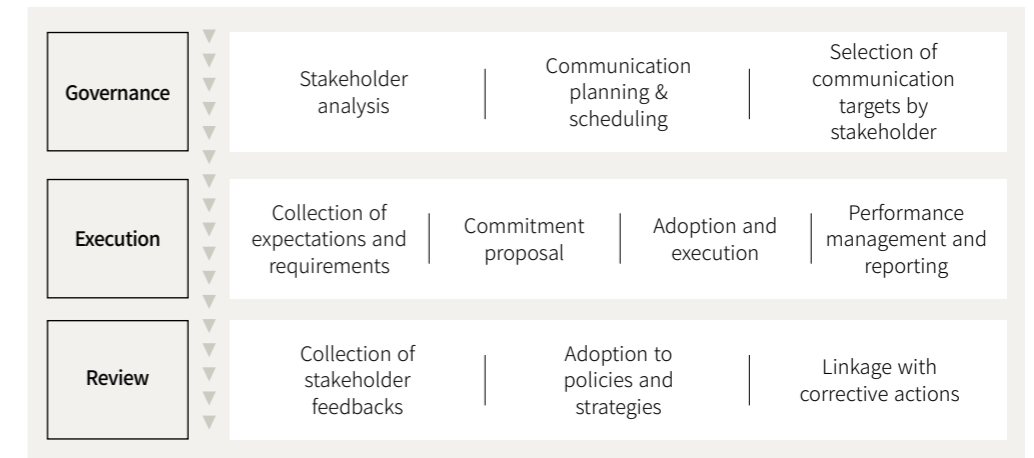
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Stakeholder communication and participation

We group our stakeholders in consideration of their impact on our business activities. Key issues and stakeholder opinions identified through a variety of communications channels are reflected in our business operations to ensure that sustainable value is created.

We categorize our stakeholders as the key group and general group. The key group directly affects and is affected by us, while the general group has a more indirect or potential impact. Our CSR issues are identified through communication with stakeholders and analyses of internal and external corporate environments. We share our CSR performance and targets with them and operate a variety of communication channels to listen to their opinions.

Annual Communication Process with Stakeholders



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CSR Vision 2020 Roadmap

We established the CSR Vision 2020 Roadmap in 2017 with activities to be conducted on an annual basis to achieve set targets by 2020. Our efforts to implement the roadmap will continue through 2019 and we are preparing a Vision 2030 Roadmap by review by each sub-committee.

Area	Progress				2020 Commitment
	2017	2018	2019	2020	
CSR management system 	Establishing the system in the America Headquarters	Running an organization responsible for EHS	Providing guidance and support for CSR management	Providing guidance and support for CSR management	<ul style="list-style-type: none"> Promoting a CSR management system in our overseas network Operating CSR committees by function
	Customer satisfaction and quality management 	Presenting concept tires for Volkswagen and EVs	Participating in Ford's fundraising event for children's diabetes for the children's diabetes foundation the North American International Auto Show; and Auto Shanghai	Diversifying communication activities (PRM ¹⁾); strengthening PR activities regarding future tire technology; and increasing the participation in fundraising events hosted by carmakers	Increasing the supply of future-oriented and eco-friendly OE tires; and innovating our development quality assurance system
Customer satisfaction and quality management 	Promoting 7-step SMART customer response through e-learning	Offering training programs on shop operation: 661 franchise owners took part in the programs.	Providing franchise owners with the programs		<ul style="list-style-type: none"> Offering customer-oriented service and expanding communication channels by securing franchise leadership Providing free mobile vehicle check-up service (200 times per year)
	Offering the SMART CARE service	Launching T'Station.com	Providing total automotive care service (establishing standards for franchise business; and developing service related to Car Life)		
	Expanding the scope of free mobile vehicle check-up service	Providing free mobile vehicle check-up service (174 times)	Conducting activities to promote communication with customers		
Employee health and safety 	Establishing of Self-Control safety management system	Running monthly EHS Innovation TFT meetings and quarterly EHS advisory committee meetings	Safety management (Design For Safety, Near Miss, and contractors)		<ul style="list-style-type: none"> Improving the work environment and strengthening employee health management Developing and promoting a culture of safety Frequency Severity Indicator (FSI) : 0.55
	Addressing equipment and work, particularly in the mixing process, that may cause musculoskeletal diseases	Developing musculoskeletal disease prevention programs	Promoting musculoskeletal disease prevention programs	Managing and updating the programs	
	Offering counseling for stress management to 1,291 employees	Providing 623 managers/supervisors with programs on how to deal with suicidal thoughts and depressed feelings	Offering employees stress-level tests and analyses and counseling service		
	Improving the work environment: enhancing local ventilation for increased efficiency	Conducting the biannual work environment measurement and improving local ventilation systems	Strengthening work environment management	Managing and updating the programs	
Employee value creation 	Selecting a total of six Facilitators from Divisions to promote human rights	Providing programs on awareness-raising on people with disabilities to 6,663 employees	Giving employees training programs on human rights		<ul style="list-style-type: none"> Ratio of female leaders : 4.4% Promoting human rights at the global level Upgrading a system to enhance diversity
	Upgrading a human rights diagnostic test		Taking follow-up measures and monitoring results		
	Checking the operation of a grievance system at worksites	Taking improvement measures for issues identified in the operation of grievance channels			
	Promoting diversity: a total of 172 employees with disabilities (accounting 2.5% of total employees)	Promoting diversity: a total of 204 employees with disabilities	Continuing efforts to supporting female employees and considering employees with disabilities		

1)PRM: Partner Relationship Management

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



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Area	Progress				2020 Commitment
	2017	2018	2019	2020	
Transparency and business ethics 	Refining the code of ethics in August	Running a pilot test of a risk assessment management tool	Ethics management risk assessment: establishing a management tool; formulating procedures for different levels of risks; conducting a risk assessment on a regular basis; and taking measures for improvement		<ul style="list-style-type: none"> Internalizing ethics management through communication Having our ethical management system externally certified
	Providing regular training on ethics management to 2,300 employees	Offering regular online training on ethics management to all of our office and technical employees	Providing regular training on ethics management (common / by job position / by task characteristics); and translating guidebooks in local languages		
	Promoting communication: launching an awareness-raising campaign	Promoting communication: increasing the efficiency of a reporting system; and raising awareness on ethics management			
Win-win partnership in the supply chain 	Reflecting CSR elements in selecting suppliers	Updating and reviewing CSR-related clauses in contracts and company rules	Strengthening the utilization of sustainability guidelines for suppliers	Keeping updated CSR elements in company rules	<ul style="list-style-type: none"> Developing supplier CSR support programs Ratio of suppliers assessed in CSR : 85% Identifying critical tier 2 (secondary) suppliers by 2030
	Conducting CSR audits for suppliers and improving audit items	Completing on-site CSR audits for machinery suppliers	Conducting CSR assessment for suppliers		
		Declaring the Sustainable Natural Rubber Policy Participating in the Global Platform for Sustainable Natural Rubber (GPSNR) as a founding member	Establishing and implementing an action plan for Sustainable Natural Rubber		
		Preparing for the work of identifying the CSR management status of secondary suppliers	Expand the scope of CSR management for suppliers : primary → secondary		
Integrated environmental management 	Upgrading a chemical management and evaluation system	Establishing a chemical inventory	Developing and operating an IT system for chemical management		<ul style="list-style-type: none"> Ratio of eco-friendly products : 60% Waste disposal intensity: 40kg/ton of finished product
	Renewing the eco-design simplified LCA	Setting the target for the use of sustainable material - Increasing the use of renewable carbon and rubber	Establishing mid- to long-term targets in the use of green products - Enhancing RR ¹⁾ and making lightweight products		
	Conducting LCA for two products in the Chongqing plant		Running LCA ²⁾ for two products in the Daejeon plant	Expanding the scope of products for LCA	
	Waste volume: 8 percent decrease from 2016	Conducting activities to reduce a manufacturing defect rate	Setting mid-/long-term targets in the intensity of waste discharged - Reducing waste from manufacturing process - Finding more recycling companies		
Climate change and GHG management 	Setting mid-/long-term targets for reducing GHG emissions		Introducing Energy Management System (ISO 50001)		<ul style="list-style-type: none"> GHG emissions intensity (tCO₂-eq/ton of finished product): reducing 5% by 2020 and 15% by 2030 (base year: 2013)
		Upgrading the e-Saver (IT system for energy management)	Promoting the e-Saver at the enterprise level		
	Reducing GHG emissions by 24,319tCO ₂ -eq	Reducing GHG emissions by 17,408tCO ₂ -eq	Conducting activities to save energy and reduce GHG emissions (improving efficiency and recycling energy)		
			Implementing carbon neutral programs		
	Reviewing the feasibility of introducing photovoltaic power generation and ESS ³⁾	Conducting a feasibility study on cogeneration and purchase of low-carbon steam	Reviewing the introduction of new technology and renewable energy		
Community involvement and development 	Promoting mobility: expanding the scope of car donation (40 cars in 2016 → 50 cars in 2017)	Donating 50 cars to welfare centers	Conducting marketing activities in line with public campaigns		<ul style="list-style-type: none"> Annual volunteer hours per employee : 4.5 hours
	Launching and upgrading an IT system to manage volunteer activities		Launching volunteering teams in overseas plants (in China and the US (Tennessee))		

1) RR: Rolling Resistance 2) LCA: Life Cycle Assessment 3) ESS: Energy Storage System

**INTEGRATED CSR
MANAGEMENT SYSTEM**

Integrated CSR Management System
CSR Committee Operation and Monitoring
CSR Management in Our Overseas Network
Stakeholder communication and participation
Stakeholder Committee
CSR Vision 2020 Roadmap
Materiality Analysis
CSR Steering Wheel 2018/19

MONITORING AREAS

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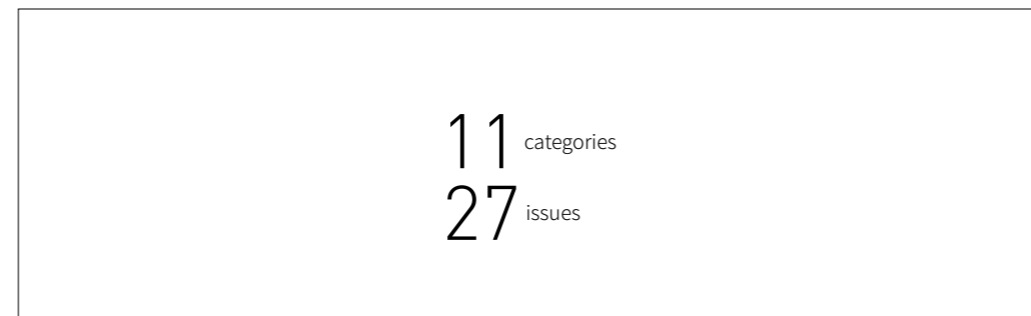
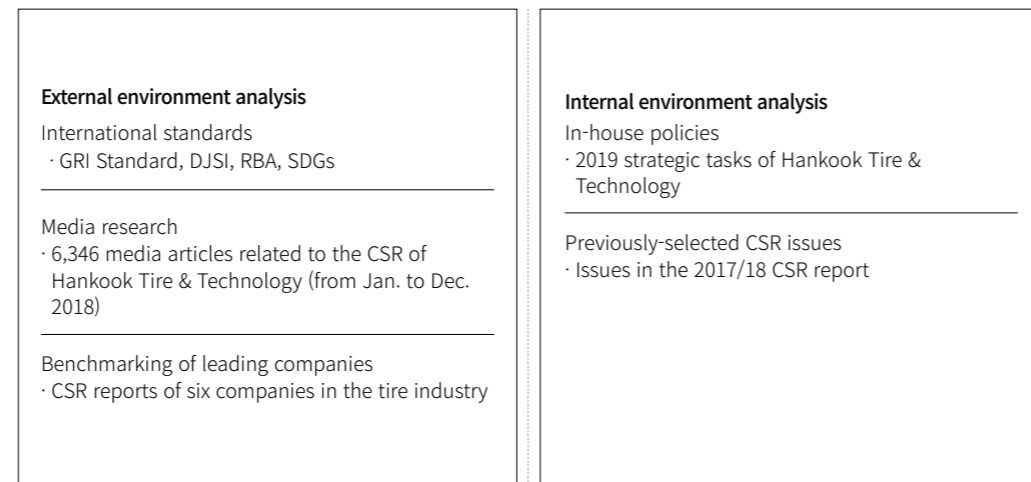
Materiality Analysis

We identify material issues considering their impact on our business and stakeholder interest, conduct activities and report the performance. The issues with higher priority among them are selected as focus areas that are managed under the CSR Steering Wheel.

Step 1: collecting issues ▶▶▶▶▶▶▶▶

When we collected issues, global CSR frameworks, including GRI¹⁾ Standard, DJSI, RBA²⁾, and SDGs, were considered. Issues were re-categorized and re-defined through conducting media research, benchmarking leading companies and analyzing internal corporate policies. As a result of internal and external environment analyses, we defined a pool of 27 issues under 11 categories.

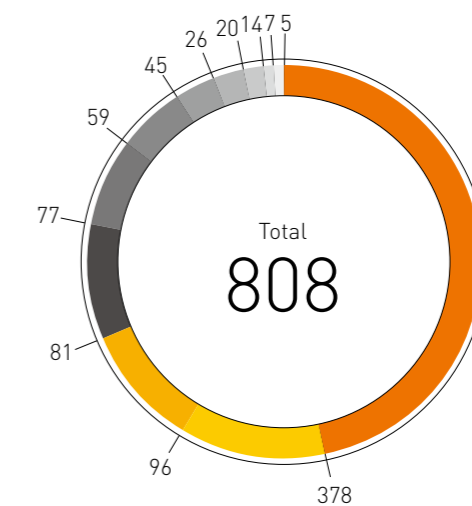
1) GRI: Global Reporting Initiative
2) RBA: Responsible Business Alliance



Step 2: identifying stakeholder interest and business impact ▶▶▶▶▶▶▶▶

We conducted activities to identify stakeholder interest and business impact regarding the 27 issues under 11 categories. A survey was conducted for a variety of stakeholders. The business impact of the issues was studied by reviewing in-house policies, standards, laws and regulations, conducting media research and benchmarking domestic and international tire companies.

Target groups
(Unit: person)



- Employees 378 / 46.8%
- Business partners (franchise owners/dealers) 81 / 10.0%
- Business partners (suppliers) 59 / 7.3%
- NGOs and NPOs 26 / 3.2%
- Academia 14 / 1.7%
- Customers (car makers) 5 / 0.6%
- Customers (individuals) 96 / 11.9%
- CSR personnel from other companies 77 / 9.5%
- Research centers and CSR consulting companies 45 / 5.6%
- Shareholders, investors, and analysts 20 / 2.5%
- Government and public agencies 7 / 0.9%

Survey period: April 1-5, 2019

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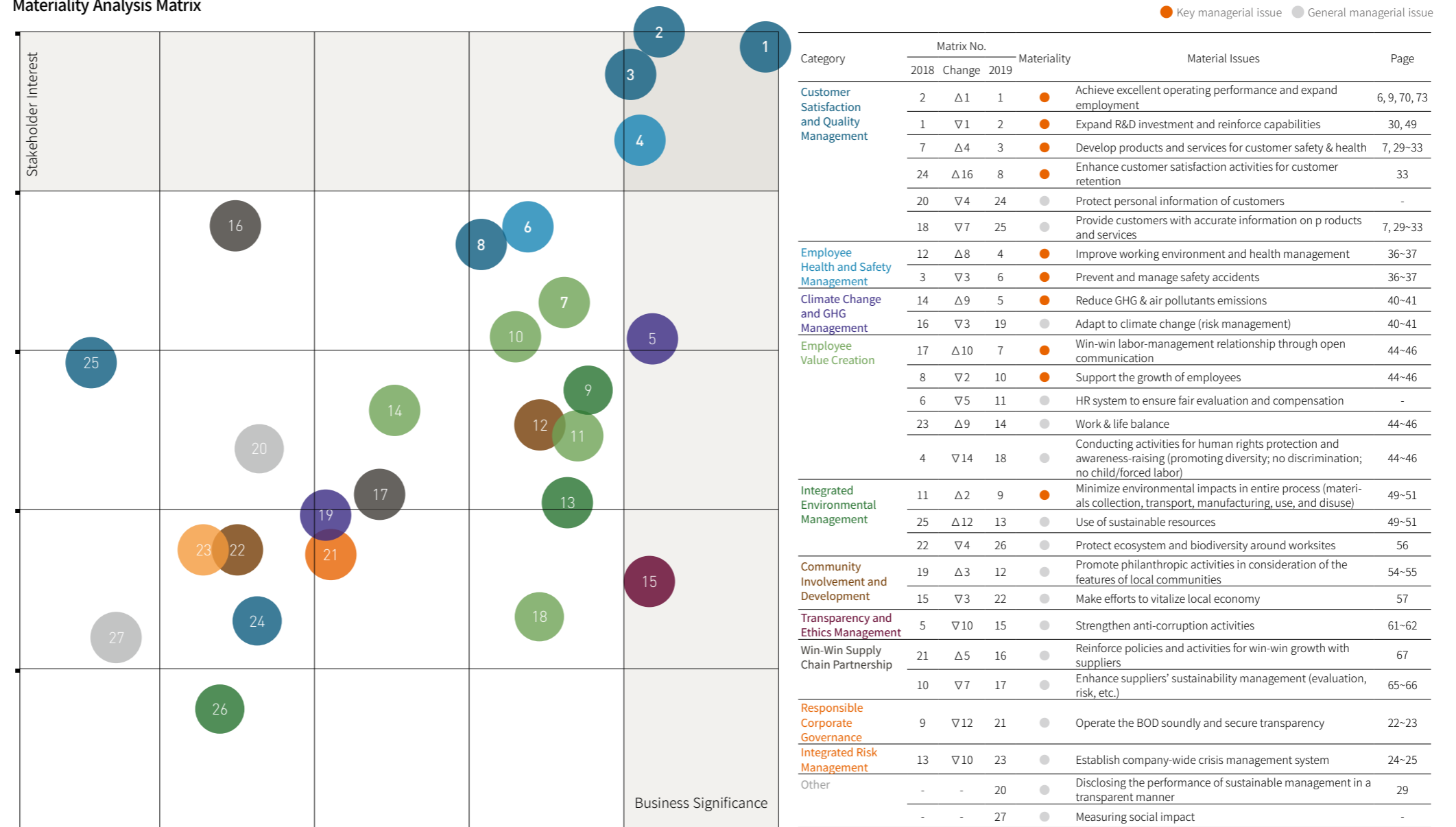
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Step 3: prioritizing issues

We prioritized 27 issues reflecting the results in Step 2. Higher priority was given to topics including: achieving outstanding business performance and increasing employment; strengthening R&D capacity and promoting investment; and developing products and services considering customer health and safety. In this report, our performance and targets regarding ten key issues are described in a transparent manner.

Materiality Analysis Matrix



* Issues with no value in the Up/Down are the ones integrated, separated, or newly identified in the Step 1.

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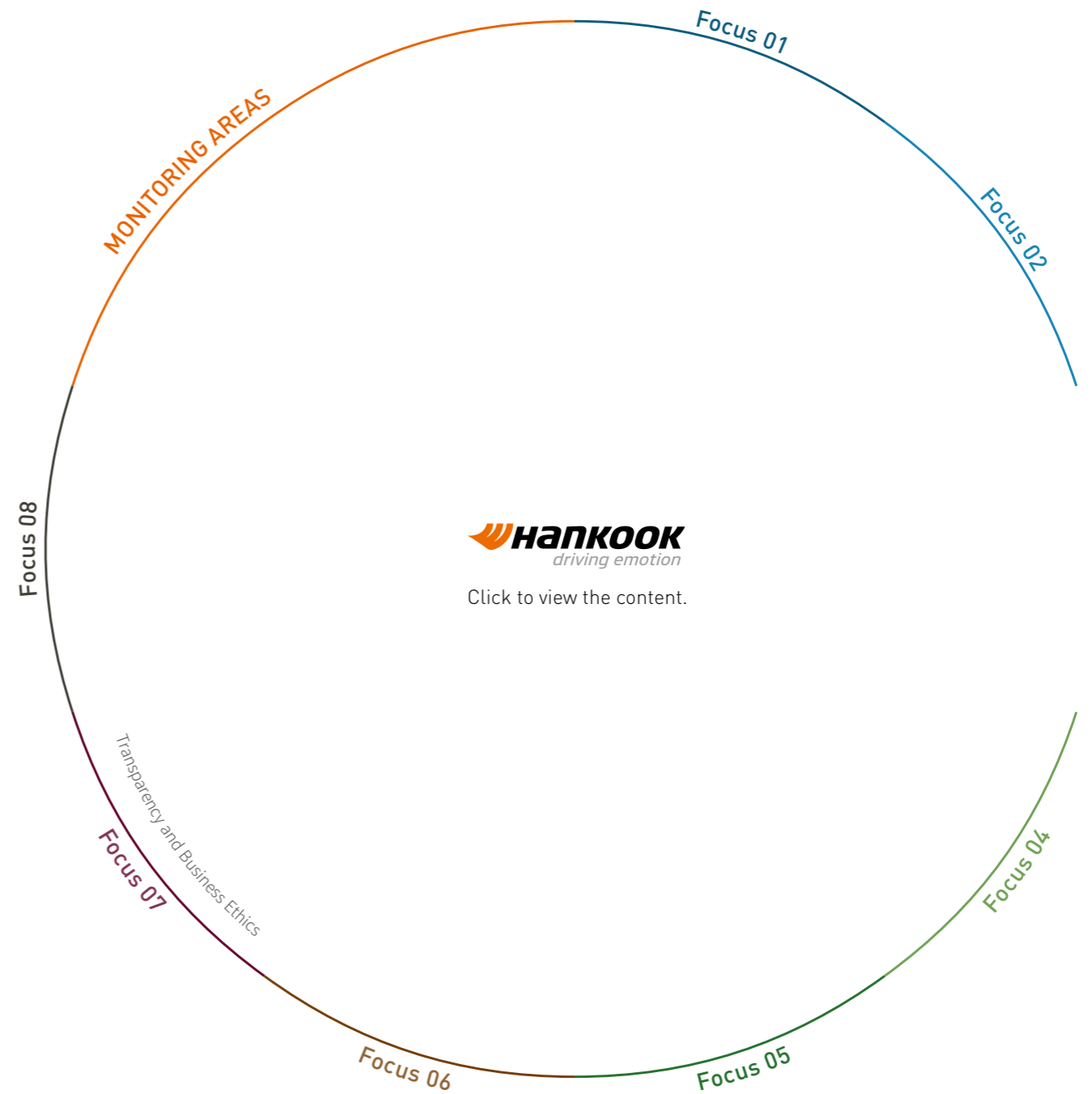
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CSR Steering Wheel 2018/19

Based on our integrated CSR management system, we defined eight focus areas: customer satisfaction and quality management; employee health and safety management; employee value creation; ethics management; win-win partnerships in the supply chain; integrated environmental management; climate change and GHG emissions management, and community involvement and development. Ten key issues selected based on the materiality analysis are mapped to these areas and our achievements and plans regarding them are described in this report.



MONITORING AREAS

INTRO

INTEGRATED CSR
MANAGEMENT SYSTEM

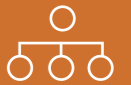
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Responsible Corporate Governance
Integrated Risk Management

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Responsible Corporate Governance



Declaration

Hankook Tire & Technology initiated the Professional Management System in early stage and has adhered to the separation of ownership and corporate management, which serves as a model in business. We are committed to maintaining healthy corporate governance and transparent business conduct.

Major Shareholders

The following indicates the status of our major shareholders and their ownership as of December 31, 2018.

Major Shareholders	No. of Shares	Ownership (%)
Hankook Technology Group	37,408,655	30.20
Cho Yang Rai	7,019,903	5.67
Cho Hyun Bum	2,561,241	2.07
Cho Hyun Shick	799,241	0.65
Others	76,086,029	61.41
Total	123,875,069	100.00

BOD Composition

The BOD features two internal and three external directors. Directors are appointed at the general meeting of stockholders. Candidates are selected by the board and by a non-executive Director Recommendation Committee. Appointed directors are listed in the table below. All of our external directors hold no vested interest in the company, management, or shareholders.

Director	Name	Position	Relationship with the Largest Shareholder	Period of Tenure
Executive director	Cho Hyun Bum ¹⁾	President, CEO	Executive at an affiliate	2012.09.01~2021.03.25
Executive director	Lee Soo Il	President, COO	Executive at an affiliate	2018.03.26~2021.03.25
Non-executive director	Cho Choong Hwan	Audit Committee member	N/A	2012.09.01~2021.03.25
Non-executive director	Hong Sung Phil	Audit Committee member	N/A	2012.09.01~2021.03.25
Non-executive director	Jung Chang Hwa	Audit Committee member	N/A	2018.03.26~2021.03.25

1) Chairman of the BOD

Evaluation and remuneration

In regard to remuneration of the directors and auditor, incentives are provided according to the evaluation results of the company's performance using economic, social and environmental indicators. The remuneration limit approved in the general shareholders meeting is at KRW 10 billion.

Remuneration of the BOD Members and Auditors

(Unit: KRW in millions)

Director	No. of Persons	Total Remuneration	Average Remuneration per Person
Executive director	3	1,831	610
Non-executive director (Audit Committee member)	4	162	41
Total	7	1,993	285

* As shown in the table below, the composition of BOD was changed based on the decision at the regular general meeting of shareholders on March 26, 2018. Therefore, the figures above included both incumbent and retired directors as of Dec. 31 2018.

	Appointment	Retirement
Executive director	Director Cho Hyun Bum re-appointed	Director Seo Seung Hwa retired
	Director Lee Soo Il newly-appointed	
Non-executive director	Director Cho Choong Hwan re-appointed	Non-executive director Cho Kun Ho retired
	Director Hong Sung Phil re-appointed	
	Director Jung Chang Hwa newly-appointed	

BOD with expertise and a heightened sense of responsibility

Our external directors, a majority of the BOD, are selected based on their experience and expertise in industry, finance, academia, law, accounting, and the public sector. They undergo a transparent and fair recommendation process by the Non-executive Director Recommendation Committee. At the general meeting of shareholders, those who specialize in the areas of business management, legal affairs, or accounting and meet the qualifications under the pertinent laws are appointed as external directors to oversee management and offer them guidance in their decision-making process.

MONITORING AREAS

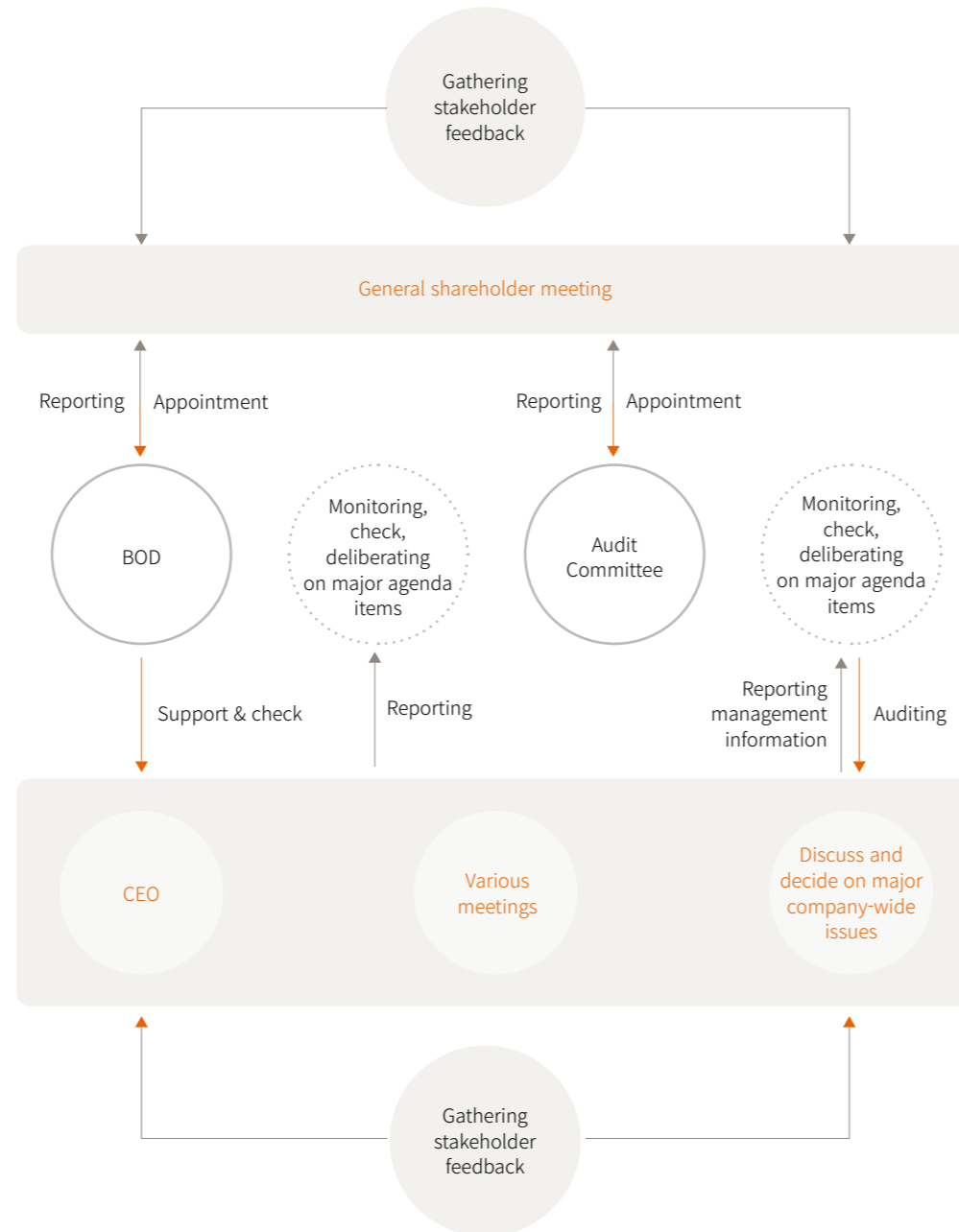
Responsible Corporate Governance
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Top Management's Decision-Making Process

The BOD is at the core of our decision-making structure at Hankook Tire & Technology. We strive to fully gather stakeholder feedbacks and align them to actual outcomes by identifying necessary tasks at various meetings. We also continue to build a corporate culture where stakeholder feedbacks are reflected in the top management's decision-making through active communication.



BOD Meetings

In 2018, four regular and four ad-hoc BOD meetings were hosted.

BOD Meetings for the Past Five Years

Year	Regular Meetings	Ad-hoc Meetings	Attendance Rate of Non-executive Directors
2014	4	6	93.3%
2015	4	7	78.8%
2016	4	4	91.7%
2017	4	4	91.7%
2018	4	4	91.7%

Operation of Subcommittees under the BOD in 2018

We operate four subcommittees under the BOD: Audit Committee, Sustainability Committee, Non-executive Director Recommendation Committee and the Internal Transactions Committee. These subcommittees meet both on a regular and ad-hoc basis.

Committee	Composition	Responsibility	Operation
Audit Committee	Three non-executive directors	- Audit accounting and business operations - Investigate corporate financial assets - Handle matters stipulated in government regulations and the articles of incorporation as well as matters commissioned by the BOD - Request directors to report business operations - Request the appointment of external auditors	Four regular and four ad-hoc meetings
Sustainability Committee	Two executive directors	- Deliberate and decide on general management matters - Deliberate and decide on financial matters	As needed
Non-executive Director Recommendation Committee	Two executive directors and three non-executive directors	- Recommend non-executive director candidates	Two meetings
Internal Transactions Committee	Three non-executive directors	- Approve large-scale internal transactions	One meeting

Integrated Risk Management



To ensure corporate sustainability, it is imperative to identify a variety of potential financial and non-financial risks to business activities. In this regard, we are systematically monitoring risks, conducting activities for prevention, and strengthening our capacity for emergency response and recovery.

Financial risks

A variety of financial risks are monitored by the Finance and Accounting Department of the Corporate Management and Finance Staff Office. In the quarterly Financial Risk Management Committee, key issues are reviewed and response strategies are formulated.

Finance

In 2018, the global economy experienced turbulence stemming from the trade war between the US and China. Domestically, sluggish economic growth led to negative conditions. Amid a difficult situation, we successfully issued global investment bonds to enhance our credit standing while increasing the percentage of borrowing at fixed interest rates in preparation for a US interest rate hike.

Foreign exchanges

As our global sales activities expanded, a total of 31 foreign currencies are now being used. To minimize the related risks, current transactions, including export and import, and deposits and borrowing are all conducted in local currencies. Meanwhile, we strive to minimize our foreign currency position through the principle of using the same currency for bill collection and payment. Any foreign currency position that is over the predetermined limit is managed in accordance with pertinent corporate rules.

Liquidity

The debt, liquidity and cashflow of each subsidiary is managed from the perspective of global business operations. When the finance market is volatile, we focus on the stability of our financial structure through conservative liquidity management. In addition, we utilize cash pooling- which allows the concentration of cash to make it centrally available among overseas subsidiaries- in order to minimize liquidity risks, ease the burden of fund management, and reduce financial costs. Furthermore, we are operating a Global Cash Management System in which the funds of our overseas subsidiaries, including regional headquarters, are centrally managed.

Tax Management

Hankook Tire & Technology is making every effort to fulfill its responsibility by paying taxes in good faith in accordance with the following tax policies:

- We pay taxes in compliance with all pertinent laws and regulations in the countries of our presence.
- We do not use any kinds of tax structures or systems intended for tax avoidance and do not transfer profits to low-tax countries.
- We are applying a transfer pricing analysis methodology to all of our overseas manufacturing/sales subsidiaries:
 - We are applying the transactional net margin method from the OECD Guidelines. This pricing method is based on comparisons made at the net profit level between the taxpayer and independent parties in relation to a comparable uncontrolled transaction or dealing.
 - In determining transfer pricing, manufacturing subsidiaries are using the Full Cost Mark-up while the operating profit margin ratio or the Barry ratio is applied to sales subsidiaries.

Non-financial risks

Based on the characteristics of identified risks, they are monitored by responsible teams, regularly reviewed by a pertinent committee, addressed by a task force, or managed through emergency response measures at worksites

Business continuity

We have maintained ISO 22301 certification by operating a Business Continuity Management System at our plants in Daejeon and Geumsan, Korea and in Hungary. ISO 22301 is an international standard allowing companies to ensure business continuity by quickly recovering key business operations in the event of accidents or disasters. In accordance with this standard, we identified all of our production activities from raw material procurement to product manufacturing and supply, based upon which a business continuity plan was formulated to spotlight potential risks. In addition, an emergency response organization was set up to create a manual for emergency situations and conduct annual mock exercises.

Laws and regulations

To manage legal risks, we review contracts for domestic and international projects, provide legal advice for teams/divisions carrying out their tasks, and resolve disputes such as lawsuits and mediation. As part of the efforts to promote compliance management, diagnoses are conducted on compliance with the Privacy Protection Act regarding our collection and use of customer information, and with the Fair Trade Act as well. Improvement measures are taken based on the results. In addition, training on the prevention of sexual harassment is provided at domestic and overseas worksites.

Health and safety

Since the occurrence of a fatal accident at the Geumsan plant in 2017, we have placed top priority on health and safety risks and further strengthened our efforts for risk monitoring and management. In 2018, a dedicated EHS organization was established. A quarterly advisory committee on health and safety was held with the participation of labor, management, and external experts. A labor-management-government task force consisting of the Regional Employment and Labor Administration and organized labor is being operated on a monthly basis. In addition, the Stakeholder Committee was created to solicit advice and opinions from outside experts on priority EHS issues selected through the materiality analysis.

Other

If there are risks that could develop into new social or environmental issues or require consistent monitoring, the seven CSR steering committees (in the areas of product environment, EHS, climate change, employees, ethics management, corporate philanthropy, and suppliers) review and discuss them on a quarterly basis and formulate strategies based on the decision of the chairperson.

CSR FOCUS AREAS

CSR FOCUS AREAS

FOCUS 01

Customer Satisfaction
and Quality Management

[read more >](#)

FOCUS 02

Customer Satisfaction
and Quality Management

[read more >](#)

FOCUS 03

Climate Change and
GHG Management

[read more >](#)

FOCUS 04

Employee Value Creation

[read more >](#)

FOCUS 05

Integrated Environmental
Management

[read more >](#)

FOCUS 06

Community Involvement
and Development

[read more >](#)

FOCUS 07

Transparency
and Business Ethics

[read more >](#)

FOCUS 08

Win-win Supply Chain
Partnership

[read more >](#)

Focus 01

Customer Satisfaction and Quality Management (Car Maker/ General Customers and Dealers)

Employee Health and Safety Management

Climate Change and GHG Management

Employee Value Creation

Integrated Environmental Management

Community Involvement and Development

Transparency and Business Ethics

Win-win Supply Chain Partnership

Customer Satisfaction and Quality Management (Car Maker)



Background

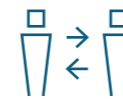
We engage in B2B transactions when providing OE¹⁾ tires to car makers. In order to keep our promises to our corporate customers, we are making every effort to faithfully meet their requirements. It is essential to strengthen our capacity for applying new technology as required by car makers if we wish to generate profit on a steady basis. If we focus only on short-term profit in our OE business, we may incur significant financial risks. Therefore, a variety of communication activities, including R&D investment, are required in order to sustain trust with customers over the long term.

1) OE: Original Equipment

Our direction

As a global business partner for car makers, Hankook Tire & Technology strives to bolster these strategic corporate partnerships based on the experience and expertise we have accumulated over the decades. To flexibly meet their needs under rapidly-changing market conditions, we make continuous efforts at developing state-of-the-art technology and enhancing quality. At the same time, greater focus is placed on strategic projects in cooperation with customers to lay groundwork for the development of market-leading technology. In addition, we are strengthening communication activities by responding to increasingly important CSR requirements.

Achievements



On-going communication with car makers

Conducted a variety of activities to communicate with car makers
- joint projects for concept tire-making, sponsorship of CSR-related events, and support for event shows



Strengthening product competitiveness

Developed technology and secured quality competitiveness
- Strengthened technological capacity through the advancement of a development process
- Provided training on quality awareness raising to 14,211 employees

Future plan and mid-/long-term targets

We will do our utmost to develop and supply products with high performance and quality that meet customer needs through multi-faceted activities, including exhibitions and exchange meetings. In particular, our focus will be on strengthening business relationships with our customers by improving product performance for future automobile technology, expanding the supply of our products, and proactively responding to CSR requirements.

Organization

Chaired by
OE Division Director

Supervisor

Global OE Planning Team, G.OE PM Team, Global OE Sales Team 1·2, Europe·America·China·Japan·ASEAN·India OE Sales Team

Cooperation members

OE Development Team, TB Development Team, Development Quality Assurance Team, Global OE Quality Team, Technical Centers in Europe, America, Japan, and China

CSR FOCUS AREAS

Focus 01

Customer Satisfaction and Quality Management (Car Maker/ General Customers and Dealers)

Employee Health and Safety Management

Climate Change and GHG Management

Employee Value Creation

Integrated Environmental Management

Community Involvement and Development

Transparency and Business Ethics

Win-win Supply Chain Partnership

Managerial Issue	2018			2019		
	Goals	Achievements	Completion	Plans	Deadline	Responsible Team
On-going communication with car makers	Conducting a variety of activities to communicate with car makers	· Promoted communication with customers by region, car makers, and category	🚩	· Concentrate on partner relationship management by sponsoring social contribution events, inviting car makers to sports events sponsored by Hankook Tire & Technology, and conducting collaboration projects of concept tire-making	2020	Global OE Sales Team, Global OE Planning Team, G.OE PM Team, Regional OE Team
		· Promoted communication activities with global car makers for future tire technology development	🚩	· Seek cooperation with manufacturers of future-oriented EVs for technological communication	2020	
	Meeting the requirements of car makers	· Actively respond to sustainability evaluation and take follow-up measures · Selected as a Highest Supplier at the Renault's Suppliers Award	🚩	· Proactively respond to sustainability evaluation and take follow-up measures	As needed	CSR Team
Strengthening product competitiveness	Developing high-performance products that meet the requirements of car makers	· Reached the performance target as required by car makers in terms of RRC ¹⁾ for developing future-oriented and eco-friendly tires for EVs and HEVs	🚩	· Develop optimal tires for EVs and HEVs · Meet the performance target for RRC required due to the implementation of WLTP ²⁾	2020	Global OE Sales Team, Global OE Planning Team, G.OE PM Team, Regional OE Team, OE Development Team
	Establishing a zero-defect quality assurance system	· Continued efforts to advance a development process	🚩	· Upgrade a development quality assurance system · Secure consistency in quality (processes, raw materials, semi-products and finished products) and strengthen the verification of products and processes	2020	Quality Division, R&D Staff Office, Production & Engineering Staff Office
	Employee awareness-raising of quality	· Upgraded a training system for employees on the shop floor to help them have expertise in their work · Improved educational content	🚩	· Accelerate efforts for capacity-building focusing on quality · Support employees responsible for quality assurance to have expertise in their work	2020	Global Quality Planning Team

1) RRC: Rolling Resistance coefficient 2) WLTP: Worldwide Harmonized Light Vehicle Test Procedure

CSR FOCUS AREAS

Focus 01

- Customer Satisfaction and Quality Management (Car Maker/ General Customers and Dealers)
- Employee Health and Safety Management
- Climate Change and GHG Management
- Employee Value Creation
- Integrated Environmental Management
- Community Involvement and Development
- Transparency and Business Ethics
- Win-win Supply Chain Partnership

On-going communication with car makers

We strive to strengthen customer-oriented marketing communication activities, including concept tire-making and PRM, to develop and promote mutually beneficial relationships with car makers.

Promoting mutual trust through communication with car makers

Trust-based communication To proactively respond to the requirements of car makers, we have promoted close relationships with them through business meetings and marketing communication activities. As a result, we received a Supplier of the Year award from General Motors in 2018.

Communication through partner relationship management activities and events

In 2018, we attended a Ford Motor Company fundraising event to combat juvenile diabetes and placed an ad in General Motors Magazine. Through two collaborative projects with Volkswagen, we presented future-oriented concept tires at the North American International Auto Show, Auto Shanghai, and IAA (International Automobile Ausstellung), which provided an opportunity to not only strengthen relationships with this company, but also to showcase our own technology. In addition, we invited European carmakers to DTM (Deutsche Tourenwagen Masters) as an official sponsor to further our business relations.

Communication through exhibitions and events

We have diversified a portfolio of our OE tires by supplying tires for 39 new cars, including Porsche Cayenne and Volkswagen T-Roc. At the same time, strategic promotion activities were conducted by placing ads on domestic and international newspapers and attending exhibitions, such as a trade show by Thomas Built Buses and the IAA Hannover

Meeting the requirements of car makers

Corporate CSR activities are becoming increasingly important indicators to external stakeholders as well. One case in point is in the supply chain management of car makers. In 2018, about 61% of our CSR-related requirements from external stakeholders originated with car makers. We proactively responded to demands from major car makers including BMW, Ford, Volkswagen, PSA, Scania, and Honda in the areas of the economy, society, and the environment in order to promote communication with them. As a result, we were selected as a Highest Supplier at Renault's Suppliers Awards for our efforts at sustainability management.



CSR FOCUS AREAS

Focus 01

- Customer Satisfaction and Quality Management (Car Maker/ General Customers and Dealers)
- Employee Health and Safety Management
- Climate Change and GHG Management
- Employee Value Creation
- Integrated Environmental Management
- Community Involvement and Development
- Transparency and Business Ethics
- Win-win Supply Chain Partnership

Strengthening product competitiveness

We are making every effort at technological development and quality enhancement to provide optimal products. Considering the tougher emissions criteria and rising technological requirements that we must face, we are focusing on developing high-performance tires, strengthening cooperation with global car-makers as strategic partners, and contributing to the overall growth of the auto industry.

Developing high-performance products that meet the requirements of car makers

Expanding the scope of eco-friendly tires As a result of our efforts to meet GHG emissions reduction requirements, we signed a contract with Hyundai Motors to supply tires for its Ioniq (BEV/PHEV). In addition, we developed tires that can contribute to enhanced fuel efficiency in line with the Worldwide Harmonized Light Vehicle Test Procedure (WLTP), receiving a positive response from both car makers and consumers. We also pursued cooperation with EV manufacturers to expand our OE business. Going forward, we will continue our efforts to diversify a portfolio of OE tires by entering new EV markets through business partnerships with manufactures of future-oriented EVs, such as MicroSnap.

Establishing a zero-defect quality assurance system

We are conducting activities to improve the management of semi-finished and finished products, make pertinent investments, and strengthen criteria for ensuring zero-defect quality assurance. In particular, our focus is on the evaluation of organizations responsible for production, development, and management of quality issues and risks in order to identify potential risks across the entire process from development to production.

Employee awareness raising of quality

All employees on quality-related teams currently make a quality management pledge, but we are still continuing to expand the scope of annual awareness-raising training. In addition, a new on-the-job quality training program is being provided to strengthen employee capacities and quality assurance personnel are being assigned appropriately based on their job skills and performance.

The 2018 list of new OE tires

Brand	Vehicle model	Product name
Audi	A1	Kinergy 4s, Ventus Prime3, Winter i*cept evo2
	Q8	Ventus S1 evo3 SUV, Dynapro HP2 plus, Winter i*cept evo2 SUV, Dynapro HP2 plus
	Q3	Ventus S1 evo2 SUV, Winter i*cept evo2 SUV, Ventus S1 evo 2 SUV
Benz	Sprinter	Vantra LT
	A-Class/B-Class	Ventus S1 evo2, Winter i*cept evo2, Kinergy GT
BMW	2-Series Active/Gran Tourer	Ventus S1 evo2
	2-Series Active/Gran Tourer/3-Series	Ventus S1 evo3
	3-Series/4-Series	Ventus S1 evo3
	3-Series/Z4	Ventus S1 evo3, Winter i*cept evo2
	X5/X6	Ventus S1 evo3 SUV
Ford	F-150	Dynapro AT2
	Focus	Ventus Prime3
	Mondeo	Ventus Prime3
	Ranger	Dynapro HT, Dynapro AT M
HMC	Eon	Kinergy Eco2, Kinergy Eco2
	i40	Ventus Prime2
	NEXO	Ventus Prime2, Ventus S1 evo2 SUV
	Santafe	Dynapro HP2, Ventus Prime 3X
	Tucson	Ventus Prime 3X, Ventus Prime2, Ventus S1 evo2 SUV
	Verna	Kinergy EX
KMC	Cee'd	Kinergy Eco2
	K9	Ventus S1 evo2
	Soul	Kinergy Eco2, Kinergy GT, Ventus Prime3, Ventus S1 noble2
	Sportage	Ventus Prime2, Ventus S1 evo2 SUV
Mini	Mini	Kinergy Eco
Porsche	Macan	Ventus S1 evo2 SUV
Volkswagen	Caddy	Ventus Prime3, Kinergy Eco2
Nissan	Altima	Kinergy GT
Ssangyong	Rexton	Dynapro HP2



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Background

As an increasing number of customers are developing an interest in tire and motor vehicle maintenance, tire manufacturers and repair service companies are expanding the scope of their services, and a variety of online-to-offline (O2O) services emphasizing convenience and speed are being launched. Nowadays, customers are searching about products online, making customized purchases based on their personal driving conditions and preferences, and sharing their experience through social networks. Rapidly-changing consumer trends and needs demand that the tire industry to innovate and adapt. Simply applying existing approaches is no longer sufficient to satisfy customers. The tire industry must serve as a service platform going beyond the traditional roles of manufacturers and distributors in order to provide new value and differentiated services in line with customer needs and trends.

Our direction

As a global business partner for car makers, Hankook Tire & Technology strives to bolster our strategic corporate partnerships with them based on the experience and expertise we have accumulated over the decades. To responsively meet their requirements under rapidly-changing market conditions, we make continuous efforts at developing state-of-the-art technology and enhancing quality. At the same time, greater focus is placed on strategic projects in cooperation with customers to prepare the development of market-leading technology. In addition, we are strengthening communication activities by responding to increasingly important CSR requirements.

- Mobile Marketing Service
For automobile customers, this provides vehicle and tire check-up service by visiting government offices, companies and venues for local events.
- Fleet Service
This provides vehicle and tire check-up service for intra-/inter-city and tourist buses and cargo trucks.

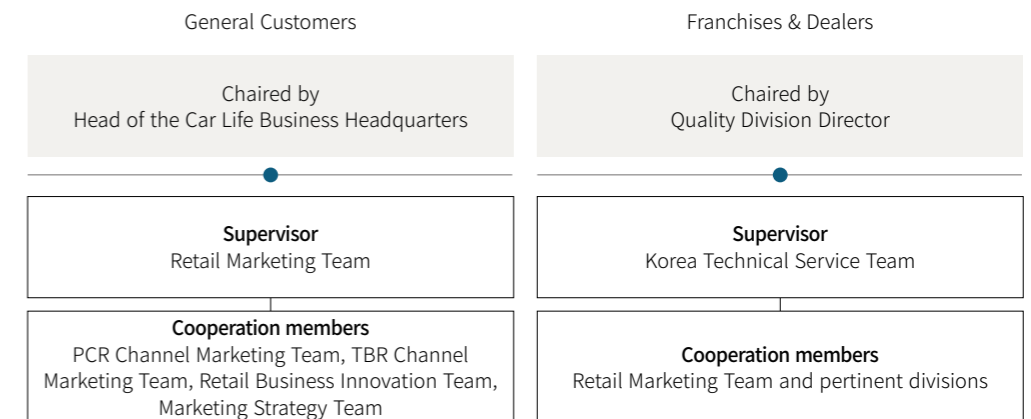
Achievements

	Included in the 2019 Korea Brand Power Index (K-BPI)	Ranked first for the eleventh consecutive year
	Automobiles that received our mobile marketing service	5,596
	Fleet Service	61 times

Future plan and mid-/long-term targets

In order to offer a seamless online-to-offline customer experience through our T'Station and service network, we are preparing new services, including professional consulting for customers, pick-up, and delivery. In addition, we will make quality our top priority in order to meet customer requirements and promote satisfaction while creating a virtuous cycle in our business operations. To achieve our ultimate goal of providing our customers with safe driving, a wide range of customer communication activities will be conducted. Our efforts at providing differentiated services for customer satisfaction will be sustained as we reflect rapidly-changing trends and needs.

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Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Win-win management	Offering training programs on shop operation	· Held four sessions of training on strengthening distribution capacity and improving business operations for a total of 661 participants	🚩	Offering training programs on shop operation	· Distribution capacity building: promote sell-out; share distribution policies; and spread the knowledge and information on shop operation	Dec.	PCR Channel Marketing Team
		· Provided a total of 354 participants with an introductory training for new shop owners (4 sessions), and programs on product knowledge (6 sessions), sales techniques (6 sessions), and shop management (6 sessions)	🚩		· Provide an introductory training for new shop owners: profit-making measures, and customers	Dec.	Retail Business Innovation Team
		· Operated training on the repair of imported cars (6 sessions) and the wheel-alignment equipment and techniques (6 sessions) for a total of 258 participants	🚩		· Offer training for staff at our shops: technological courses for imported cars and equipment, and programs for products, sales, shop operation and service	Dec.	Retail Business Innovation Team
Customer satisfaction	Enhancing customer satisfaction	· Established a database (visit, consulting, and shop closing-down): launched T'Station.com to offer a digital-based customer experience	🚩	Enhancing customer satisfaction	· Implement and utilize standardized services of a digital-based customer experience	Dec.	Retail Marketing Team
	Including global brands for sales	· Offered tires with different brands at T'Station : Hankook→Hankook, Michelin, Pirelli, Maxxis	🚩		· Devise customer royalty programs	Dec.	Retail Marketing Team
Customer communication	On-highway vehicle safety check-up campaigns	· Provided battery and tire pressure check-up services and tips on tire maintenance to drivers in six highway service areas in Korea (four times) · Offered vehicle check-up service during the summer vacation season (in July)	🚩	On-highway vehicle safety check-up campaigns	· Conduct improvement activities focusing on the efficiency of on-highway vehicle safety check-up campaigns: enhancing customer satisfaction by providing services and promotional materials with their requirements reflected	Dec.	Korea Technical Service Team
	Free mobile vehicle check-up services	· Offered these services 174 times · Visited government offices, companies and venues of local festivals to provide free check-up service · Launched promotional activities at T'Station shops, including welfare programs in partnerships with companies	🚩		Free mobile vehicle check-up services	· Check a service management system	Dec.

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Win-win management

We provide our shop owners with training programs to share a value of ‘driving for happiness’ and achieve shared growth with our customers and dealers.

Training programs on shop operation

We provided a variety of programs for our shop owners to help them effectively operate their businesses and increase customer satisfaction. Programs on shop operation and how to serve customers were offered and new shop owners were provided an introductory training course. In 2018, a total of 258 participants received training on product knowledge, the repair of imported cars, and



다양한 브랜드에 미쉐린까지



wheel-alignment techniques in an effort to strengthen their professional capacities. We will step up our efforts to support shop owners and dealers to bolster their confidence in shop operation and ensure the provision of high-quality service to customers.

Customer satisfaction

To increase customer satisfaction, our T'Station brand is offering a positive purchase experience and new concepts in services to customers through the sales of global tire brands, the T'Station.com website, and Today service.

Increasing customer satisfaction

T'Station.com is a digital-based online and mobile platform that allows customers to purchase tires that meet their needs. By utilizing our network of 300 T'Stations across the country, customers can enjoy the same service and experience as they do offline. In particular, its Today service, a new concept of service devised for maximizing customer satisfaction, allows customers to have their tires installed on the day of purchase at T'Station.com.

Sales of global tire brands

To increase customer convenience and satisfaction by providing a wide range of choices, T'Station has expanded the scope of its products to include global tire brands such as Michelin, Pirelli, and Maxxis. This allows customers to select optimal products according to their preferences and driving style. They also can enjoy ‘total care’ service from experienced tire professionals using advanced equipment.

Customer communication

We offer services to reach and listen to customers as a means to increase their satisfaction by improving product and service quality.

On-highway vehicle safety check-up campaigns

We set up booths in six highway service areas in Korea to provide battery, tire pressure, and oil checks along with windshield washer fluid refill. While offering these services, we provided drivers with tips on tire maintenance and information about its importance for road safety. In addition, campaigns to enhance our corporate image were conducted during the summer vacation season.

Free mobile vehicle check-up services

To strengthen communication with customers and promote safe driving, we provided free mobile vehicle check-up services 174 times for a total of 7,619 cars in 2018. In 2019, we plan to offer free tire pressure and wear checks and maintenance tips in places with a heavy car presence, such as at local festivals.

FA¹⁾ service by region

Region	Seoul/Gyeonggi/Incheon	Busan/Gyeongnam	Chungcheong	Gwangju/Honam	Gyeongbuk	Total
FA service (unit: time(s))	35	10	9	4	3	61

Mobile service

	Seoul/Gyeonggi/Incheon	Busan/Gyeongnam	Chungcheong	Gwangju/Honam	Gyeongbuk	Total
Mobile service (unit: time(s))	19	16	23	24	31	113
Automobiles subject to check-up services	884	1,125	1,026	961	1,600	5,596

1) FA: Fleet Account

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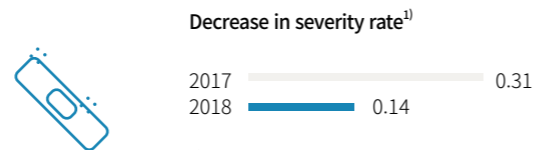
Background

Industrial accidents are a potential risk factor that can seriously damage the reputation and business operations of companies. Since tire manufacturing is a process industry and requires the use of chemicals, ensuring a healthy and safe work environment is essential. Recently, corporate responsibility for employee health and safety has been expanded and the government is tightening regulations by pushing for the overhaul of the Occupational Safety and Health Act. In response, companies must conduct proactive and preventative activities to protect the safety and health of employees.

Our direction

Promoting employee safety and health is our fundamental management philosophy and serves as a driving force for our pursuit of sustainable growth. To achieve a zero-accident and zero-disaster record, the EHS committee is working regularly and leading a variety of related activities. The 2018 activities include expanding EHS-related investments, launching campaigns to create a culture of safety, and providing muscular skeletal disease prevention programs and psychological counseling for employees. We will continue our efforts to ensure that a culture of safety takes root at our worksites.

Achievements



¹⁾ Severity rate means the number of days lost by temporary disability for 1,000 worked hours (number of days compensated / number of worked hours) x 1000



Decrease in frequency severity indicator²⁾

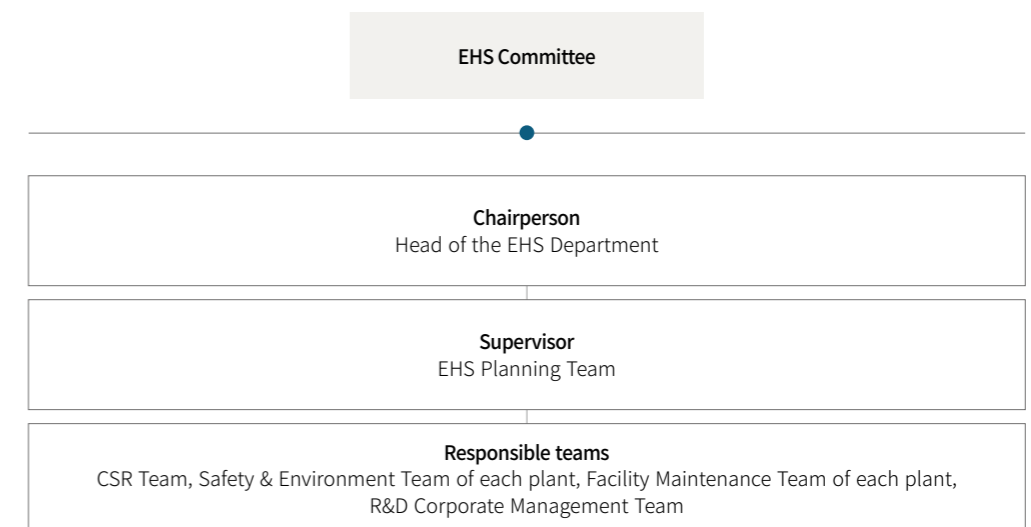


²⁾ Frequency severity indicator reflects both frequency rate of injuries and severity rate (frequency rate x severity rate)^{0.5}

Future plan and mid-/long-term targets

We are making multifaceted efforts to establish safe and healthy worksites by pursuing EHS activities. To ensure that a culture of safety takes root at our worksites, we will evaluate the safety awareness and activities of all our employees, identify any issues, and determine improvement measures. In addition, as part of the efforts underlying the proactive operation of our EHS system, we are planning for our transition to ISO45001 and establishment of a chemical management system.

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Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Strengthening safety management at worksites	Establishing a culture of safety	· Established a mid-/long-term safety roadmap and framework	🚩	Establishing a culture of safety	· Strengthen the safety management and activities of domestic plants and R&D centers by receiving professional consulting service	Nov.	DP)KP) ¹⁾ Safety & Environment Team R&D Corporate Management Team
	Reinforcing a safety and health system	· Operated in-house security, designated safety and health personnel and ran a labor-management-government task force (monthly)	🚩	Reinforcing a safety and health system	· Upgrade a compliance evaluation system and expand the scope of a health and safety advisory committee	Dec.	DP)KP)Safety & Environment Team, EHS Planning Team
	Proactively managing safety risks	· Ran an EHS task force and operated a health and safety advisory committee - External experts: safety (1), and health (3) - Frequency: quarterly	🚩	Transition to ISO 45001	· Work on an ISO14001 transition plan for domestic and overseas plants - Domestic plants and research centers: in the first half of the year - Overseas plants: in the second half of the year	Nov.	EHS Planning Team
Bolstering efforts for employee health	Developing procedures for muscular skeletal disease prevention and response	· Standardized procedures for muscular skeletal disease prevention and response	🚩	Developing procedures for muscular skeletal disease prevention and response	· Investigate and analyze harmful factors through the standardization of work processes at plants · Formulate and implement improvement measures for work processes with high risks	Dec.	DP)KP)Safety & Environment Team, EHS Planning Team
	Operating stress management programs	· Operated stress and depression diagnoses and counseling programs for employees (gardening activities and a 'cinema healing' program)	🚩	Bolstering efforts for employee health	· Establish a framework for health cohort · Strengthen efforts for health management of a high risk group · Expand the scope of counseling center operation	Nov.	DP)KP)Safety & Environment Team, EHS Planning Team
	Strengthening work environment management	· Increased the efficiency of local ventilation systems (mixing, extruding, building, curing and trimming processes)	🚩	Strengthening work environment management	· Enhance a chemical management system · Optimize the operation of ventilation facilities · Improve the thermal work environment	Nov.	DP)KP)Safety & Environment Team, EHS Planning Team, DP)KP)Facility Maintenance Team

1) DP: Daejeon Plant / KP: Geumsan Plant

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Strengthening safety management at worksites

We encourage employees at worksites to take the initiative in safety management in order to create a safe and healthy work environment.

Establishing a culture of safety

To heighten employee awareness and guarantee a culture of safety at domestic plants, diagnoses were conducted in cooperation with external experts. Surveys and interviews with employees in different positions were held and on-site inspections were carried out to identify issues with their safety management systems and operations. To address the issues uncovered, a roadmap and framework for establishing a culture of safety were formulated and pertinent activities were conducted. In addition, professional training programs were provided to prevent any unsafe employee behaviors stemming from job stress or psychological factors. A total of 154 employees (team leaders, team members responsible for safety management, and suppliers) took the programs on safety psychology and safety accident investigation techniques. We will operate a wide range of evaluation activities and programs to encourage our employees to practice safety with heightened awareness.

Reinforcing a safety and health system

We operate in-house security programs and designate safety and health personnel at domestic plants. To create a pleasant and safe work environment, risk factors are identified, including unsafe employee behaviors, and activities are conducted to address them. As part of the efforts at industrial disaster prevention, a labor-management-government task force is conducting joint safety-health inspections and checking the implementation progress of EHS plans on a monthly basis. The task force activities allow us to find common ground on safety management and strengthen EHS efforts at the plant level. We will continue our efforts and encourage employees to take the initiative in promoting safety and health at worksites.

Proactively managing safety risks

To ensure a timely response to EHS issues and risks and promote their fundamental reduction, monthly EHS meetings and quarterly safety and health advisory committee meetings are held. Based on advice from external experts, issues related to our safety and health systems and operational processes are identified and verified, and improvement measures are taken to proactively address EHS-related risks.

Bolstering efforts for employee health

Employee health is one of key elements for the sustainability of companies. We have established a disease prevention system to protect employees from harmful factors and continued our efforts at creating a safe and pleasant work environment.

Developing procedures for muscular skeletal disease prevention and response

For fundamental and effective prevention of musculoskeletal disorders at the Daejeon and Geumsan plants and R&D centers, we developed new programs by standardizing pertinent programs being operated individually at the worksite level. In addition, training on these programs was provided to employees responsible for EHS at each worksite to support effective implementation through employee participation and interest in the program. The programs apply scientific analysis techniques for the effective improvement of work processes that could negatively impact employee health. In addition, post-management of employees suffering health issues is included in order to monitor their adjustment to work after returning from treatment. In 2019, we will fully utilize the programs and work on expanding their scope to our overseas worksites.

Operating stress management programs

Since 2014, we have been operating counseling programs to help our employees and their family members relieve and prevent stress. If they wish to receive counseling outside of the company or at home, professional counselors can visit them in person. In 2018, programs for overcoming depression and suicidal thoughts were provided for 623 managers and supervisors, and a total of 730 employees used counseling services. In 2018, a depression diagnosis (Hamilton Depression Rating Scale) was conducted for all of our domestic employees. Employees with scores of 15 points or higher (mid-level depression) were provided psychological counseling and treatment. Going forward, we will continue to offer training to managers and supervisors to help them identify and support employees with high risks of depression and further promote counseling programs among our employees.



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Ensuring a healthy work environment

To protect employee health and create a more pleasant work environment, work environment measurement is conducted twice a year. Based on the results of checks on air quality, noise, illumination, temperature, and humidity, we improve and upgrade the pertinent facilities. The efficiency of the local ventilation systems essential for work environment management is monitored from the design to installation and test operation phases. We conduct independent testing and take improvement measures for systems with compromised efficiency to ensure appropriate air flow rates. In 2018, as for chemical injection facilities during the mixing process, we increased the installation of local ventilation systems to prevent fugitive dust emissions and upgraded existing systems in the extruding, building, molding, trimming and inspection processes. Meanwhile, to enhance the efficiency of rubber fume control during the curing process, zeolite in the CFRTO (combustion equipment) was replaced and ventilators were installed.

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Climate Change and GHG Management



Background

Increasing GHG emissions are triggering environmental issues, such as ecosystem changes and sea-level rise. Since the Paris Agreement took effect on November 4, 2016, many countries around the world have been taking part in efforts to respond to climate change. In this regard, the role of companies is becoming increasingly important in limiting the overall temperature increase to 1.5 degrees Celsius above pre-industrial levels. Governments are expected to tighten regulations on GHG emissions as the agreement goes into effect. Stricter regulations could lead to trade barriers and increased production costs, eroding market competitiveness. On the other hand, if we can maximize energy efficiency and transition to low-carbon fuels and electricity, it will bring benefits such as enhanced competitiveness and improved corporate brand value.

Our direction

Since climate change is impacting the environment, ecosystem, and people, the issue involves diverse regions and stakeholders. Considering GHG emissions from raw materials, tire production, and product use perspectives, we should respond to climate change issues across the entire supply chain from supplier to customers.

We will do our utmost to reach our targets for GHG emissions reduction. As part of the efforts to address global warming issues, we aim for energy transition to green energy curbing the use of fossil fuels. Our activities are monitored in the quarterly Climate Change Committee and we provide information on our annual GHG emissions and responses to climate change and through CDP¹⁾.

1) CDP (formerly the Carbon Disclosure Project) is an organization which supports companies and cities to disclose the environmental impact of major listed corporations. The environmental information publicly disclosed through CDP is used as a guide for the investment by financial institutions around the world.

Achievements



Awarded the 2018 CDP Korea Carbon Management Sector Honors

Leadership A- rating



GHG emissions reduction

17,408 tCO₂-eq



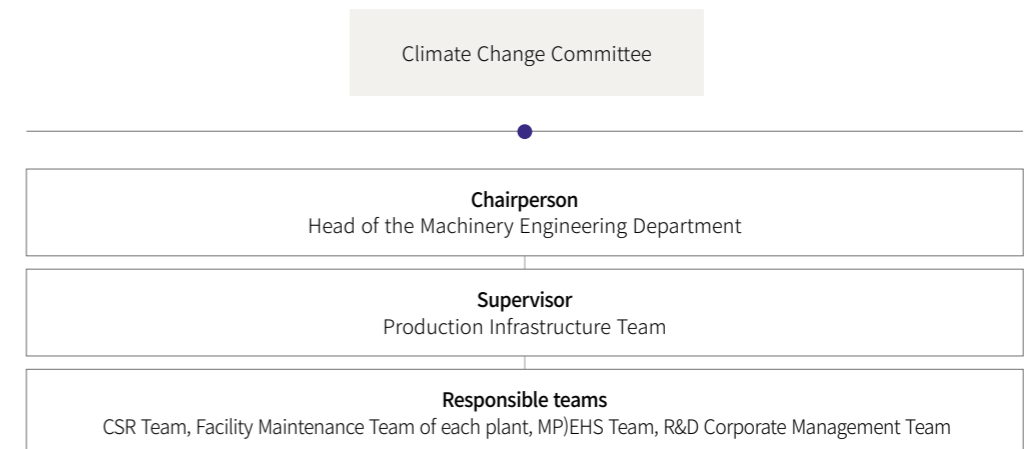
Energy and carbon cost savings

KRW 2.633 billion

Future plan and mid-/long-term targets

A detailed plan will be prepared to achieve our 2030 GHG emissions reduction targets. We will continue our efforts to identify alternative energy sources and lay a foundation for energy transition. Currently, we are working on a plan for establishing an integrated platform for energy management that will allow us to remotely oversee energy use at all of our domestic and overseas plants and share technology on GHG emissions reduction.

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	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team	
Low-carbon management	Becoming an outstanding carbon management company in CDP	· Awarded the 2018 CDP Korea Carbon Management Sector Honors · Received A- in the CDP Supplier Engagement Rating	🚩	Maintaining the status as an outstanding carbon management company in CDP	· Sustain our efforts to maintain Leadership in the CDP Climate Change Rating	Dec.	CSR Team	
	Upgrading the e-Saver, an IT system for energy management	· Added new features of a power overload alarm and automatic settings for target intensity of energy use by process	🚩	Upgrading the e-Saver, an IT system for energy management	· Upgrade the system to utilize big data	Dec.	Production Infrastructure Team	
Reduction of GHG emissions	Introducing high-efficiency facilities	Replacing with LEDs	· Replaced 15,000 fluorescent lights with LED	🚩	Minimizing pump flow and pressure	· Reduce the use of power by minimizing pump flow and pressure	Dec.	Facility Maintenance Team of each plant
		Replacing old pumps	· Replaced old pumps with high-efficiency ones (The 2018 plan was completed.)	🚩	Replacing old pumps	· Continue the replacement work	Dec.	Facility Maintenance Team of each plant
	Recycling energy and preventing leakage	Stabilizing a system for re-using waste heat during the curing process	· Increased the amount of waste heat recovered through data analysis (utilization rate) and system stabilization	🚩	Introducing high-efficiency motors	· Save electricity by using high-efficiency motors	Dec.	Facility Maintenance Team of each plant
		Resolving steam leakage issues during the curing process	· Inspected and replaced steam traps (The 2018 plan was completed.)	🚩	Stabilizing a system for re-using waste heat during the curing process	· Continue our efforts to increase the amount of waste heat recovered through data analysis (utilization rate) and system stabilization	Dec.	Facility Maintenance Team of each plant
		Reduced the use of steam by 18% by utilizing automatic traps when discharging condensate water (at the Jiaxing plant)	· Reduced the use of steam by 18% by utilizing automatic traps when discharging condensate water (at the Jiaxing plant)	🚩	Resolving steam leakage issues during the curing process	· Continue the inspection and replacement of steam traps · Prevent the leakage of steam by utilizing automatic traps when discharging condensate water (at the Geumsan plant)	Dec.	Facility Maintenance Team of each plant
	Promoting operational efficiency	Implementing a compressor ER (energy recovery) system	· Completed a feasibility study and concluded that the timing of system implementation should be re-examined	🚩	Operating an energy patrol	· Organize a patrol for energy leakage prevention at each plant	Dec.	Facility Maintenance Team of each plant
		Enhancing temperature control for cooling/heating	· Improved temperature control for cooling/heating and prevented power waste at plants and offices	🚩	Introducing a centrally-controlled compressor system	· Use a centrally-controlled system to appropriately change the pressure of compressor according to demand and consequently reduce the use of power	Dec.	DP)KP)JP)MP) Facility Maintenance Team
	Introducing new technology and using renewable energy	Optimizing the pressure for N ₂ gas supply	· Set a lower limit of N ₂ gas supply pressure to reduce electricity consumed by N ₂ gas production facilities	🚩	Participating in the demand-side power management scheme	· Take part in the demand-side power management scheme led by the Korea Power Exchange to contribute to addressing electricity overload at the national level	Dec.	DP)KP)Facility Maintenance Team
		Utilizing absorption chillers	· Replaced turbo chillers with absorption chillers to save energy	🚩	Increasing operational efficiency of chillers	· Improve the efficiency in the use of power through tube cleaning and control of chillers operation	Oct.	Facility Maintenance Team of each plant
		Enhancing boiler efficiency	· Conducted tube cleaning and upgraded tubes for recovering condensate water	🚩	Enhancing boiler efficiency	· Maintain appropriate air ratio by adjusting the air-fuel ratio of boilers for fuel efficiency	Oct.	DP)KP)Facility Maintenance Team
Adopting photovoltaic power generation at the Jiaxing plant (installation)		· Installed photovoltaic power generating units on the roof of the China Technical Center (CTC) a research center located in the Jiaxing Plant	🚩	Adopting photovoltaic power generation at the Jiaxing plant (power generation)	· Contribute to about 300tCO ₂ -eq reduction of GHG emissions by generating and supplying green electricity utilizing the photovoltaic power generation system.	Dec.	JP)Facility Maintenance Team	
Using externally-generated low-carbon steam	Using externally-generated low-carbon steam	· Completed a feasibility study and installation and planned the start of its operation in 2019	🚩	Using externally-generated low-carbon steam	· Utilize externally-generated low-carbon steam that includes thermal energy from biomass at the Daejeon plant, reducing GHG emissions by about 12,000tCO ₂ -eq per year	Mar.	DP)Facility Maintenance Team	
	Conducting a feasibility study on adopting CHP (Combined Heat and Power) generation	· Completed a feasibility study on introducing CHP to domestic plants	🚩	Reviewing the feasibility of introducing biomass fuels	· Review a project to reduce CO ₂ emissions by using wood pellet fuel from the Geumsan plant	Oct.	Production Infrastructure Team	
	Reviewing the introduction of ESS (Energy Storage System)	· Reviewed the feasibility on adopting ESS at the Geumsan plant	🚩	Conducting a feasibility study on the introduction of power reduction facilities	· Review the technology that allows optimal current flow and power loss reduction by supplying magnetic wave energy	Dec.	Production Infrastructure Team	

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Low-carbon management

We operate the Climate Change Committee to systematically devise response strategies for addressing climate change issues at the company level. In 2018, we were selected as an outstanding company by CDP in recognition of our efforts at low-carbon management. To optimize energy management at plants, our e-Saver system has been upgraded in phases.

Awarded the CDP Korea Carbon Management Sector Honors

As a result of our transparent disclosure of information on our climate change response and proactive GHG emissions reduction activities, we were given a Leadership A- in the CDP Climate Change Rating and awarded the 2018 CDP Korea Carbon Management Sector Honors at the 2018 CDP Korea Climate Change & Water Management Award. Since we received an A- in CDP Supplier Engagement Rating, we were unable to be included on the Leader Board. Still, we will continue with our efforts at carbon management within the supply chain.



Upgrading the e-Saver

We are phasing in upgrades of our e-Saver, an IT system for systematic energy management at plants. In 2018, we added new features including a power overload alarm and automatic settings for target intensity of energy use by process. These will be utilized in publishing weekly energy reports. The 2019 upgrade will feature centrally-controlled compressors using big data.

Reducing GHG emissions

A variety of activities for conserving energy, including the adoption of high-efficiency facilities and recycling energy, are being conducted to minimize production costs and GHG emissions over the mid- to long-term. In addition, we are constantly reviewing transition plans to shift to low-carbon energy.

Introducing high-efficiency facilities

To increase energy efficiency during the tire manufacturing process, we are focusing on improving operational efficiency of existing facilities and replacing with high-efficiency ones. We have been carrying out projects to replace fluorescent lights with LEDs and in 2018, a total of 15,000 lights were replaced. At the same time, old facilities have been replaced by new ones. As a result, we have been able to save KRW 1.07 billion per year and reduce 5,562tCO₂-eq of GHG emissions per year.

Recycling energy and preventing leakage

During the curing process, which is where 95% of the energy supplied to plants is applied. By stabilizing the system for recovering and re-using waste heat, the application of waste heat can be increased. In addition, steam traps are regularly inspected and replaced to prevent thermal leakage. The condensate water used in the curing process was forcefully discharged at specific regular times, meaning that some steam had to be discarded as well. In response, the Jiaxing plant adopted condensate water discharge control technology that utilizes automatic traps to prevent the leakage of steam. This technology is being phased in across all our plants. Our efforts at recycling energy and preventing leakage have resulted in cutting costs by KRW 410 million per year and reducing 3,628 tCO₂-eq of GHG emissions per year.

Promoting operational efficiency

We are conserving energy in a variety of ways by efficiently and effectively improving existing approaches to tire manufacturing and energy use. In 2018, turbo chillers were replaced with absorption chillers that do not require electric power. N₂ gas production efficiency has increased as well, reducing the use of power. In addition, temperature control for cooling & heating and tubes for recovering condensate water were improved to conserve thermal energy. As a result, we saved KRW 1.16 billion per year and reduce 8,218tCO₂-eq of GHG emissions per year.

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Introducing new technology and utilizing renewable energy

Photovoltaic power generation units were installed on the roof and bicycle racks of the China Technical Center (CTC), a research center at the Jiaxing plant. Their operation started on December 27, 2018. It is expected to contribute to about 300tCO₂-eq reduction of GHG emissions per year by generating and supplying green electricity utilizing the photovoltaic power generation system. Meanwhile, facilities at the Daejeon plant were established to utilize externally-generated low-carbon steam that includes thermal energy from biomass, reducing GHG emissions by about 12,000tCO₂-eq per year.



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Background

As enterprises are becoming increasingly influential across wide swaths of society, the interest in and demand for corporate social responsibility is growing worldwide. To secure business sustainability, companies need to focus not only on product price competitiveness and quality, but also on policies for nurturing talent.

Our direction

Promoting human rights management is one of our strategic tasks for realizing the CSR vision of sustainable growth through fulfilling corporate social responsibility. We announced our human rights management plans in 2015 and conducted human rights assessment to identify potential issues across the supply network, including at our subsidiaries. We have continued in our efforts to root out vulnerabilities by considering the business characteristics of each subsidiary, upgrading training modules, and raising employee awareness. As part of these efforts, we are operating programs to support and communicate with employees and concentrating on change management with the introduction of HR3.0.

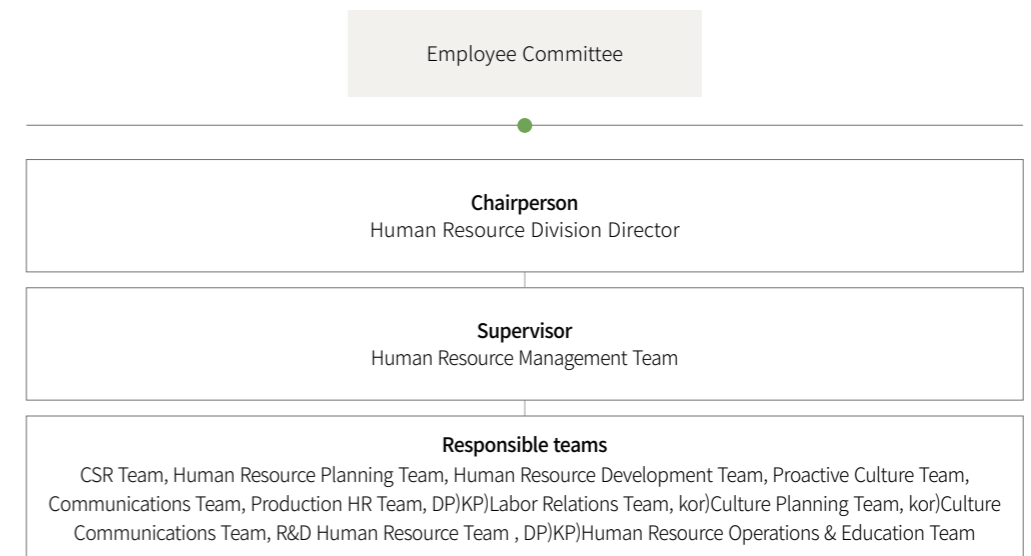
Achievements

	Published a guide book on human rights management	
	Conducted a survey on employee engagement	A total of 276 improvement tasks identified
	Developed microlearning content for employee:	18 programs

Future plan and mid-/long-term targets

We are doing our utmost to protect human rights of our employee by establishing a system for human rights management. Going forward, the scope will be expanded to the entire supply chain, including suppliers, and enterprise-wide diagnostic tests will be biennially conducted. For worksites with high risks, a due diligence will be conducted to reduce the risks and improve the working environment. In addition, we will steadily increase the employment of people with disabilities and the percentage of female managers, and lay a groundwork for diversity management.

Organization



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Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Pursuing changes for a positive corporate culture	Improving organizational practices	<ul style="list-style-type: none"> Conducted a survey on employee engagement diagnosis to identify organizational practices that need to be addressed Identified tasks for improvement and conducted pertinent activities (a total of 276 tasks from 62 departments) 		Improving organizational practices	<ul style="list-style-type: none"> Provide a guide to revisit the previously-selected tasks at the company and department levels (identifying and monitoring tasks regarding organizational practices on meetings and reporting, leadership, and process) Interview the heads of departments/divisions Conduct an internal survey for evaluating the results 	Dec.	Proactive Culture Team
	Internalizing core values	<ul style="list-style-type: none"> Raised awareness on our core values (70% in 1Q → 79% in 3Q) Launched an awareness campaign to promote the core values (a cup sleeve event, best practice workshop, and making posters) 		Internalizing core values	<ul style="list-style-type: none"> Provide training on the Group mission and vision Identify the best practices of domestic and overseas subsidiaries 	Dec.	Proactive Culture Team
	Innovating the ways we work	<ul style="list-style-type: none"> Operated the Less For Better campaign for work efficiency (managing work hours; and improving organizational practices on meetings and reporting) Ran a platform for presenting ideas and operated Proactive LABs for their implementation 		Innovating the ways we work	<ul style="list-style-type: none"> Identify and implement tasks for improving the way we work 	Dec.	Proactive Culture Team
	Improving organizational practices on meetings and reporting	<ul style="list-style-type: none"> Offered a guidelines to promote efficiency in meetings Monitored the results of employee satisfaction survey on organizational practices regarding meetings and reporting 		Improving organizational practices on meetings and reporting	<ul style="list-style-type: none"> Upgrade a guide on increased efficiency in meetings and reporting Focus monitoring efforts on identifying meetings with low efficiency 	Dec.	Proactive Culture Team
	Adding "Mr. or Ms." as a suffix for every employee's name when addressing one another	<ul style="list-style-type: none"> Launched a campaign to use 'nim (a title of respect)' when addressing one another and distributed campaign posters 		Adding "Mr. or Ms." as a suffix for every employee's name when addressing one another	<ul style="list-style-type: none"> Continue and monitor the campaign 	Dec.	Proactive Culture Team
	Running the Proactive Friday and Strategic Sunday programs	<ul style="list-style-type: none"> Operated the Proactive Friday programs in which employees planned and conducted creative activities Selected Corporate Culture Agents by organization Provided lectures and held town hall meetings on leadership for executives and team leaders 		Running the Proactive Friday and Strategic Sunday programs	<ul style="list-style-type: none"> Launch and finance DIY programs Offer lectures and host town hall meetings on leadership for executives and team leaders 	Dec.	Proactive Culture Team
Training support for capacity building	Identifying and creating content for microlearning	<ul style="list-style-type: none"> Developed 18 programs for microlearning 		Nurturing digital talent	<ul style="list-style-type: none"> Develop and operate digital training programs for capacity building 	Oct.	Human Resource Development Team
	HRD innovation and change management	<ul style="list-style-type: none"> Supported office and technical employees to set targets for capacity building and provided one-on-one feedbacks 		Training on mission/vision	<ul style="list-style-type: none"> Develop and operate a curriculum utilizing the concept of gamification 	Aug.	Human Resource Development Team
Human rights and diversity	Strengthening due diligence on human rights management	<ul style="list-style-type: none"> Published a guidebook to promote human rights management to all of our employees 		Publishing and distributing a translated version of the guide book	<ul style="list-style-type: none"> Conduct improvement activities for human rights management through promotion and monitoring 	Dec.	Human Resource Management Team
	Promoting diversity	<ul style="list-style-type: none"> Appointed female managers and hired 204 people with disabilities 		Conducting a diagnosis on human rights	<ul style="list-style-type: none"> Identify human rights issues and improve worksites with higher risks 	Dec.	Human Resource Management Team
	Promoting flexible work hours	<ul style="list-style-type: none"> Introduced flexible work hours at domestic plants Operated a working hour reduction system for childcare 		Promoting diversity	<ul style="list-style-type: none"> Continue pertinent activities for its management and monitoring 	Dec.	Human Resource Management Team
Work & Life Balance	Promoting flexible work hours	<ul style="list-style-type: none"> Introduced flexible work hours at domestic plants Operated a working hour reduction system for childcare 		Promoting flexible work hours	<ul style="list-style-type: none"> Continue pertinent activities for its management and monitoring 	Dec.	Human Resource Management Team
	Operating in-house childcare centers	<ul style="list-style-type: none"> Operated in-house childcare centers at worksites in Korea Provided financial aid to support employees with children at childcare centers or kindergartens 		Operating in-house childcare centers	<ul style="list-style-type: none"> Maintain in-house childcare centers at worksites in Korea 	Dec.	Human Resource Management Team

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Pursuing changes for a positive corporate culture

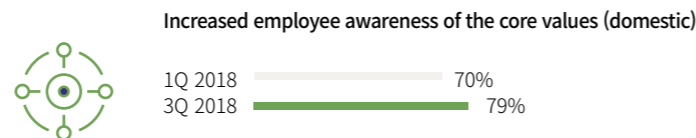
To create an environment in which employees concentrate on their work with creative ideas, we motivate our employees with a variety of campaigns and programs.

Improving organizational practices

A survey on employee engagement was conducted in 2018 to improve organizational practices at the company and department levels. To identify multiple aspects of issues, customized questions were provided by organization and region. The survey results were analyzed based on which plans for improvement had been established and monitored. A total of 276 tasks were identified from 62 departments, and the related progress was monitored. In 2019, we will provide a guide to revisit the previously-selected improvement tasks.

Internalizing core values

In 2018, we focused on activities to raise awareness and promote the understanding of our core values: passion, innovation, collaboration, and global. The activities included a cup sleeve event and making posters. In addition, workshops on best practices were held to help our employees more deeply understand the meaning of our core values.



* Our employee awareness of the core values rose from 70% in 1Q to 79% in 3Q 2018.

Innovating the ways we work

A wide range of activities were conducted to innovate the ways we work. To promote efficiency, a campaign on the theme of Less for Better was operated. Content materials on efficient time management were published as a series in 2018 to provide guidance to employees on utilizing a new working hours system. Over the past seven years, we have been operating a platform through which employees can freely present ideas, and maintaining nine Proactive LABs. These in-house project teams are led by an idea's presenters to pursue its implementation.

Improving organizational practices on meetings and reporting

We review the results of biannual employee satisfaction surveys on innovating corporate culture, in particular organizational practices regarding meetings and reporting. The Proactive Culture Team personally monitors meetings and provides guidance on enhancing meeting efficiency. In addition, our PPT-less initiative encourages employees to create clear and concise reports rather than PowerPoint documents with an excess of pages.

* Company-wide use of PowerPoint documents : 1 % (2018)

* Employee satisfaction survey on organizational practices on meetings and reporting: 67% (2017) → 70% (2018)



Adding "Mr. or Ms." as a suffix for every employee's name when addressing one another

To create a more horizontal corporate culture, we encourage our employees to add "Mr. or Ms." instead of a job title as the suffix for every employee's name when addressing one another. To this end, a variety of activities have been implemented, including campaigns and promotional materials. In addition, an annual survey is conducted to monitor progress. In the 2018 survey, 74% of employees responded that they used "Mr. or Ms.", which equaled the level in 2017.

Running the Proactive Friday and Strategic Sunday programs

The Proactive Friday program is operated once per month. On the designated day, all of our executives and team leaders take the day off while the remaining employees, either as individuals or in groups, plan and conduct creative activities promoting our core values. Executives and team leaders return to work on the Sunday of the week, which is called Strategic Sunday, and host Town Hall meetings to discuss issues and strategic directions.

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Training support for capacity building

We created microlearning content for employee training and conducted activities for HRD innovation and change management.

Identifying and creating content for microlearning

To provide employees with materials for self-directed learning, we created short (5-7 minutes) videos as follows:

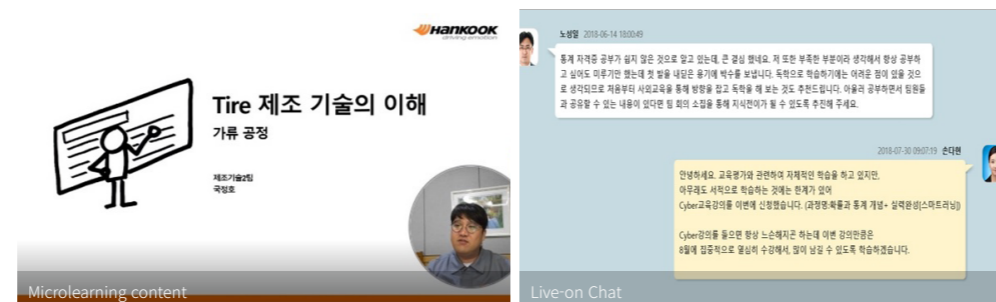
- Tire manufacturing processes from mixing to calendaring, cutting, building, curing, and inspection (13 videos)
- Hankook Tire & Technology's Proactive Workstyle (1)
- Understanding of a PLM¹⁾ system (2)
- Understanding of tire up-selling techniques (2)

1) PLM: Product Life Cycle Management

The content is utilized as pre-learning materials for: introductory training for new non-career/career office and technical employees; vocational and on-the-job training for production workers; and a professional course.

HRD innovation and change management

We develop activities to promote self-directed learning and ensure that employee capacity-building activities boost their results at work. Live-on Chat is a tool that allows our office and technical employees to set and manage their learning targets by communicating with their team leaders. In addition, programs were developed for employees on the track for promotion to a team leader, and the scope of on-the-job training has been expanded.



Promoting human rights and diversity

We are promoting human rights and diversity in order to contribute to building a sound and healthy society. As part of these efforts, we operate grievance channels, conduct a Human rights assessment and increase the number of employees with disabilities.

Strengthening due diligence on human rights management

Grievance Committee In 2015, we established a grievance process through which employees can raise personal grievances. It aims to address the personal issues of employees, prevent disputes, and promote a harmonious labor-management relationship. Employees can report any kind of grievance, including discrimination, workplace sexual harassment, unfair treatment related to parental leave, or other personal issues via an oral report, phone call, letter, or e-mail. The Grievance Committee or similar channels are operated at domestic worksites and key overseas manufacturing subsidiaries. A Human rights assessment was conducted to identify worksites lacking a grievance process. In 2018, a total of 29 reports were addressed. Going forward, we plan to expand the scope to include all of our overseas subsidiaries by establishing and promoting such channels at the subsidiary level.

Human rights assessment We conduct a human rights assessment biannually for all of our worksites, including the headquarters, domestic and overseas plants, R&D centers, and overseas subsidiaries and offices. For the diagnosis, we use a checklist, an upgraded version of the one developed by the National Human Rights Commission of Korea. The checklist consists of 66 items in 11 categories, including nondiscrimination in employment, freedom of association, the right to collective bargaining, prohibition of forced/child labor, and occupational health and safety. The 2017 assessment was conducted for 38 teams/departments focusing on privacy protection and workplace sexual harassment. For the 15 domestic and overseas worksites with results that require attention, improvement measures will be formulated and implemented to prevent potential risks.

※ Since 2018, the Human rights assessment has been conducted biennially for more efficient implementation of improvement measures.

A checklist for the Human rights assessment

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Promoting diversity

Hankook Donggrami Partners, established in 2015 according to the ‘subsidiary-type standard business system’, aims to give the vulnerable job opportunities and contribute to the social and economic development of local communities. The number of employees with disabilities has steadily increased from 87 in 2015 to 204 in 2018, and they are working in our in-house employee welfare facilities in four areas, including laundry service, bakery, coffee and beverage, and office and administrative support. In April 2019, Hankook Donggrami Partners received the Prime Minister Citation for its efforts in increasing the employment of the disabled, promoting employment stability, improving labor conditions, running programs for their successful adjustment to their jobs, and raising awareness of people with disabilities. The company will expand its service areas to offer more job opportunities and continue its efforts to create a culture of promoting diversity.



Four-year trends of employment of people with disabilities (Unit: Persons)



Work & Life Balance

We are implementing flexible work hours and a working hour reduction system for childcare and operating in-house daycare centers to create an environment in which employee can concentrate on their work and promote work-life balance.

Promoting flexible work hours

Since July 2018, we have operated the "blocked flexible work hour system" so that employees at domestic plants can adjust their work hours while not exceeding 40 hours per week on a two-week basis. At R&D centers, employees have been utilizing a "flexible time system" since 2015, which allows them to choose their times for arriving at and leaving work to support a healthy work-life balance. In addition, a VPN system is in place to support employees working at home or on business trips.

All of our employees with children aged eight (second graders) or younger can take parental leave up to one year. In addition, our working hour reduction system for childcare allows employees subject to parental leave to reduce their working hours (20 hours per week) over one year rather than taking a leave of absence. Both male and female employees can take parental leave or use the working hour reduction system twice for a total of one year.

Operating in-house childcare centers

We maintain in-house childcare centers at the headquarters, R&D centers, and plants in Korea. To ensure quality education and the safety of children, we maintain the number of teachers required by law, utilize programs designed by professional educational institutions, and provide children with nutritious meals from dedicated cooking facilities. Their operating costs above the government subsidiary are fully covered by Hankook Tire & Technology to help employees minimize the burden of childcare and more concentrate on their work.

Furthermore, we provide KRW 200,000 worth of financial aid to support all employees who have children aged from four to six at childcare centers or kindergartens on a quarterly basis.



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Background

Since protecting the environment is essential for the sustainability of all companies, we consider the environmental impact not only from our manufacturing processes, but also from the use of our products. In this regard, we will further strengthen our research efforts to reduce the related impact, starting from the product development stage. To prepare for the era of Green Survival in which eco-friendliness is not an option but a must, we will do our utmost to protect the environment.

Our direction

The EHS Committee and the Product Environment Committee are reviewing the progress of the CSR Vision 2020 Roadmap established in 2017. In 2019, we will set our mid-/long-term CSR targets considering SDGs and K-SDGs to start activities from 2020 to meet them.

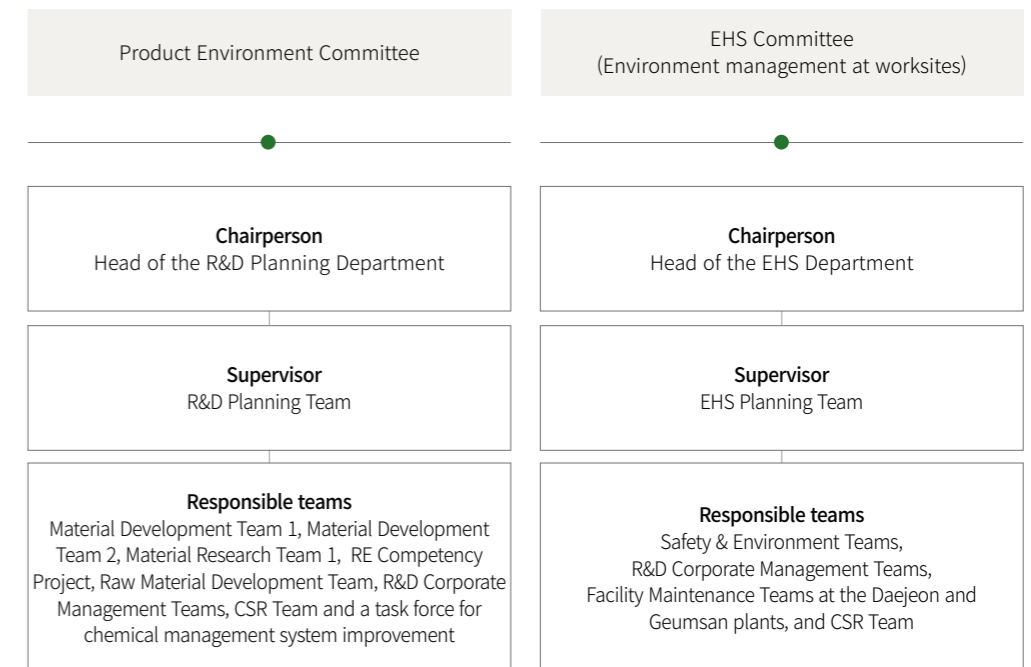
Achievements

	Recycling rate of treated water	44.1%
	Ratio of eco-friendly products (based on quantities)	64.7%
	Discharged waste intensity	43.1 kg/ton of finished product

Future plan and mid-/long-term targets

To minimize our environmental impact on local communities, we will continue to reduce waste and water use while promoting treated water recycling at our plants. In addition, by gradually increasing the use of renewable material and recycled materials, we plan to develop tires made only from sustainable materials by 2045. We will proactively join the efforts to protect the earth through activities for improving fuel efficiency of vehicles, including making lightweight tires and enhancing rolling resistance.

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Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Tire design/raw materials	Establishing a chemical management system through process improvement	· Proposed a dedicated organization for chemical management · Improved chemical management process and created an inventory	🚩	Establishing a chemical management system through process improvement	· Establish an IT system and devise a plan to operate an IT system.	Dec.	A task force for chemical management system improvement, R&D Corporate Management Team
	Conducting LCA	· Selected a plant (Daejeon) and products for LCA	🚩	Updating LCA results for domestic plants	· Conduct LCA for two products at the Daejeon plant	Jul.	CSR Team
	Eco-design	· Re-examined items subject to eco-design	🚩	Re-defining green products and re-establishing targets	· Re-define eco-friendly products · Set mid-/long-term targets for the percentage of eco-friendly products	Oct.	CSR Team, Product Planning Team, Global TBR Marketing Operations Team
Tire use/disposal	Developing energy-saving curing technology	· Optimized the pressure for nitrogen gas supply in manufacturing PCR and LTR tires	🚩	Developing energy-saving curing technology	· Manufacture and evaluate TBR tires for the test purpose	Dec.	Material Development Team 2
	Identifying eco-friendly materials and developing technology with the application of the materials	· Developed compound technology with renewable raw materials applied · Manufactured compounds by applying reclaimed butyl rubber and green carbon ²⁾ and completed temporary production	🚩	Identifying eco-friendly materials and developing technology with the application of the materials	· Sustain efforts to develop compound technology with the application of renewable raw materials · Expand the application of compounds with reclaimed butyl rubber and green carbon	Dec.	Material Research Team 1, Material Development Team 1, Raw Material Development Team
	Manufacturing lightweight tires	· Optimized the structure of existing products · Achieved optimal groove depth of stud tires	🚩	Manufacturing lightweight tires	· Apply lightweight structure to other tire products	Dec.	RE Competency Project
Managing the work environment	Reducing waste and increasing recycling	· The 2018 intensity of waste discharged: 43.1kg/ ton of finished product	🚩	Reducing waste and increasing recycling	· Intensity of waste discharged: 40kg/ ton of finished product or less	Dec.	EHS Planning Team
		· Increased waste recycling at the Daejeon and Geumsan (percentage of recycling: 78.9%) · Recycled 100% of treated wastewater at the Daejeon plant	🚩	Recycling resources	· Conducted a study to reduce factory odors at the Daejeon plant	Dec.	DP)Safety & Environment Team
	Proactively responding to strengthened environmental laws	· Conducted activities and studies to ease odors at the Daejeon plant	🚩	Proactively responding to strengthened environmental laws	· Install high-efficiency denitrification facilities	Dec.	KP)Safety & Environment Team
		· Increased the efficiency of the CFRTO and CRCO (equipment reducing factory odors) at the Daejeon plant	🚩		· Improve hazardous chemical management	Dec.	KP)Safety & Environment Team
		· Expanded the installation of odor/dust reduction equipment (W/S) in the mixing process at the Daejeon plant	🚩		· Continue the installation of odor and dust reduction equipment in the mixing process at the Daejeon plant	Dec.	EHS Planning Team
		· Increased the installation of odor/dust reduction equipment (W/S) in the calendaring process at the Geumsan plant	🚩		· Continue the installation of odor and dust reduction equipment in the calendaring process at the Geumsan plant	Dec.	EHS Planning Team
		· Overhauled local ventilation systems for mixers at the Daejeon and Geumsan plants	🚩		· Upgrade local ventilation systems used in the mixing process at the Daejeon and Geumsan plants	Dec.	EHS Planning Team
	Achieving shared growth with local communities	· Conducted R&D activities for new equipment (a complex wet EP system)	🚩	Achieving shared growth with local communities	· Improve sand filters at wastewater treatment facilities (at the Daejeon plant)	Dec.	DP)Safety & Environment Team
		· Held meetings of the Donggrami consultation group for shared growth at the Daejeon plant (once) · Had meetings of a consultation group for the environment at the Geumsan plant (five times)	🚩		· Held meetings of the Donggrami consultation group for shared growth at the Daejeon plant · Continue the operation of a consultation group for the environment at the Geumsan plant	Dec.	DP)Safety & Environment Team KP)Safety & Environment Team

1) The name of the goal changed from 'Identifying new materials and developing application technology'
2) Green carbon means recovered carbon black generated from pyrolyzed waste tires.

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Tire design/raw materials

We conducted lifecycle assessment (LCA), which confirmed that the use phase in the product life cycle accounts for 95% of climate change impact and 85% of respiratory inorganics generation. It is essential to identify environmental impact from the development stage and conduct activities to reduce it.

Establishing a chemical management system through process improvement

As the Act on the Registration and Evaluation, etc. of Chemical Substances and the Chemical Control Act takes effect in Korea, greater importance is being placed on safe chemical management. As a response, in 2018 we produced a full list of the chemicals we use, based on which a chemical management process was established to allow teams responsible for procurement, raw material development, and other chemical-related areas to share the information and take appropriate measures. We have screening procedures to identify the harmfulness of newly-adopted chemicals, and in 2019 we plan to establish an IT system to comprehensively manage information on the chemicals managed in our worksites and on material safety.

Conducting LCA

We began conducting life-cycle assessment (LCA) on our products from the Geumsan plant in 2012 and have expanded it to plants in Hungary and China. In 2019, we will select two products from the Daejeon plant for LCA. In addition, the data accumulated over the past seven years will be utilized to quantify the results of activities to improve our products and environmental management. We will continue to devise new methods of using the data in our decision-making process.

Tire use/disposal

Developing energy-saving curing technology

Curing is the process of applying pressure to the green tire within a mold in order to establish its final form. We put considerable R&D effort into efficient use of thermal energy and enhanced product quality in the curing process. We have standardized data by identifying curing time, temperature, and pressure under high energy efficiency conditions, which allows each plant to optimize curing conditions for elevated productivity. In 2018, we studied optimum conditions for the inert gas that creates pressure for curing PCR and LTR tires in order to boost productivity and product quality.

Developing technology with the application of sustainable materials

Under our E-Circle program, in 2018 we grouped all of our studies on eco-friendliness into sustainable research categorized into one of four areas: use of green materials, re-use of tires, use of reclaimed materials, and minimization of environmental impact by tire products. This year, we focused on green carbon¹⁾ in an effort to increase its purity and explored reclaimed rubber with a goal of improving its processability and quality. The results were evaluated in on-site testing and production was eventually completed. Studies on the application of reclaimed materials were also performed and we were able to manufacture tires utilizing reinforced substances extracted from biomaterials as a compound. Its performance will continue to be tested and evaluated.

1) Green carbon means recycled carbon black generated from pyrolyzed end-of-life tires

Reducing rolling resistance of tires

Over the lifecycle of tires, their impact on the environment is the greatest during their use. In this sense, the rolling resistance and weight of tires are critical elements for reducing their environmental impact. In response, we have conducted studies on product structure, raw materials, additional substances, and manufacturing to decrease rolling resistance and consequently increase the fuel efficiency of vehicles. As a result, we improved the rolling resistance of our PCR tires supplied for the Mercedes-Benz S-Class by 24%²⁾ compared to existing products and 18%³⁾ for TBR tires. If we attempt to improve fuel efficiency purely by lowering resistance, it could hamper braking, handling, and wear performance. In response, we are working on the development of compounds by considering their eco-friendliness and the balance between ground contact pressure and performance.

2) PCR tires for passenger car: new products (255/50R18Y XL K117) were compared with existing product (245/55R17W K115).

3) TBR tires for trucks and buses: the comparison was made between TL10+ and TL20 (435/50R19.5).

Manufacturing lightweight tires

Lightweight tires contribute to reducing the use of raw materials and increasing fuel efficiency through lessened vehicle weight. To develop lighter products, we are continuing with our efforts at achieving optimal structures. For enhanced ground contact on icy roads, we have applied lightweight technology to studded tires with metal inserted in the treads. Over a total of 44 specifications, we achieved 7% weight reduction on average. This technology is being applied in regular production at our domestic and overseas plants.

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Managing the work environment

According to our LCA, the product manufacturing process accounts for 5% of the impact on water resource depletion and acidification and 9% of respiratory inorganics. To minimize the environmental impact of our manufacturing activities, we are managing environmental indexes, standardizing the pertinent facilities, installing high-efficiency equipment, and conducting research on reducing factory odors in cooperation with academics and in accordance with our CSR Vision 2020 Roadmap.

Reducing waste and increasing recycling

For the reduction of waste generated at our plants, we are steadily conducting activities to decrease product defect rate in the manufacturing process. As our product defects occurred mostly in textiles and steel cords, we focused on improving processability in calendaring. As a result, in 2018 waste dropped 3% and 2.9% year on year for the Daejeon and Geumsan plants respectively. In 2019, we will strengthen our efforts by creating a task force for reducing scrap of semi-finished products.

The Geumsan plant used to bury the sludge generated during the treatment of wastewater. Starting in 2018, however, it is providing it as supplementary fuel to companies using thermal energy. In addition, 75% of treated wastewater is being used as toilet water and cleansing water for wet scrubber. The Daejeon plant has applied wastewater for cleansing and as cleaning water for wet scrubber since 2012. In 2018, instead of discharging wastewater, the plant re-used 100% of it.

Proactively responding to tightening environmental law

As part of the efforts to promote Daejeon as an area with high air quality, our Daejeon plant signed an agreement with Daejeon Metropolitan City on particulate matter reduction in June 2017. In order to improve local concentrations to 18 µg/m³ by 2020, the plant is operating pertinent facilities under only optimal conditions, regularly conducting water-cleaning, and implementing an odd-even traffic rationing policy.

The plant is making remarkable efforts to minimize its environmental impact on the surrounding area by installing high-efficiency environmental facilities. Still, local residents are calling for improvement measures. Under contracts with local universities, we are analyzing the characteristics of factory odors and the results of pertinent projects to effectively ease any smells.

To maintain the efficiency of combustion equipment at the plant, its key components were replaced. As a result, its efficiency has increased over 90%. The plant will measure odors and conduct BET¹⁾ and TGA²⁾ on a monthly basis to identify optimal timing for the part replacement and maintenance of it.

Outdated low-efficiency equipment is being replaced with upgrades. The Geumsan plant increased its efficiency at removing odors and dust by 50% by installing diffraction-type wet scrubber. Moreover, the replacement facility is 30% smaller, which will reduce waste at the time of its disposal. Going forward, we will improve the work environment by upgrading local ventilation systems with lower dust-collection performance, shielding conveyor lines, and enhancing curved portions of ducts while increasing efficiency in removing pollutants.

1) BET: Brunauer Emmett Teller
2) TGA: Thermogravimetric Analysis

Achieving shared growth with local communities

Since the establishment of the Donggrami consultation group in 2016, quarterly meetings have been held at the Daejeon plant with participants from local communities, universities, environmental organizations, and the city council. The plant describes the status of pollutant discharges and management and offers a factory tour. Opinions and advice from local residents and environmental experts at the meetings allow the plant to identify points for improvement. The group also serves as a communication channel to address any local misunderstandings about the company.

To prevent chemical accidents and ensure the safety and health of local residents, the Geumsan plant serves as a leader of the Chemical Safety Community consisting of six companies in Geumsan and Nonsan. At the Geumsan Environmental Management Committee, opinions from participants, including local residents, experts and government officers, are presented and collected based upon which the plant is working on key issues and formulating follow-up measures.

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Climate Change and GHG Management
Employee Value Creation

Focus 05

Integrated Environmental Management
Community Involvement and Development
Transparency and Business Ethics
Win-win Supply Chain Partnership

Case Study

Topic | Responding to emerging risks: the effect of tire and road wear particles on the occurrence of particulate matters in the air

1 Overview

Despite the fact that the Ministry of Environment issued a press release correcting the results of a study asserting that tire wear particles significantly contribute to airborne particulate matter, the study continues to be quoted in media reports. As the government and the public in Korea pay increased attention to issues of particulate matter, their interest in the impact of tire wear particles on the occurrence of particulate matter is growing. In this regard, inaccurate information could damage our corporate image and result in tightened regulations on tire products.

3 Results

The TIP study confirmed that TRWP do not pose serious risks to humans or the environment. According to the study, TRWP account for less than 3% of PM10 and 1% of PM2.5. As tires are made from rubber, tire wear mainly creates coarse particles.

4 Future plan

Wear is a physical result of the basic function of tires. If friction is not properly created between tires and roads, the safety of drivers and passengers is impacted. In response, the TIP is continuing its R&D efforts to enhance tire durability by minimizing wear while keeping other functions intact. Identifying the potential impact of TRWP on health and the environment remains a top priority.

2 Our response

Supported by eleven tire companies, the Tire Industry Project (TIP) has conducted scientific research from 2006 to collect and identify tire and road wear particles. The research confirms that particles are created through a combination of rubber from tires and road wear particles.

- The ratio of tire wear to road wear particles is 6:4.
- A new term, TRWP (tire and road wear particles) was coined.



↑ KIT drum machine for creating and collecting TRWP (outside)
← KIT¹⁾ drum machine for creating and collecting TRWP (inside)

1) KIT: Karlsruhe Institute of Technology

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Community Involvement and Development



Background

Companies should not only seek a profit, but also fulfill their roles as members of their neighboring communities. We are conducting a wide range of corporate philanthropic project by creating jobs, supporting the vulnerable, and protecting the environment. In 2019, we are working on programs that can contribute to addressing the issue of particulate matters. Through these activities, we will continue in our efforts for achieving share growth with local communities.

Our direction

Our CSR Team is in overall charge of corporate philanthropic project and key teams at the headquarters and domestic and overseas plants are formulating and implementing customized projects and activities. At the end of the year, responsible personnel at each worksite devise and implement plans in cooperation with the CSR Team and external NGOs or NPOs. In addition, quarterly social contribution committee meetings are held to monitor the progress of projects and activities and address pertinent issues.

Achievements



Conducted corporate philanthropic projects in our overseas network

KRW 1 billion spent to support a total of 72 projects



Joined the efforts to create space for traffic safety experience at the Daejeon training center for people with development disorder



Signed an MOU to launch a project for protecting endangered species in Daejeon

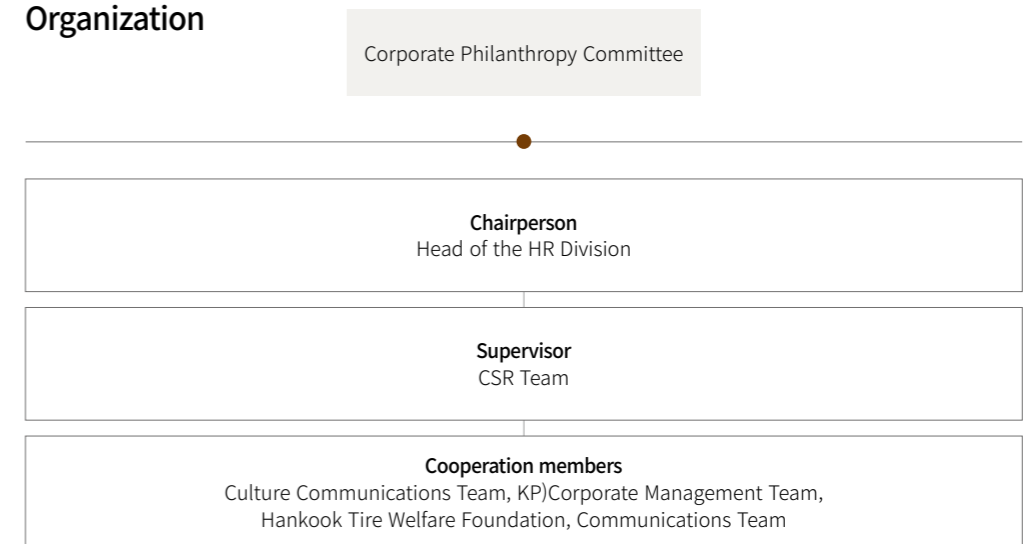
KRW 24. 5 million spent

Future plan and mid-/long-term targets

We will further promote our mobility projects and devise new projects to address issues in local communities. In the Taean area where our PG¹⁾ construction is underway, we will take a step beyond the one-time proposal we made in 2018 to plan and operate a corporate philanthropic project allowing Hankook Tire & Technology and Taean-gun to grow together. Based on these efforts, we will concentrate on our strategic directions for enterprise-wide implementation, employee participation, capacity building, and local community support in order to achieve our goal of promoting the growth of local communities and enhancing brand value.

1) PG: Proving Ground

Organization












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Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Company-wide implementation	Conducting corporate philanthropic activities at overseas sites	<ul style="list-style-type: none"> Overseas worksites programs in our overseas network China HQ: supported the vulnerable, and offered scholarships Europe HQ: donated tires (the Czech Republic) and made a donation for building a hospital (Italy) Hungary Plant: operated employee volunteer groups and sponsored local festivals Indonesia plant: provided medical support for the vulnerable and operated employee volunteer activities America HQ: supported for the Disabled American Veterans (DAV) Conducted a total of 72 activities (KRW 1 billion spent) 		Conducting corporate philanthropic activities at overseas sites	<ul style="list-style-type: none"> Continue existing corporate philanthropic activities (89 activities; KRW 1.4 billion) China HQ: support the children in low-income families with scholarships Europe HQ: donate tire (the Czech Republic); support the construction of a hospital (in Italy) and donate some of its sales revenue (in Germany) Hungary Plant: donate tires and operate employee volunteer teams Indonesia plant: launch a traffic safety campaign, improve the school environment and provide drinking water support. America HQ: support the DAV and the Salvation Army Conduct new corporate philanthropic activities Identify the demand for our social contribution activities and review new projects. 	Dec.	Relevant Teams
	Operating volunteer teams in Korea	<ul style="list-style-type: none"> Reviewed measures for encouraging employee to voluntarily take part in the efforts 		Operating volunteer teams in Korea	<ul style="list-style-type: none"> Reorganize a system to manage volunteer activities of domestic office employees 	Dec.	CSR Team, Culture Communications Team, Production Innovation Team, R&D Corporate Management Team
Employee participation	Conducting overseas volunteer activities	<ul style="list-style-type: none"> Prepared the launch of employee volunteer teams by plant in China 		Conducting overseas volunteer activities	<ul style="list-style-type: none"> Establish employee volunteer teams in China and America 	Dec.	CSR Team
	Developing traffic safety maps for children	<ul style="list-style-type: none"> Reviewed improvement points of this project. This project was not implemented. 		Developing traffic safety maps for children	<ul style="list-style-type: none"> Region: Seoul and Gyeonggi-do Participants: four elementary schools In partnership with: the Korean Association for Safe Communities 	Dec.	CSR Team
	Undertaking three major Mobility projects	<ul style="list-style-type: none"> Car donation: 50 cars Tire donation: 705 vehicles (2,824 tires) Tuieum Bus: 620 buses supported 		Undertaking three major Mobility projects	<ul style="list-style-type: none"> Car donation: donate 50 cars and provide wrapping replacement and repair support after the expiration of a maintenance contract Tire donation: donate 2,000 tires for 500 vehicles and offer free vehicle check-up and part replacement services Tuieum Bus: provide 600 buses for support 	Dec.	Hankook Tire Welfare Foundation
	Conducting cause-related marketing activities	<ul style="list-style-type: none"> Not conducted due to internal issues 		Conducting cause-related marketing activities	<ul style="list-style-type: none"> Devise activities for addressing social issues 	Dec.	CSR Team
Local community support	Protecting at-risk youth and support their self-reliance	<ul style="list-style-type: none"> Operated the Wonderland program for providing a shelter to vulnerable youth Programs for vulnerable youth to help them gain their feet Renovated a youth self-reliance coffee shop at the Gisen Hall of the Catholic University of Korea Held a variety of promotions, including an exhibition and talk event, to increase sales of the second location. 		Protecting at-risk youth and support their self-reliance	<ul style="list-style-type: none"> Continue the Wonderland program for providing a shelter to at-risk youth Internship programs for at-risk youth Operate the second location of a youth self-reliance coffee shop named 'Lost and Found' Provide at-risk youth with internship programs to experience different jobs in their local communities 	Dec.	Hankook Tire Welfare Foundation
	Social housing project	<ul style="list-style-type: none"> Eleven building provided in 2018 (a total of 16) For 145 households in 2018 (a total of 219 households) 		Social housing project	<ul style="list-style-type: none"> Provide 15 social housing buildings for 250 households Add a new type of social housing: land-support REITs (real estate investment trusts) Support monthly rent and deposit for the vulnerable Increase support fund in cooperation with the Seoul Social Investment Fund 	Dec.	Hankook Tire Welfare Foundation
	DreamWith project	<ul style="list-style-type: none"> Operated programs to promote the participation of local residents and supported 14 organizations and groups 		DreamWith project	<ul style="list-style-type: none"> Introduce a profit-sharing business model and support 15 organizations 	Dec.	Hankook Tire Welfare Foundation

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Company-wide implementation

To achieve shared growth with local communities, customized activities by region have been conducted within our global network.

Undertaking philanthropic activities at our overseas worksites

Customized activities by region have been conducted at our overseas worksites. In 2018, KRW 1 billion was spent to support a total of 72 projects and activities including: supporting the underprivileged and offering scholarships in China; operating employee volunteer groups and donating tires in Europe; providing medical support for the vulnerable in Indonesia; and supporting the Disabled American Veterans (DAV) in the US. In 2019, our Tennessee plant will initiate activities to contribute to local communities and the Hungary plant will sponsor high-school and college competitions.

Philanthropic activities at home and abroad in 2018

Category	Major activities
Domestic	1. Three mobility projects [car donation, tire donation, and Tuieum bus]
	2. Programs for at-risk youth
	3. Social housing project
	4. Donation to the Community Chest Of Korea
	5. Operation of the employee volunteer teams
	6. A project for protecting endangered species in Daejeon
Overseas	1. China HQ: supporting the vulnerable and offering college scholarships
	2. Europe HQ: supporting injured veterans and donating tires (the Czech Republic), making a donation to the foundation of a hospital (Italy), and donating some of sales revenues (Germany).
	3. Hungary Plant: donating tires and operating employee volunteer teams
	4. America HQ: supporting the DAV and the Salvation Army
	5. Indonesia Plant: conducting employee volunteer activities, donating tires and improving the elementary school environment

Employee participation

Our employees are taking part in a variety of volunteer activities and promoting the value of sharing by providing support to the vulnerable in local communities.

Operating volunteer teams in Korea

We have put great effort in the past into increasing the number of employee volunteers and total volunteer hours contributed. From 2019, our focus will be more on improving volunteering qualitatively. We will be performing ‘voice donation’ activities for visually-handicapped people in which employees will create and donate audio recordings of books. While providing employees with optional volunteer programs, we will also encourage them to select independent activities if they prefer.

Conducting overseas volunteer activities

In 2018, we prepared for the launch of volunteer groups at our worksites in China. We communicated with the responsible teams there to identify the progress of the preparations and any issues that might be emerging. In 2019, volunteer groups will be launched in China and America.

Volunteering team activities in 2018

Category	Domestic	Indonesia Plant	Hungary Plant	Total
No. of participants in volunteer works (accumulative) (persons)	5,081	655	257	5,993
No. of pure volunteers (persons)	2,151	275	93	2,519
Total volunteer hours (hours)	18,392	902	1,109	20,403
No. of volunteer activities (cases)	424	18	36	478
Volunteer hours per employee (hours)	2.6	0.5	0.5	1.8

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APPENDIX

1 Background

Since 2013, our Hungary plant has been operating an employee volunteer program designed to encourage employees to conduct beneficial activities and promote shared growth in local communities. As a result of the proactive participation of the employees at the plant, the plant was awarded in 2016 as the Corporate Volunteer Program of the Year by the Volunteer Centre Foundation, a nationwide Hungarian institution.

2 Project details

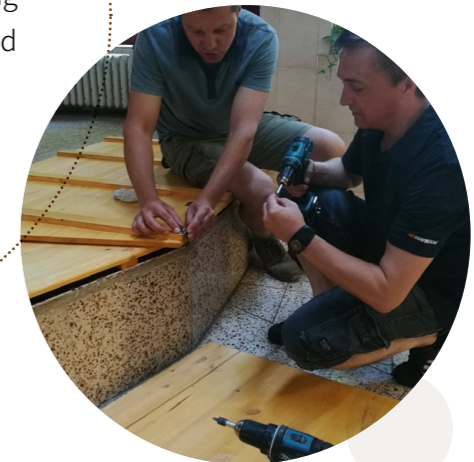
Employees submit their plans for volunteer activities, and 40 plans are selected through internal evaluation. The company supported the required expenses and materials to help them conduct pertinent activities according to these plans.

3 Project results

In 2018, HUF 14,044,178 (KRW 56 million) was spent to support a total of 37 employee volunteering activities, including renovation and remodeling of school and kindergarten facilities and playgrounds.

4 Plan in 2019

In 2019, we will proactively sustain our efforts and a total of 45 employee volunteer activities will be supported with HUF 17,683,964 (KRW 70 million).



↑ Volunteer activities at the Hungary plant

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Case Study

Topic 2 | Endangered species protection project in Daejeon

1 Background

All of our worksites comply with environmental law and strive to protect the environment in local communities. To protect the ecosystem in Daejeon, an MOU was signed in 2018 with six organizations to launch a project to protect endangered species.

2 Project details

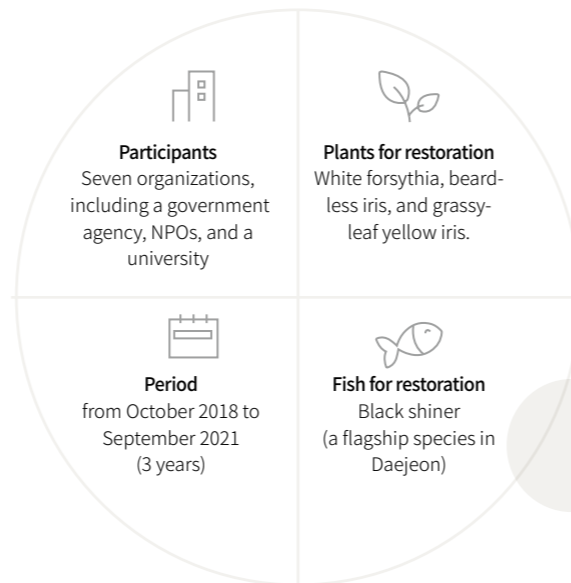
Hankook Tire & Technology signed an MOU with the Geum River Environmental Office, Daejeon Metropolitan City Government, Soon Chun Hyang University, Chollipo Arboretum, Daejeon Choongnam Civic Group for Ecosystem Protection, and Daejeon Office of the Korea Federation for Environmental Movements, under which a project is operated for three years from October 2018 to September 2021 to restore black shiner, a flagship species of fish in Daejeon, and white forsythia, beardless iris, and grassy-leaf yellow iris.

4 Plan in 2019

In 2019, 1,500 white forsythia will be planted to create habitat and 1,500 black shiner will be released in the Youdeungcheon stream.

3 Project's state of progress

On September 13, 2018, we signed an MOU with six organizations to protect endangered species in Daejeon. This project is being financed by Hankook Tire and Technology, with the company and the Geum River Environmental Office in overall charge of the project. The Daejeon Metropolitan City Government is providing support related to the habitats of the species. Soon Chun Hyang University is taking responsibility for restoring black shiner while the Chollipo Arboretum is working on white forsythia, beardless iris, and grassy-leaf yellow iris. The Daejeon Choongnam Civic Group for Ecosystem Protection and the Daejeon Office of the Korea Federation for Environmental Movements are conducting promotional activities and public educational programs.



↑ Endangered species protection project in Daejeon

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Focusing on core competence

We have been conducting philanthropic projects utilizing our strength within the tire industry. A traffic safety campaign a map-making event with children and three major Mobility projects are currently being operated. In 2019, we will continue our efforts for corporate philanthropy by focusing on these projects.

Three major Mobility projects

Car donation This car donation program was launched in 2008. A total of 447 compact cars, including 50 in 2018, have so far been donated to social welfare centers. In addition, safe driving training was provided to drivers at the centers to promote road safety, and incentives were given to centers with good performance filling out their vehicle logs. In 2019, we plan to donate 50 vehicles through the proper channels.



Tire donation Since 2010, we have been donating tires for social welfare service vehicles. In 2018, a total of 2,824 tires for 705 service cars were given to social welfare centers nationwide. This project is also being carried out in other countries, including Hungary and Indonesia. In 2018, the number of tires donated domestically and internationally totaled 6,253.

Tire donation

	Korea	Indonesia Plant	Hungary Plant	Czech Republic	China HQ	Total
Number of tires	2,824	369	2,860	192	8	6,253

Tuieum Bus The Tuieum Bus project was launched in 2013 with the aim to provide cultural and educational opportunities and offer history and ecosystem experiences to people with mobility challenges by offering them free bus service to social welfare centers. This project includes three programs: monthly free bus service, quarterly programs on specific themes, and programs held in cooperation with organizations including the Korea Forest Service. In 2018, a total of 620 buses were used for the project, and a total of 600 will be supported in 2019.

Fostering local community's sustainability

We are proactively working with local communities to help resolve their most pressing issues. As part of these efforts, a social housing project is under way to support young people with housing issues, and programs for at-risk youth are being operated to help them gain their feet.

Programs for supporting the self-reliance of at-risk youth

In order to protect at-risk youth and help them grow into healthy members of our society, we have been offering programs since 2015. In 2018, four teenagers received barista training at Coffee Zoo, a youth self-reliance coffee shop, and two more worked at a second location. In the second location, a variety of promotions, including an exhibition and talk event, have been held since last July in an effort to increase sales. In 2019, we are planning internship programs that provide young people with opportunities to experience different jobs in their local communities.

Social housing project

Our social housing project was launched in 2016 to support young people to address housing issues. Since 2016, a total of sixteen social housing buildings, including eleven buildings for 145 households in 2018, were provided to 219 household. In 2019, we will increase support fund in cooperation with the Seoul Metropolitan Government to benefit a total of 250 households.



DreamWith project

DreamWith is a project aimed at strengthening the capacity of local communities by helping residents take the initiative in addressing childcare and youth issues. We supported 14 organizations and groups of local residents as they worked on issues including sharing childcare, transportation, and intergenerational communication. Just one year of operation has produced results in a range of areas, garnering a positive response from local communities.

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- Win-win Supply Chain Partnership

Case Study

Topic 3 | Hankook Tire Welfare Foundation

Established in December 1990, the Hankook Tire Welfare Foundation has been operated to fulfill our responsibilities and obligations as a corporate citizen by returning to society some of the value created through business operations. Projects led by the foundation include three major Mobility projects (car donation, tire donation, and Tuieum bus) that draw upon the strengths of Hankook Tire & Technology; programs for at-risk youth and scholarships; and social housing projects, donation to welfare centers, and medical support for achieving shared growth with local communities. We will continue in our efforts at pursuing sustainable value, supporting the dreams of children and young people, and addressing economic and social inequalities, thereby contributing to society overall.

Major programs at the Hankook Tire Welfare Foundation



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Transparency and Business Ethics



Background

As enterprises are becoming increasingly influential within both countries and local communities, public awareness of ethical corporate management is being heightened. In addition, our policies previously characterized by control and bureaucratic oversight have shifted to emphasize the delegation of decision-making to individual employees, meaning employee awareness of ethics is more important than ever. If our employees make continuous efforts at raising awareness and keeping vigilant, and if the company conducts activities to promote ethics management, it will lead to growth for the company. On the other hand, if corruption and irregularities are allowed to take place, it may result in a decline.

Our direction

We are monitoring potential ethical risks through a variety of programs. An on-line ethics education system is in place for awareness-raising, and reporting channels, including a cyber-audit room and the Sinmungo e-petition system, are being operated. In addition, diagnoses are being conducted to identify and share directions for improvement. In 2018, our E-Ethics Letter was published and delivered to employees on a monthly basis and the scope of employees subject to making an ethics management pledge was expanded from office and technical workers to the production field. All of our activities to promote ethics management, including education, diagnoses, and reporting, are being shared with our subsidiaries as well. Going forward, we will engage all of our stakeholders in these efforts through continuous communication.

Achievements

	Number of whistleblower reports received	27
	Regular ethics management education	97.0% of office and technical employees and employees dispatched to overseas subsidiaries
	Employees subject to a pledge for ethics management	2,837

Future plan and mid-/long-term targets

In our evolving corporate environment where decisions are being entrusted to individual employees, it is essential to provide them with guidance on ethics management. To this end, we will continue to sponsor annual education for all employees, publish our E-Ethics Letter, and strengthen the function of the help-desk for promoting internal communication. Moreover, we will create a risk-evaluation checklist and formulate procedures appropriate for each risk level to ensure effective prevention and management.

Organization



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APPENDIX

Managerial Issue	2018			2019			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Ethics management education and awareness raising	Execute regular ethics management education	· Provided all of office and technical employees with online education		Execute regular ethics management education	· Domestic - Utilize microlearning content for office and technical employees (annually) - Use specific education materials for production employees (annually) · Overseas - Create and distribute a guidebooks for ethics management education to overseas subsidiaries - Distribute specific education materials for plants and the headquarters respectively	Jul.	Audit Team 2 Human Resource Development Team
	Raising employee awareness of ethics	· Delivered monthly E-ethics Letter (from May to November)		Raising employee awareness of ethics	· Publish our E-ethics Letter on a monthly basis · Share legal issues related to business operation and questions and answers about ethics · Launch a 'No Giving/No Taking of Holiday Gifts'	Regularly	Audit Team 2, Legal Team
	Expanding the scope of a whistleblowing system	· Improving a framework for our whistleblowing channels · Modified the terms on the collection of customer data, upgraded an online whistleblowing channel and improved a framework for our whistleblowing system		Improving a framework for our whistleblowing channels	· Expand the scope of a cyber-audit room: adding its link to our oversea websites · Upgrade our cyber-audit room	May.	Audit Team 2. Brand Marketing Team
	Updating a pledge for ethics management	· Updated a pledge for ethics management and checked employee compliance		Updating a pledge for ethics management	· New employees and those who have not made the pledge: e-signature (annually) · Review whether to make signing the pledge mandatory	Dec.	Audit Team 2, Human Resource Management Team
				A pledge for compliance with the Improper Solicitation and Graft Act	· Encourage employees to be vigilant and promoting the understanding of the Act	Oct.	Audit Team 2, Legal Team
Monitoring and diagnostic tests	Conducting diagnoses on ethics management	· Conducted diagnoses on ethics management		Conducting diagnostic tests	· Continue to provide diagnostic tests	Feb. 2020	Audit Team 2
				Monitoring any high-handed conduct of abusing one's position in businesses with suppliers	· Check whether there is any case of high-handed conduct of abusing one's position in businesses with suppliers (annually)	Jun.	Audit Team 2
	Establishing a risk assessment management tool	· Conducted a pilot test to identify points for improvement		Establishing a risk assessment management tool	· Develop a checklist of risk assessment	Aug.	Audit Team 2, CSR Team, Teams related to ethics management by region
	Formulating procedures for different levels of risks	· Concluded more work needs to be done to establish a tool					
	Conducting a regular risk assessment						
Promoting ethics management to affiliates	Launching a 'No Giving/No Taking of Holiday Gifts' campaign	· Operated a 'No Giving/No Taking of Holiday Gifts' campaign		Launching a 'No Giving/No Taking of Holiday Gifts' campaign	· Continue to promote a 'No Giving/No Taking of Holiday Gifts' campaign	Feb., Sep.	Audit Team 2, Teams responsible for ethics management of each affiliate
	Providing education to affiliates	· Offered online education to office, technical and production employees of four affiliates		Providing education to affiliates	· Provide four affiliates with online education (for office, technical and production employees)	Nov.	
	Conducting diagnoses on ethics management	· Conducted ethics management diagnoses for affiliates		Establishing a risk assessment and management tool	· Operate diagnostic tests for affiliates	Nov.	

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Ethics management education and awareness-raising

We have been providing our employees with regular education on ethics management, sharing best practices, and keeping channels in place to promote communication.

Providing regular education on ethics management

Regular annual education is provided to raise employee awareness of ethics management and support them in taking related actions. Domestic office and technical employees and employees dispatched to overseas subsidiaries underwent education using video-based educational materials on topics such as understanding ethics management, our pertinent activities, and best practices. Four thousand five hundred production employees received education with materials distributed at the morning assembly.

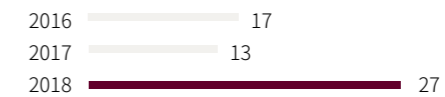
Employee awareness raising

We have published our E-ethics Letter since 2013 to share information and best practices on ethics management for employee awareness-raising. Since a renewal in May 2018, it has been emailed to employees to share best practices identified in previous diagnoses and at other companies, along with an ethics management guide. The information is also posted on the help desk page on our intranet. In addition, employees can ask questions and receive an immediate response in the Q&A menu. As part of our ethics management efforts, we launched a ‘No Giving/No Taking of Holiday Gifts’ campaign and encouraged employees to participate.

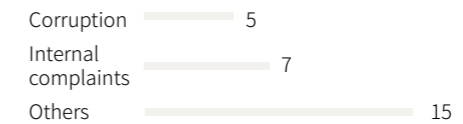
Expanding the whistleblowing system

We have established a process to implement the whistleblowing system across our global network. By expanding its scope, we will add a menu on whistleblowing channels to all of our global websites.

Three-year trends of whistleblower reports (unit: no. of reports)



The 2018 whistleblower reports by type (unit: no. of reports)



A pledge for ethics management

To prevent irregularities and create a sound corporate culture through employee awareness raising and pertinent activities, the scope of employees subject to a pledge for ethics management has expanded from office and technical to production workers. We will continue promotional activities and training to encourage more employees to join these efforts.

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Regular monitoring and Self Diagnoses

Self Diagnoses on ethics management are conducted in order to identify improvement points and emplace measures to address them.

Self Diagnoses on ethics management

We conduct annual Self Diagnoses to identify the strengths and weakness of our efforts in support of ethics management. In 2018, the participation rate was 95.8% (479 out of 500 employees subject to diagnosis) and the average score was 69.1 points, falling into the middle-range of an ‘institutionalization’ phase. Based on employee awareness and ideas on ethics management, improvement points were identified and reflected in the tasks of the ethics management committee. In addition, we shared pertinent cases with our employees, expanded the scope of the employees subject to training, and provided an ethics management guide to our suppliers.

Risk assessment and management

To manage and respond to pertinent risks, we have devised a tool to identify risks through the analysis of ethics management by level and to generate risk reduction activities by team.

Promoting ethics management to affiliates

To achieve both qualitative and quantitative shared growth, we are operating the same level of ethics management programs with our affiliates.

‘No Giving/No Taking of Holiday Gifts’ campaign and education and Self Diagnoses for affiliates

We launched a ‘No Giving/No Taking of Holiday Gifts’ campaign with four affiliates via our intranet. All employees of the affiliates attended ethics management education by using our online content or their own education materials. We are monitoring their ethics management status through annual education and diagnosis.

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Focus 08

Win-win Supply Chain Partnership

Win-Win Partnership in the Supply Chain



Background

We encourage our suppliers to achieve sustainable growth by fulfilling their corporate social responsibility. To ensure stable raw material procurement and supply that can directly impact our production efficiency and competitiveness, it is essential to secure suppliers with good CSR performance. We are clearly aware that the sustainability of our suppliers is central to our long-term competitiveness, so we pursue win-win partnerships across the supply chain.

Our direction

We promote transparency, fairness and trust in relationships with our suppliers to achieve win-win partnerships and grow together. To help them enhance competitiveness in the long term, we formulate policies for supporting them and conduct a CSR assessment to identify and prevent potential risks in the supply chain.

Achievements

	Supplier selection	29 suppliers selected considering CSR elements
	Supplier capacity building	On-site CSR audits conducted for machinery suppliers

Future plan and mid-/long-term targets

To promote a culture of shared growth with our suppliers, CSR activities are considered in our supplier selection process. Greater importance is being placed on CSR assessment results and the scope of suppliers subject to CSR audit has been expanded. We will elaborate on the audit process by defining its targets and cycle. To ensure win-win partnerships, we will continue our efforts to systematically provide our suppliers with capacity-building training programs.

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Employee Health and Safety Management

Climate Change and GHG Management

Employee Value Creation

Integrated Environmental Management

Community Involvement and Development

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2018		2019		🚩 Completed 🚩 Partially Completed 🚩 Preparing			
Managerial Issue	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Supplier selection	Selecting suppliers considering CSR elements	· Updated CSR-related standards in contracts and rules	🚩	Selecting suppliers considering CSR elements	· Strengthen the utilization of sustainability guidelines for suppliers	December	Purchasing Planning Team
		· Developed a template for secondary suppliers	🚩		· Expanding the scope of CSR management for suppliers : primary → secondary		
Supplier capacity building	Conducting on-site CSR audit	· Conducted CSR audit for machinery suppliers	🚩	Expanding the scope of on-site CSR audit	· Expand the scope of on-site CSR audit	December	Purchasing Planning Team
		Publicly announcing our SNR ¹⁾ policy	· Declared an SNR policy · Participated in the GPSNR as a founding member		🚩		
Supplier ESG management	Minimizing environmental impact during transportation	· Targets and tasks to be defined	🚩				CSR Team

1) SNR: Sustainable Natural Rubber

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Supplier selection

The business stability of our suppliers leads directly to our own, and their CSR management is a critical element for achieving shared growth. In response, we have been working on expanding the scope of supplier CSR management from our primary to our secondary suppliers.

Selecting suppliers considering CSR elements

Promoting win-win relationships with suppliers is essential to achieving sustainability in our businesses. In 2018, we completed CSR assessment for 151 primary suppliers. To promote our CSR policy, we prepared guidelines for distribution to suppliers when signing a contract. For critical primary suppliers, we developed a template that allows them to identify the CSR management status of their key secondary suppliers. For those who do not have criteria for secondary supplier management, guidance on minimum requirements was provided. In 2019, we will work on the refinement of this template and distribute it to suppliers for more transparent supply chain management.

The 2018 on-site CSR audit

Target	Domestic machinery suppliers	
Audit areas	CSR management system	· CSR policy; responsibility; system operation; and communication
	Human rights and labor	· Human rights policy and management; and training · Freedom of association and collective bargaining; working hours and minimum wage; and employment contracts · Prohibition of child/forced labor/discrimination/violence; and prevention of sexual harassment · Grievance channels
	Ethics management	· Ethics management system; responsibility; and policy · Code of ethics; code of conduct; and training · Monitoring; disciplinary actions; whistleblowing system; and disclosure · Information security policy, responsibility and training; and information security system monitoring
	Corporate philanthropy	· Corporate philanthropy policy; responsibility; and activities
	Health and safety	· Health and safety policy; working environment measurement and improvement; and chemical management · Safety responsibility, inspection and training; disclosure of industrial accidents; and the Safety and Health Committee · Safety gear · Firefighting management; and responsibility
	Environment and climate change	· Environmental management system; and conflict minerals · Environment/water/air pollution/waste management; and prevention of soil contamination · Low-carbon management; and energy/GHG emissions management
	Supplier CSR management	· Supplier CSR policy; and communication · Human rights management; ethics management; safety control; and environmental management
Corrective action plans	· Wearing safety gear (hard helmets, gas masks, and masks) and providing them to visitors · Setting up grievance/whistleblowing channels that anyone can report in anonymity · Establishing and promoting internal code of ethics	· Upgrading the equipment for preventing chemicals and oil leakage in the storage of toxic materials · Conducting fire drills on a regular basis

Supplier capacity building

We are offering a wide range of supplier capacity-building programs, including on-site audits, to support them to strengthen competitiveness.

Conducted on-site CSR audit

The scope of on-site CSR audit has been expanded from raw material to machinery suppliers. Our CSR Team supported suppliers in the review of audit results and planning of improvement measures. These activities have helped us to more fully understand the operations of our suppliers. In 2019, we plan to establish a process for conducting systematic on-site audits.

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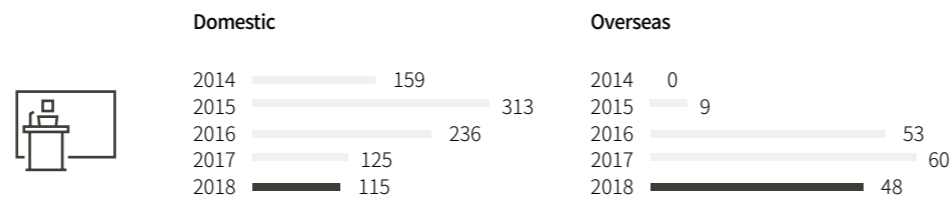
Supplier ESG management

We do our utmost to minimize the environmental impact across the entire product lifecycle. In particular, the impact of the transportation process is a key element that needs to be considered.

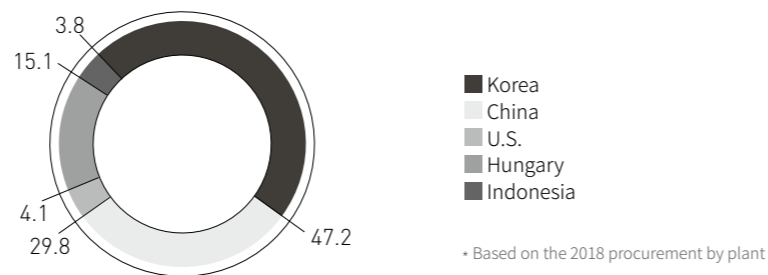
Minimizing environmental impact during transportation

We contract with third-party logistics companies for shipping and transportation of finished products. This limits our ability to adjust the mode of transportation as needed. When we sampled and analyzed the results of a product lifecycle assessment, it turned out that the environmental impact of shipping and transportation accounted for a mere 0.3%. In response, we elected to focus our efforts on areas with a greater impact and to plan new targets and tasks. Meanwhile, we will continue our efforts at GHG emissions reductions by optimizing the transportation routes of finished products.

Suppliers assessed in CSR (unit: company)



Procurement by region (unit: %)



CSR assessment items¹⁾

Category	Details
Human rights, labor, and non-discrimination	Human rights · Freedom of association; and collective bargaining
	Labor · Prohibition of child/forced labor; compliance with legal working hours, minimum wage and employment contracts; and implementation of whistleblowing channels
	discrimination · Non-discrimination; no violence; and prevention of sexual harassment
Ethics	System and its implementation · Establishment of the code of ethics; training; anti-corruption; no bribery ; and social contribution activities
	Monitoring and disciplinary actions · Regular audit and monitoring; and disciplinary actions for violation
	Data protection · Information security of customers
Safety and health	Safety · Safety inspection; safety gears; Safety and Health Committee; and supplier safety management
	Firefighting · Fire prevention activities
	Health · Work environment measurement and improvement; and chemical management
Environment and GHG emissions	Environment · Environmental management; prevention of soil contamination; and waste management
	GHG emissions · Energy and GHG emissions management

1) In selecting new suppliers and renewing contracts, suppliers whose CSR grade is Y (60 points) or higher are given priority. In addition, we are working on improvement measures for suppliers with R grade (less than 60 points or not assessed)

Our critical suppliers

We group our key suppliers into two categories considering their business relevance and dependency and the significance of the items supplied. For raw material suppliers, our selection criteria are: technology-intensiveness; whether only a limited number or exclusive companies exist; and tire cord manufacturers. Regarding machinery, since maintenance issues require considerable time to address once they occur, we identify and manage suppliers who could affect our production continuity.

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1 Overview

About 70% of the natural rubber produced is used in tire manufacturing, and 85% of this rubber production comes from small holders. The sustainability of the natural rubber supply chain is critical for the development of the tire industry. The Global Platform for Sustainable Natural Rubber (GPSNR) was launched in 2018 with leading auto makers such as BMW, Ford, and GM participating as members. In 2016, GM publicly announced a commitment to purchasing tires made from 100% sustainable natural rubber (SNR). If we cannot ensure the sustainability of natural rubber, we may become unable to sell tires for new vehicles.

2 Our response

To ensure the economic, social, and environmental sustainability of our natural rubber supply chain, we formulated an SNR policy stipulating social responsibility along the supply chain. This policy will allow members of the supply chain, including growers, traders, processors, and manufacturers, to comply with the pertinent laws and regulations of the countries of our presence and fulfill all social responsibilities regarding human rights, the environment, and transparent business operations. In particular, through this policy we will work to support growers in improving quality of life while enhancing both productivity and the quality of natural rubber.

3 Results

The Tire Industry Project (TIP) with eleven tire companies participating as members formed a working group on SNR, and launched the GPSNR on October 23, 2018. The GPSNR is a global platform that involves different stakeholders, including growers, traders, processors, and manufacturers (tire and other rubber industries), car makers and NGOs.

4 Future plan

As a member of the GPSNR, we will establish and implement an action plan for an SNR supply chain.



↑ The GPSNR General Assembly (in Singapore on March 21, 2019)

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Overview

The 2018-2019 Hankook Tire & Technology Report is our tenth sustainability report prepared to transparently share with our stakeholders the last year's performance in our CSR activities and mid-/long-term strategies. We have published this annual report since 2010, with the latest released in July 2018. We will continue to publish the report on an annual basis.

Reporting guidelines

This report was prepared in accordance with the Comprehensive option in the GRI (Global Reporting Initiative) Guidelines. The reporting standard and definition of financial information is in line with the International Financial Reporting Standards (IFRS).

Reporting period

The reporting period is from January 1 to December 31, 2018. Some activities spanning the first half of 2019 are included. For quantitative performance, five-year data from 2014 is provided to show trends.

Reporting scope

Data on Hankook Tire & Technology is used to report on our performance and targets, but for some of the information, including on the number of employees, data on the holding company Hankook Technology Group is reflected. The reporting scope encompasses the headquarters in Seoul, Daejeon and Geumsan plants and R&D centers in Korea, and overseas worksites in Hungary, China, Indonesia, and the U.S.. We will continue to expand the scope so that a wide range of our CSR efforts and achievements are fully reflected in this report.

Third-party assurance

For the credibility of this report, third-party verification was conducted by the Korea Productivity Center. For the assurance standard and conclusion, please refer to pages 86-87.

Additional information

For more information or inquiries on this report, please contact us at:

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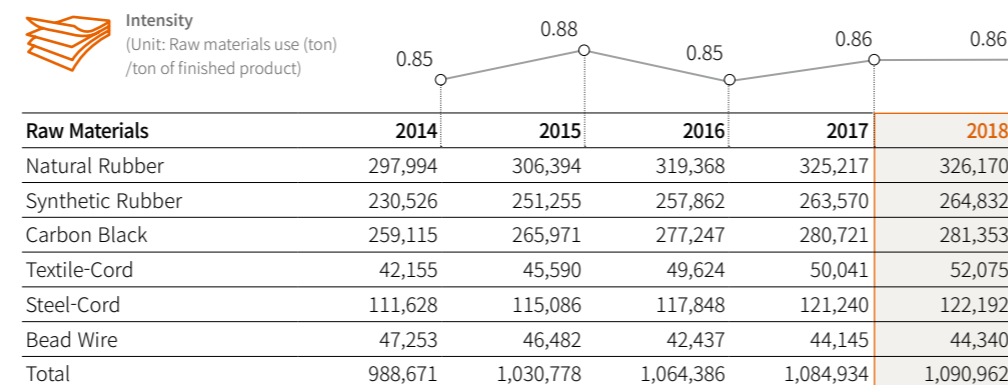
Economic Performances (consolidated basis)

Item	Unit	2014	2015	2016	2017	2018	
Sales	KRW million	6,680,848	6,428,173	6,621,762	6,812,858	6,795,089	
Cost of sales	KRW million	4,280,801	4,084,046	4,045,028	4,492,384	4,691,444	
Gross income	KRW million	2,400,047	2,344,127	2,576,734	2,320,474	2,103,645	
Operating income	KRW million	1,031,637	884,990	1,103,228	793,432	702,651	
Income before tax	KRW million	935,634	839,374	1,092,416	743,036	697,700	
Income tax	KRW million	236,339	182,870	213,326	136,580	167,320	
Net income	KRW million	699,295	656,504	879,090	606,457	530,381	
Other comprehensive income	KRW million	(57,417)	17,352	(8,858)	(140,767)	(45,451)	
Total comprehensive income	KRW million	641,878	673,856	870,232	465,690	484,930	
Total assets	KRW million	8,320,082	9,496,138	9,621,973	9,518,786	9,796,442	
Total liabilities	KRW million	3,803,609	4,355,350	3,660,494	3,145,280	3,006,129	
Total equity	KRW million	4,516,473	5,140,788	5,961,479	6,373,506	6,790,313	
Patent registration	Domestic	Items	273	79	79	70	53
	Overseas	Items	25	19	71	68	35
Patent application	Domestic	Items	116	62	80	47	79
	Overseas	Items	44	49	40	63	81

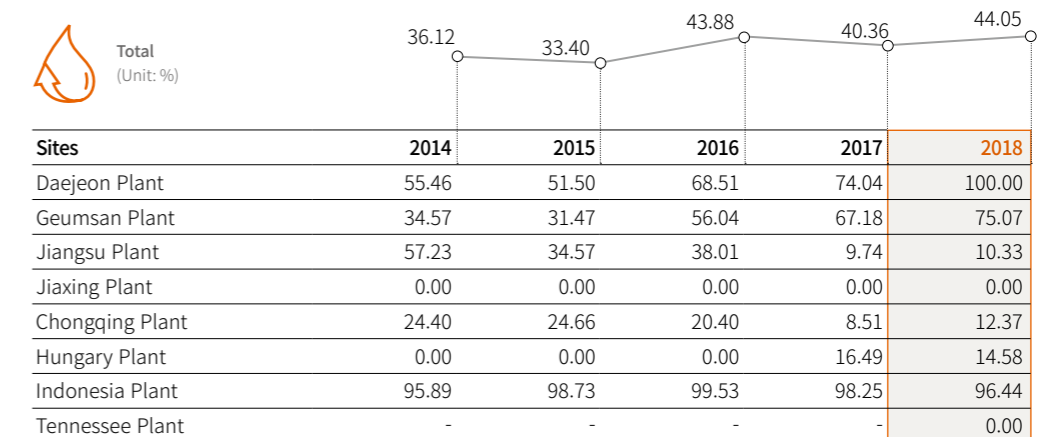
Environmental Performances

Item	Unit	2014	2015	2016	2017	2018
Ratio of eco-friendly products(based on quantities)	%	41.77	47.34	52.00	47.99	64.70
Ratio of products conducted LCA(based on quantities)	%	36.54	29.90	23.96	21.41	16.04

Use of Major Raw Materials (Unit: ton)



Recycling Rate of Treated Water (Unit: %)



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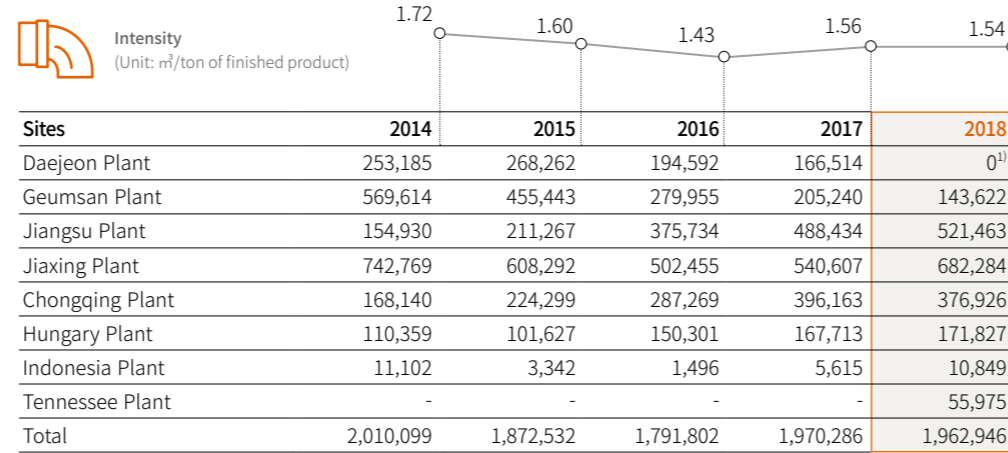
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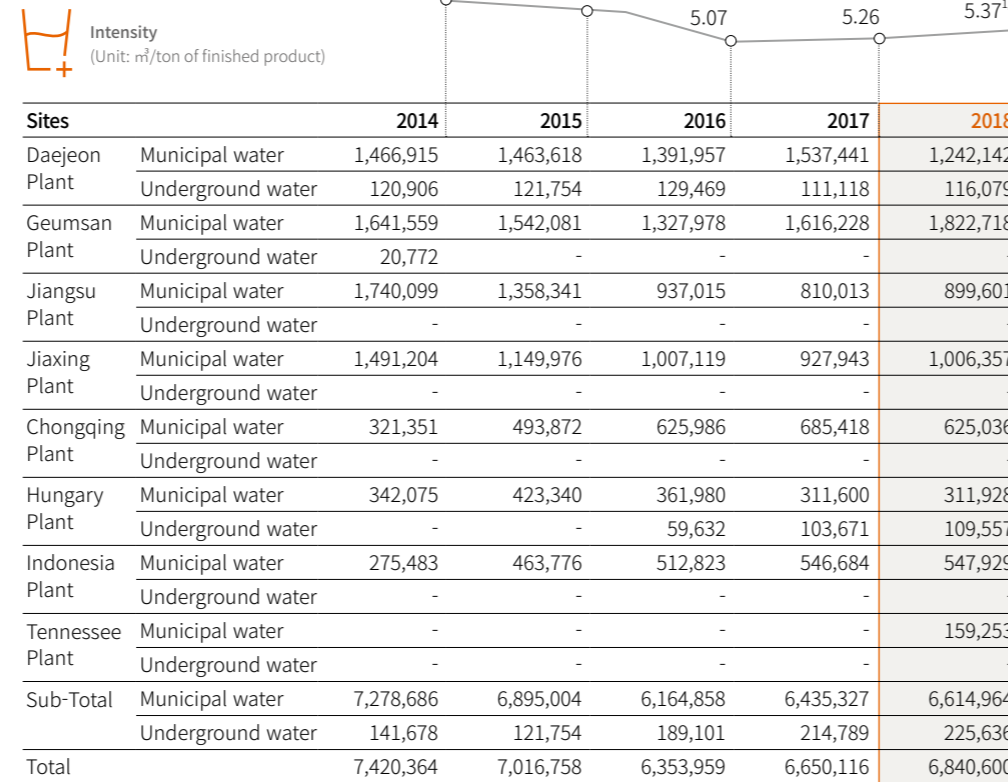
Environmental Performances

Discharge of Treated Water (Unit: m³)



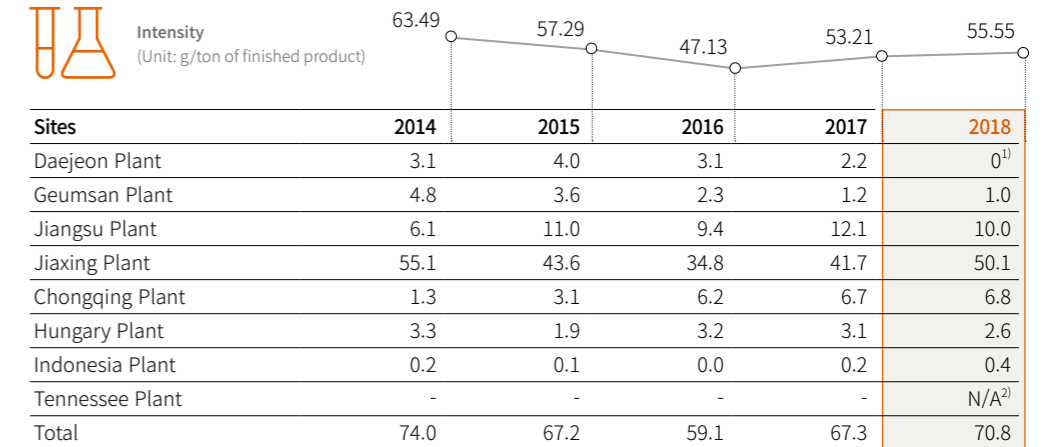
1) At the Daejeon plant, pipes were installed to use treated wastewater and 100% of treated wastewater was recycled by raising the volume of water used for the wet scrubbers.

Water Withdrawal (Unit: m³)



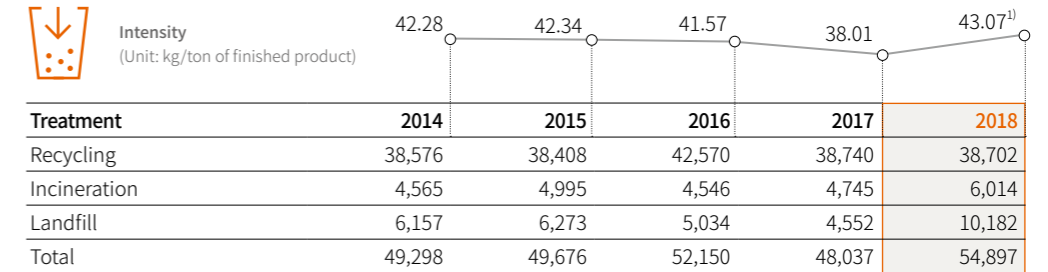
1) Our new Tennessee plant was included in the reporting scope in 2018. However, as it has not been in full operation yet, its performance impacted the increase of total intensity.

COD Emissions (Unit: ton)



1) The 2018 volume of wastewater discharged is 0. 2) Out of the scope of measurement.

Waste Disposal (Unit: ton)



1) Our new Tennessee plant was included in the reporting scope in 2018. However, as it has not been in full operation yet, its performance impacted the increase of total intensity.

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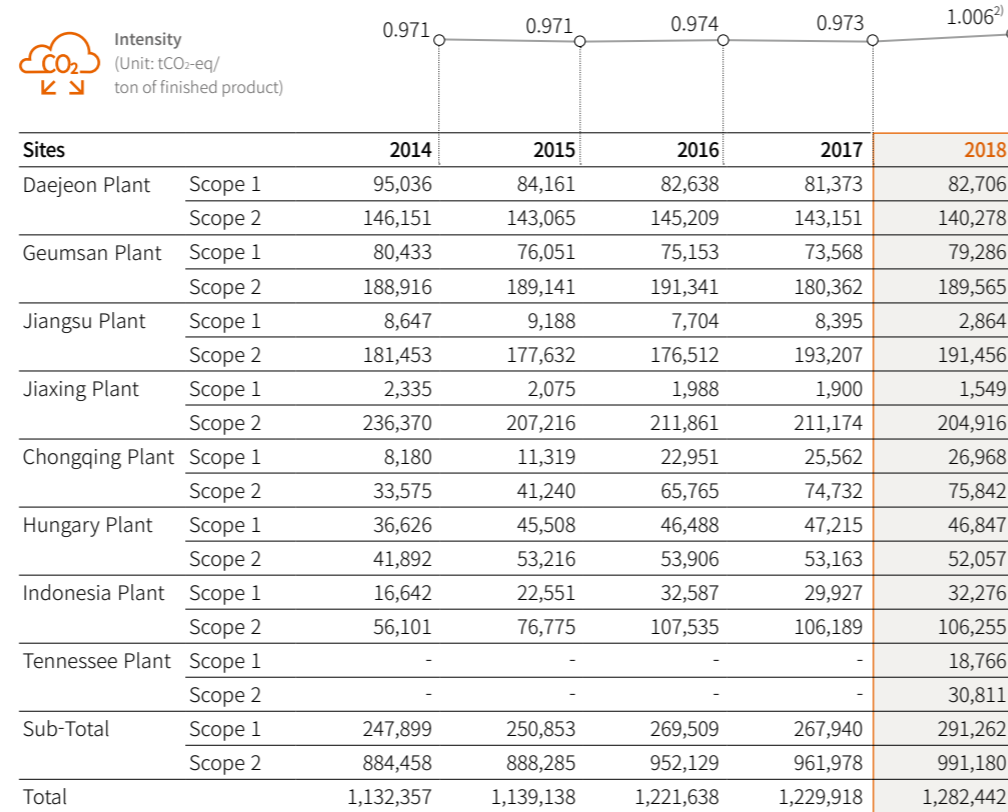
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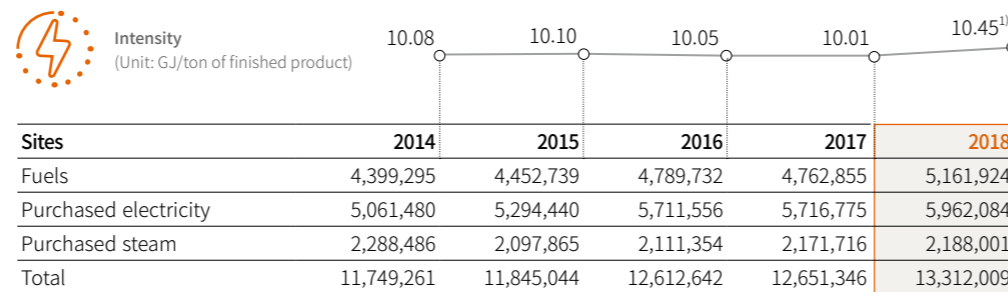
GHG Emissions¹⁾ (Unit: tCO₂-eq)



1) Regarding GHG emissions occurred by the use of purchased electricity, the 2007-2008 average electricity emission factor was applied in domestic plants. As for overseas plants, recalculation was conducted utilizing the electricity emission factors from 2014 to 2016, which led to the modification of the Scope 2 emissions figures. (From 2017 to 2018, the 2016 emission factor applied)

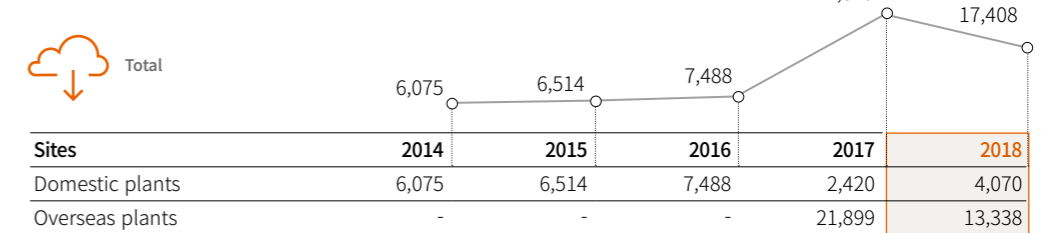
2) Our new Tennessee plant was included in the reporting scope in 2018. However, as it has not been in full operation yet, its performance impacted the increase of total intensity.

Energy Consumption (Unit: GJ)



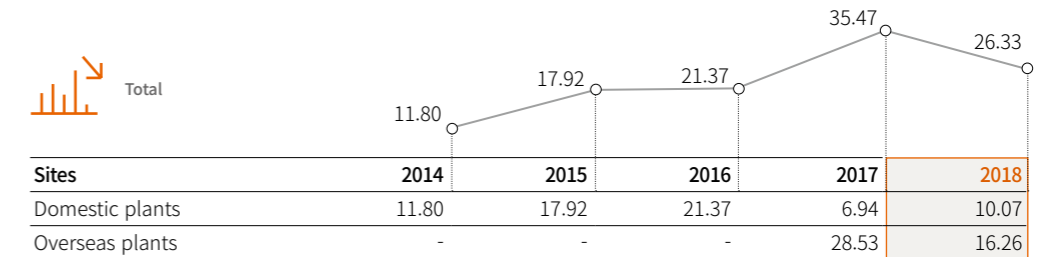
1) Our new Tennessee plant was included in the reporting scope in 2018. However, as it has not been in full operation yet, its performance impacted the increase of total intensity.

Reduction of GHG Emissions¹⁾ (Unit: tCO₂-eq)



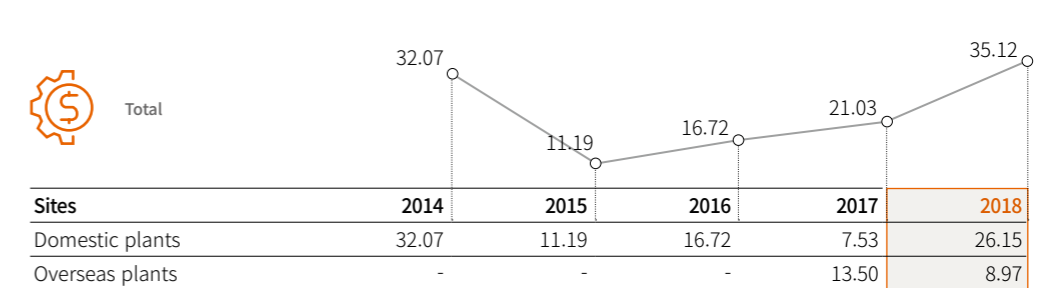
1) The figures between 2014 and 2016 refer to domestic plants, while those in 2017 include even overseas plants.

Energy and carbon cost savings¹⁾ (Unit: KRW 100 million)



1) The figures between 2014 and 2016 refer to domestic plants, while those in 2017 include even overseas plants.

Investment in energy saving projects¹⁾ (Unit: KRW 100 million)



1) The figures between 2014 and 2016 refer to domestic plants, while those in 2017 include even overseas plants.

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Social Performances

Item	Unit	2014	2015	2016	2017	2018		
Emplo- -yees ¹⁾	Total employees	Domestic	persons	6,911	6,935	6,909	6,821	6,732
		Overseas (Expatriates)	persons	217	262	266	267	261
		Overseas (Locally-hired)	persons	12,832	12,885	12,664	13,562	13,353
		Total	persons	19,960	20,082	19,839	20,650	20,346
New hires	Office staff (Korea)	Office staff (Korea)	persons	194	185	186	129	61
		Operators (Korea)	persons	62	32	1	3	105
		Office staff (Local)	persons	478	373	461	425	460
		Operators (Local)	persons	3,564	2,785	1,345	1,418	1,234
Job category	Office staff	Office staff	persons	4,729	4,983	5,283	5,458	5,324
		Operators	persons	15,231	15,099	14,556	15,192	15,022
Employment type	Regular	Regular	persons	6,883	6,909	6,865	6,774	6,691
		Non-regular	persons	28	26	44	47	41
		Ratio of non-regular employees	%	0.4	0.4	0.6	0.5	0.5
Parental leave	Applicants ²⁾	Applicants ²⁾	persons	19	26	31	19	33
		Employees who returned to work ²⁾	persons	16	24	26	19	12
		Rate of return	%	84.2	92.3	83.9	100	66.7
Female employees	Office staff	Office staff	persons	927	948	949	988	995
		Operators	persons	573	577	627	849	804
	Ratio of female employees	%	7.0	7.0	7.5	8.6	8.7	
	Ratio of female leaders	%	-	-	3.58	3.57	3.53	
	Ratio of female managers (in senior management position or above)	%	6.5	7.1	7.8	8.0	7.9	
	Ratio of female managers (in management position or above)	%	12.2	13.1	14.1	14.1	14.2	
	New hires (Korea)	persons	51	22	25	16	17	
Diversity	Disabled employees (Korea)	Disabled employees (Korea)	persons	82	88	169	172	204
		Total employees overseas	persons	13,049	13,147	12,930	13,829	13,614
		Expatriates	persons	217	262	266	267	261
		Locally-hired employees	persons	12,832	12,885	12,664	13,562	13,353
		Ratio of locally-hired employees	%	98.3	98.0	97.9	98.0	98.1
		Local managers	persons	531	620	809	870	919
Employees by region	Korea	Korea	persons	6,911	6,935	6,909	6,821	6,732
		China	persons	8,677	8,202	7,549	7,354	7,195
		Europe	persons	2,903	3,297	3,248	3,182	3,042
		Americas	persons	182	279	571	1,267	1,358
		Middle East, Asia-Pacific	persons	1,287	1,369	1,562	2,026	2,019
		Total	persons	19,960	20,082	19,839	20,650	20,346
Local employees by region	China	China	persons	8,595	8,119	7,480	7,286	7,130
		Europe	persons	2,848	3,231	3,173	3,110	2,967
		Americas	persons	146	217	500	1,197	1,291
		Middle East, Asia-Pacific	persons	1,243	1,318	1,511	1,969	1,965
		Total	persons	12,832	12,885	12,664	13,562	13,353

1) The figures were partially revised due to changes in data calculation criteria.

2) Applicants: employees who took parental leave in the year
Employees who returned to work: applicants who are returning to work or who have left the company after returning to work and working for more than six months.

Item	Unit	2014	2015	2016	2017	2018			
Emplo- -yees	Retirement	Office staff	persons	375	491	593	524	614	
		Operators	persons	2,163	2,130	2,475	1,851	1,687	
	Average service years (Korea)	Years	12.0	12.7	13.6	14.3	14.9		
	Performance and remuneration (Korea)	Ratio of employee who completed regular performance assessments	%	99.6	99.6	99.4	99.3	99.0	
	Grievance handling (Korea)	No. of grievances handled	Cases	19	45	29	32	29	
	Labor union (Korea)	No. of employees eligible for union membership	Union members (1st Labor Union)	persons	4,942	4,853	5,152	4,962	4,527
			Union members (2nd Labor Union)	persons	4,801	4,337	4,191	4,239	4,066
		Health and safety	LTIFR ³⁾ (Employees)	%	-	-	314	288	321
		LTIFR (Contractors)	%	2.8	4.0	4.4	4.1	4.3	
		OIFR ⁴⁾ (Employees)	%	2.3	1.4	3.3	2.8	3.2	
		%	0.36	0.67	1.24	0.94	1.63		
Emplo- -yees Training	Training hours per employee	Human rights training	Hours	33.3	34.3	36.6	60.9	52.0	
		Human rights training	persons	-	129	185	6	6,663 ⁵⁾	
Suppliers	Ratio of local purchasing	Raw materials	%	61.86	63.17	62.78	62.70	51.9	
		Machinery	%	86.97	97.21	95.40	55.70	59.7	
		Indirect	%	97.47	96.06	98.64	72.90	53.9	
		Total	%	67.93	69.34	69.96	62.54	52.8	
Customers	No. of customer complaints regarding personal information	Cases	3	-	1	1	0 ⁶⁾		
Ethics Manage- -ment	No. of whistleblower reports	Self-assessment score	Cases	26	44	21	18	44	
		Self-assessment score	Points	75	73	72	71	69.1	
	No. of regulatory violations	Cases	-	-	-	3	1 ⁷⁾		
	No. of violations against fair trade regulations	Cases	-	1	-	-	0		
Corporate Philan- -thropy	Corporate philanthropy spending	Support in cash ⁸⁾	KRW in thousands	-	-	-	-	5,140,352	
		Support in kind ⁸⁾	KRW in thousands	-	-	-	-	453,529	
		Total	KRW in thousands	4,835,134	7,339,890	7,506,682	5,325,976	5,593,881	
	Volunteer activities (Korea, Hungary, Indonesia)	Philanthropic expenses to consolidated sales	Philanthropic expenses to consolidated sales	%	0.07	0.11	0.10	0.07	0.07
			Total volunteer hours	Hours	29,330	27,353	30,876	28,330	20,403
			Monetary value of volunteer activities	KRW in thousands	-	-	-	947,614	645,933
Other	Annual number of participants (accumulated)	Annual number of participants (accumulated)	persons	7,597	6,365	7,321	6,904	5,993	
		Number of participants (no duplicates)	persons	3,113	2,522	3,244	2,990	2,519	
		Total volunteer activities	Cases	414	379	715	614	478	
		Volunteer hours per employee	Hours	3	2.7	2.5	2.4	1.8	
	Other corporate philanthropic expense ⁸⁾	KRW in thousands	-	-	-	-	465,014		

3) LTIFR: Lost-Time Injuries Frequency Rate: No. of injuries / total work hours * 1,000,000

4) OIFR: Occupational Illness Frequency Rate: No. of occupational disease / total work hours * 1,000,000

5) Results of the training to raise awareness of people with disabilities which started in 2018

6) Cases received due to misinformation were excluded.

7) We paid penalties of KRW 2 million in violation of the Chemicals Control Act (non-compliance with a weekly regular inspection of toxic chemical treatment facilities)

8) This item was included in 2018.

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Government funding

(Unit: KRW in thousands)

Project	Task	Team in charge	Development period	Government funding		Role
				Total amount	2018 budget	
Ketone-based premium fiber and resin for carbon reduction	Development of polyketone fiber composite materials	Raw Material Development Team	September 1, 2010 ~ March 31, 2018	294,078	887	Participation

Organization/Association membership to influence policy

(Unit: KRW in thousands)

	Organization/Association	2018 expenditure
Trade association	Korea Tire Manufactures Association, USTMA ¹⁾ , and ETRMA ²⁾ , etc.	829,111
Chamber of commerce	Korea Chamber of Commerce, Daejeon Chamber of Commerce, and Seoul Chamber of Commerce	148,000
Other	TIP(Tire Industry Project), WBCSD ³⁾ , KBCSD ⁴⁾ , Korea Employers Federation, etc.	309,047

1) U.S. Tire Manufacturers Association

2) European Tyre & Rubber Manufacturers' Association

3) World Business Council for Sustainable Development

4) Korea Business Council for Sustainable Development

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GRI Standards Universal Standards GRI 100

Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note		
Organization Profile	102-1	Name of the organization		6-7	V			
	102-2	Activities, brands, products, and services			V			
	102-3	Location of headquarters			V			
	102-4	Number of countries where the organization operates			V			
		The names of countries where it has significant operations and/or that are relevant to the topics covered in the report	Ownership and legal form			V		
	102-5	Ownership and legal form			V			
	102-6	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)			V			
	102-7	Scale of the organization			V			
Strategy	102-8	Total number of employees by employment contract (permanent and temporary), by gender		-	V	Regular/Male: 18,490 Regular/Female: 1,756 Non-regular/Male: 60 Non-regular/Female: 40		
		Total number of employees by employment contract (permanent and temporary), by region		-	V	Regular/Korea: 6,691, Regular/China: 7,195 Regular/Europe: 3,017, Regular/Americas: 1,353 Regular/Middle East, Asia-Pacific: 1,990 Non-regular/Korea: 41, Non-regular/China: 0 Non-regular/Europe: 33, Non-regular/Americas: 5 Non-regular/Middle East, Asia-Pacific: 21		
	102-8	Total number of employees by employment type (full-time and part-time), by gender		-	V	Full time/Male: 18,550, Full time/Female: 1,796 Part time: None		
Strategy	102-8	Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees	Overseas plants do not disclose due to internal affairs.	-	V	At out Daejeon Plant and Geumsan Plant, residing subcontractors are engaging in carrying semi-finished products in the manufacturing process, operating heat-pressing works in the inspection process, and storing tires in the distribution process (820 persons in DP and 648 persons in KP).		
		102-9	Supply chain		63-67	V		
	102-10	Significant changes to the organization and its supply chain			-	V	N/A	
	102-11	Precautionary Principle or approach			24-25	V		
	102-12	External initiatives			9, 85	V		
	102-13	Membership of associations			85	V		
	Ethics and integrity	102-14	Statement from senior decision-maker			4	V	
		102-15	Key impacts, risks, and opportunities			24-25	V	
	Governance	102-16	Values, principles, standards, and norms of behavior			59-62	V	
			Mechanisms for advice and concerns about ethics				V	
		102-18	Governance structure of the organization, including committees of the highest governance body			10-11,	V	
			Committees responsible for decision-making on economic, environmental, and social topics			22-23	V	
		102-19	Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees				V	
102-20		Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics				V		
		Whether post holders report directly to the highest governance body				V		
102-21		Consulting stakeholders on economic, environmental, and social topics			22-23	V		
102-22		Composition of the highest governance body and its committees				V		
102-23		Chair of the highest governance body				V		
102-24	Nominating and selecting the highest governance body			-	V	Please refer to the Annual Financial Report		
102-25	Processes for the highest governance body to ensure conflicts of interest are avoided and managed			-	V	Please refer to the global website		
102-26	Role of highest governance body in setting purpose, values, and strategy			10-11, 22-23	V			

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Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Governance	102-27	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics		12	V	
	102-28	Evaluating the highest governance body's performance		22~23	V	
	102-29	Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities		10~11, 22~23	V	
	102-30	Effectiveness of risk management processes			V	
	102-31	Review cycle of economic, environmental, and social topics			V	
	102-32	Highest governance body's role in sustainability reporting		10~11	V	
	102-33	Process for communicating critical concerns to the highest governance body		22~23	V	
	102-34	Total number and nature of critical concerns that were communicated to the highest governance body			V	
		Mechanism used to address and resolve critical concerns			V	
	102-35	Remuneration policies		-	V	Please refer to the Annual Financial Report
	102-36	Process for determining remuneration		22~23	V	
	102-37	Stakeholders' involvement in remuneration			V	
	102-38	Annual total compensation ratio		-	V	Please refer to the Annual Financial Report
102-39	Wage growth rate of maximum wage recipients to average wage growth rate of employees			V	Please refer to the Annual Financial Report	
Stakeholder Engagement	102-40	List of stakeholder groups		14~15, 18~19	V	
	102-41	Collective bargaining agreements		73	V	
	102-42	Identifying and selecting stakeholders		14~15, 18~19	V	
	102-43	Approach to stakeholder engagement			V	
	102-44	Key topics and concerns raised			V	
	102-45	Entities included in the consolidated financial statements		-	V	Please refer to the Annual Financial Report
Reporting Profile	102-46	Defining report content and topic Boundaries		18~19	V	
	102-47	List of material topics			V	
	102-48	Restatements of information		70~74	V	
	102-49	Changes in report		19	V	
	102-50	Reporting period		69	V	
	102-51	Date of most recent report			V	
	102-52	Reporting cycle			V	
	102-53	Contact point for questions regarding the report			V	
	102-54	Claims of reporting in accordance with the GRI Standards(Core/Comprehensive)			V	
	102-55	GRI content index		75~81	V	
	102-56	A description of the organization's policy and current practice with regard to seeking external assurance for the report		86~87	V	
	A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process			V		
	The relationship between the organization and the assurance provider			V		
	Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report.			V		
Management Approach	103-1	Explanation of the material topic and its Boundary		27, 31, 34, 38,	V	
	103-2	The management approach and its components		42, 47, 52, 59,	V	
	103-3	Evaluation of the management approach		63	V	

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GRI Standards Topic Specific GRI 200, 300, 400

Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Economic(GRI 200)						
Economic Performance	201-1	Direct economic value generated and distributed		8, 70	V	
	201-2	Financial implications and other risks and opportunities due to climate change		38-41	V	
	201-3	Defined benefit plan obligations and other retirement plans		-	V	Retirement pension program (DC and DB types)
	201-4	Financial assistance received from government		74	V	
Market presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage		-	V	Complying with local minimum wage and applying the same level of wage regardless of gender
Indirect economic impacts	203-1	Infrastructure investments and services supported		8-9	V	
	203-2	Significant indirect economic impacts			V	
Procurement Practices	204-1	Proportion of spending on local suppliers		66	V	
Stakeholder Engagement	205-1	Total number and percentage of operations assessed for risks related to corruption		63-67	V	
		Significant risks related to corruption identified through the risk assessment			V	
	205-2	Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, broken down by region.		-	V	40%(two executive directors)
		Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region.		-	V	100%
		Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region		-	V	100%
	205-3	Total number and percentage of governance body members that have received training on anticorruption, broken down by region		-	V	None
		Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region		63-67	V	
206-1	Confirmed incidents of corruption and actions taken		-	V	None	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		73	V	
Environmental(GRI 300)						
Materials	301-1	Materials used by weight or volume(Non-renewable materials)		-	V	75.06%
		Materials used by weight or volume(Renewable materials)		-	V	24.31%
	301-2	Recycled input materials used		-	V	0.63%
	301-3	Percentage of reclaimed products and their packaging materials for each product category		-	V	Packaging materials not used
How the data for this disclosure have been collected			-	V	N/A	
Energy	302-1	Total fuel consumption within the organization from non-renewable sources, including fuel types used		72	V	Total fuel consumption by fuel type disclosed through CDP
		Total fuel consumption within the organization from renewable sources, including fuel types used		-	V	0GJ
		Electricity consumption		72	V	
		Electricity sold		-	V	0GJ
		Steam consumption		72	V	
		Steam sold		-	V	0GJ
		Total energy consumption within the organization		72	V	
		Standards, methodologies, assumptions, and/or calculation tools used.		-	V	Energy consumption x lower heating value(GHG and Energy Target Management System Operating Guidelines)
		Source of the conversion factors used		-	V	The Ministry of Environment, the GHG and Energy Target Management System Operating Guidelines
		302-2	Energy consumption outside of the organization		-	V
	Standards, methodologies, and assumptions used			-	V	N/A
	Source of the conversion factors used			-	V	N/A
	302-3	Energy intensity ratio for the organization		72	V	
Organization-specific metric (the denominator) chosen to calculate the ratio				V		
Types of energy included in the intensity ratio				V		
Whether the ratio uses energy consumption within the organization, outside of it, or both			-	V	Within the organization	

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Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Energy	302-4	Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives		-	V	139,184GJ
		Types of energy included in the reductions		-	V	Fuel, purchased electricity, and purchased steam
		Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it		-	V	2013
		Standards, methodologies, assumptions, and/or calculation tools used		-	V	Energy reduction x lower heating value
	302-5	Reductions in energy requirements of sold products and services achieved during the reporting period		-	V	We are continuing our R&D efforts to improve vehicle fuel efficiency by minimizing tire rolling resistance.
Water	303-1	Total volume of water withdrawn (surface water, including water from wetlands, rivers, lakes, and oceans)		-	V	0m ³
		Total volume of water withdrawn (ground water)		71	V	
		Total volume of water withdrawn (rainwater collected directly and stored by the organization)		-	V	0m ³
		Total volume of water withdrawn (waste water from another organization)		-	V	0m ³
		Total volume of water withdrawn(municipal water supplies or other public or private water utilities)		71	V	
	303-2	Total number of water sources significantly affected by withdrawal by type (size of the water source)		-	V	N/A
		Total number of water sources significantly affected by withdrawal by type(whether the source is designated as a nationally or internationally protected area)		-	V	N/A
		Total number of water sources significantly affected by withdrawal by type(biodiversity value)		-	V	N/A
		Total number of water sources significantly affected by withdrawal by type(value or importance of the water source to local communities and indigenous peoples)		-	V	N/A
	303-3	Total volume of water recycled and reused by the organization		-	V	1,545,239m ³
Total volume of water recycled and reused as a percentage of the total water withdrawal as specified in Disclosure 303-1			-	V	22.59%	
Emissions	305-1	Gross direct (Scope 1) GHG emissions		72	V	
		Gases included in the calculation		-	V	CO ₂ , CH ₄ , N ₂ O
		Biogenic CO ₂ emissions		-	V	N/A
		Base year for the calculation		-	V	2013
		Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source		-	V	<Emission factors> - Ministry of Environment: the GHG and Energy Target Management System Operating Guidelines - IPCC, 2006 Guidelines for National Greenhouse Gas Inventories <Global Warming Potential> - IPCC, Second Assessment Report
		Consolidation approach for emissions (whether equity share, financial control, or operational control)		-	V	Operational Control
		Standards, methodologies, and assumptions used		-	V	- ISO 14064-1 - WRI, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) - Ministry of Environment: the GHG and Energy Target Management System Operating Guidelines
	305-2	Gross location-based energy indirect (Scope 2) GHG emissions		72	V	991,180tCO ₂ -eq
		If applicable, gross market-based energy indirect (Scope 2) GHG emissions		-	V	N/A
		If available, the gases included in the calculation		-	V	N/A
		Base year for the calculation		-	V	2013

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Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Emissions	305-2	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source		-	V	<Emission factors> - The Ministry of Environment, the GHG and Energy Target Management System Operating Guidelines - IEA, CO ₂ Emissions from Fuel Combustion Highlights - API, Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry <GWP: Global Warming Potential> - IPCC, Second Assessment Report
		Consolidation approach for emissions: equity share, financial control, or operational control		-	V	Operational Control
		Standards, methodologies, and assumptions used		-	V	- ISO 14064-1 - WRI, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) - The Ministry of Environment, the GHG and Energy Target Management System Operating Guidelines
	305-3	Other indirect (Scope 3) GHG emissions		-	V	Disclosed through CDP
		The gases included in the calculation		-	V	Disclosed through CDP
		Biogenic CO ₂ emissions		-	V	N/A
		Base year for the calculation		-	V	Disclosed through CDP
		Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source		-	V	Disclosed through CDP
		Consolidation approach for emissions: equity share, financial control, or operational control		-	V	Disclosed through CDP
	305-4	Standards, methodologies, assumptions, and/or calculation tools used		-	V	Disclosed through CDP
GHG emissions intensity				72	V	
Organization-specific metric (the denominator) chosen to calculate the ratio					V	Ton of finished product
Types of GHG emissions included in the intensity ratio			-	V	CO ₂ , CH ₄ , N ₂ O	
305-5	Gases included in the calculation		-	V	CO ₂ , CH ₄ , N ₂ O	
	GHG emissions reduced as a direct result of reduction initiatives			72	V	
	Gases included in the calculation		-	V	CO ₂ , CH ₄ , N ₂ O	
	Base year including the rationale for choosing it		-	V	2013	
	Scopes in which reductions took place			72	V	
305-6	Standards, methodologies, assumptions, and/or calculation tools used		-	V	- ISO 14064-1 - WRI, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) - The Ministry of Environment, the GHG and Energy Target Management System Operating Guidelines	
	Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent.			-	V	The level of ODS emissions is very low as HFCs are used as coolant.
	Substances included in the calculation		-	V	N/A	
305-7	Source of the emission factors used		-	V	N/A	
	Significant air emissions, including NOx, and SOx		Data to be disclosed starting from 2019	-	V	
	Source of the emission factors used			-	V	Operating boilers for steam generation

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GRI Standards Topic Specific GRI 200, 300, 400

Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Effluents and Waste	306-1	Total volume of planned and unplanned water discharges (destination)		-	V	1,962,946m ³
		Total volume of planned and unplanned water discharges (quality of the water, including treatment method)		-	V	TSS 27.5, COD 70.8 (physical-chemical treatment)
		Total volume of planned and unplanned water discharges (whether the water was reused by another organization)		-	V	0m ³
306-2		Total weight of hazardous waste by disposal method (reuse)		-	V	0kg
		Total weight of hazardous waste by disposal method(recycling)		-	V	2,853,483kg
		Total weight of hazardous waste by disposal method(composting)		-	V	0kg
		Total weight of hazardous waste by disposal method(recovery, including energy recovery)		-	V	0kg
		Total weight of hazardous waste by disposal method(incineration)		-	V	1,880,711kg
		Total weight of hazardous waste by disposal method(deep well injection)		-	V	0kg
		Total weight of hazardous waste by disposal method(landfill)		-	V	405,673kg
		Total weight of hazardous waste by disposal method(on-site storage)		-	V	0kg
		Total weight of hazardous waste by disposal method(other)		-	V	0kg
		Total weight of non-hazardous waste by disposal method (reuse)		-	V	0kg
		Total weight of non-hazardous waste by disposal method(recycling)		-	V	35,848,116kg
		Total weight of non-hazardous waste by disposal method(composting)		-	V	0kg
		Total weight of non-hazardous waste by disposal method(recovery, including energy recovery)		-	V	0kg
		Total weight of non-hazardous waste by disposal method(incineration)		-	V	4,132,940kg
		Total weight of non-hazardous waste by disposal method(deep well injection)		-	V	0kg
Total weight of non-hazardous waste by disposal method(landfill)		-	V	9,776,391kg		
Total weight of non-hazardous waste by disposal method(on-site storage)		-	V	0kg		
Total weight of non-hazardous waste by disposal method(other)		-	V	0kg		
		How the waste disposal method has been determined		-	V	By Hankook Tire & Technology
306-3		Total number and total volume of recorded significant spills (total number and total volume of spills)		-	V	None
		Additional information for each spill that was reported in the organization's financial statements (location , volume and material of spill)		-	V	N/A
		Impacts of significant spills		-	V	N/A
306-4		Total weight for hazardous waste transported		-	V	5,139,867kg
		Total weight for hazardous waste imported		-	V	0kg
		Total weight for hazardous waste exported		-	V	0kg
		Total weight for hazardous waste treated		-	V	0kg
		Percentage of hazardous waste shipped internationally		-	V	0%
306-5		Water bodies and related habitats that are significantly affected by water discharges and/or runoff (size; whether it is designated as a protected area; and the biodiversity value)		-	V	N/A
Environmental compliance	307-1	Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations (total monetary value of significant fines; total number of non-monetary sanctions; and cases brought through dispute resolution mechanisms)		-	V	None
		If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient		-	V	N/A

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Topic	Disclosure	Contents	Omission	Page	Assurance Note	Note
Social (GRI 400)						
Occupational Health and Safety	403-1	Percentage of workers whose work, or workplace, is controlled by the organization, that are represented by formal joint management-worker health and safety committees		-	V	100% of the legally applicable workforce represented
	403-2	Types of injuries related to all employees		34-37	V	
		Injury rate (IR) by region		-	V	Korea (Daejeon and Geumsan Plants): 5.4% China (Jiaying, Jiangsu, Chongqing Plants): 0.5% Europe (Hungary Plant): 3.6%, Americas (Tennessee Plant): 13.2%, Middle East, Asia-Pacific (Indonesia Plant): 0.5%
	403-2	Occupational disease rate (ODR) by region		-	V	Korea (Daejeon and Geumsan Plants): 5.2% China (Jiaying, Jiangsu, Chongqing Plants): 0.0% Europe (Hungary Plant): 0.0% Americas (Tennessee Plant): 6.1% Middle East, Asia-Pacific (Indonesia Plant): 0.0%
		Loss day rate (LDR) by region		-	V	Korea (Daejeon and Geumsan Plants): 0.0022% China (Jiaying, Jiangsu, Chongqing Plants): 0.0002% Europe (Hungary Plant): 0.0006% Americas (Tennessee Plant): 0.0012% Middle East, Asia-Pacific (Indonesia Plant): 0.0004%
		Absentee rate (AR) by gender	Undisclosed due to internal affairs	-	V	
	Absentee rate (AR) by region	Undisclosed due to internal affairs	-	V		
	No. of work-related fatalities of total employees (gender)		-	V	0	
	Injury rate (IR) and the number of occupational fatalities by gender and region regarding suppliers residing in business sites	Undisclosed due to internal affairs	-	V		
	403-3	Workers with high incidence or high risk of diseases related to their occupation		34-37	V	
403-4	Health and safety topics covered in formal agreements with trade unions		-	V	Covered in formal agreements with trade unions	
Training and Education	404-1	Average hours of training per year per employee	Data by gender and age are undisclosed due to internal affairs.	73	V	
	404-2	Programs for upgrading employee skills and transition assistance programs		42-46	V	
	404-3	Percentage of employees receiving regular performance and career development reviews		73	V	
	Diversity and Equal Opportunity	405-1	Percentage of governance bodies, by gender		-	V
Percentage of governance bodies, by age				-	V	under 30: 0% 30-50: 40% over 50: 60%
Percentage of employees, by gender			-	V	Male: 91.3% Female: 8.7%	
Percentage of employees, by age			-	V	under 30: 5,134 30-50: 13,535 over 50: 1,677	
405-2		Ratio of basic salary and remuneration of women to men		-	V	No difference for the same position
Freedom of Association and Collective Bargaining	407-1	Reporting operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk		42-46	V	
		Reporting measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining			V	
Customer Health and Safety	416-1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement		-	V	100%
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		-	V	None

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CSR Principles

Corporate Social Responsibility Principle

Purpose and Intent

The CSR Principles serve as fundamental guidelines that define our corporate social responsibility and build CSR into the fabric of our corporate culture so that it forms the basis of our business conduct. We at Hankook Tire & Technology vow to act on these principles to deliver the best-possible value to our stakeholders and fulfill our roles and responsibilities as a corporate citizen in leading the sustainable development and growth of the entire mobility industry as well as the tire industry.

Regular Review and Improvement

Our CSR Strategy Committee performs annual reviews and makes modifications or improvements on detailed operational guidelines as deemed necessary through the materiality analysis, including stakeholder interviews.

Integrated CSR Management System

To advance CSR management systematically on a companywide level, we established an integrated CSR management system as follows: the CSR Strategy Committee serves as the top CSR decision-making body attended by BOD members and the top management; the CSR Steering Committee is operated under the integrated management system as a working-level implementation and consultation body attended primarily by executives and employees in charge of respective CSR issues; dedicated CSR Teams are responsible for defining CSR roles and responsibilities, including planning and operating our company-wide CSR initiatives and publishing CSR Reports.

CSR Policy Stipulation

We verify that CSR-related operational policies, systems, and issue-specific action plans are clearly stipulated and fully disseminated, both internally and externally to ensure their company-wide application and implementation.

Regular CSR Diagnosis and Monitoring

We develop and use our in-house CSR self-evaluation model that includes global standards and wide-ranging regulations, and perform annual diagnoses and evaluations. Meanwhile, CSR Teams continuously monitor the progress made and issues to be addressed through the CSR Steering Committee.

Company-Wide CSR Training and Consensus Building

We set and implement company-wide training plans to disseminate CSR and build employee consensus.

Stakeholder Dialogue and Information Disclosure

We define our key stakeholders as customers, employees, suppliers, local communities, nature · ecology · climate and shareholders & investors. We constantly develop communication channels with these key stakeholders, as well as annual communication plans, so as to create regular and official communication opportunities to implement in our future business conduct and CSR operations. Furthermore, we disclose our achievements and CSR and business management plans in a transparent and thorough manner through our annual CSR Reports, websites, and diverse communication channels optimized for respective stakeholder groups.

Integrated Risk Management

Not only do we constantly manage financial risks, but also we systematically manage and respond to non-financial risks. Notably, the entire CSR Focus Areas are included in the scope of our risk issue management, and are addressed on a company-wide level through the integrated management system of the CSR Steering Committee.

Safety, Health and Environment Policy

Hankook Tire & Technology Co.,Ltd. sets its utmost value on human safety, health and environment. With this in mind Hankook Tire & Technology Co.,Ltd. pursues safe and healthy living providing customers with value and pleasure, and implements pacesetting safety, health and environmental management throughout its business activities and product life cycle. For this, we resolve to act as follows:

1. Reduce risk by improving the operation and making investments in safety, health and environment through remove of Environmental Impacts and Hazard and prevent work-related injury and ill health to workers and to provide safe and healthy workplaces and minimize environmental effects of our business activities by promoting source reduction and recycling.
2. Train all employees so that they can understand and continuously improve the safety, health and environmental management system, and disclose the policies and performance to stakeholders.
3. Establish internal management standards that satisfy domestic and overseas laws and other requirements related to safety, health and environment, and faithfully fulfill them.
4. Pursue continual improvement by evaluating impacts on safety, health and the environment in advance of establishing safety, health and environment objectives/targets and fulfilling them. All employees actively participate in the safety, health and environment management by complying with this policy.

All employees comply with this internally and externally announced Safety, Health and Environmental Policy and actively consult and participate in the safety, health and environment management activities.

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CSR Principles

Social Contribution Charter

Our Statements

1. We continuously propagate our social and environmental values through economic and business activities and contribute to local economies.
2. We promote superior product quality and client safety through customer-oriented management practices.
3. We do our utmost to minimize our environmental footprint throughout the entire business sector and in the communities we operate in.
4. We fully commit ourselves to supporting socially vulnerable and underprivileged populations by bestowing to society the values we generate.
5. We are pioneers in making our society healthier through promoting the welfare of our employees and providing local communities with medical support based on our human-focused management philosophy.

Characteristics and Directions

1. We ensure that our social charity activities stand congruent with our core business practices so that our corporate action may promote social benefit.
2. We focus our company-wide capacities on our main philanthropic programs to ensure that our social contribution activities are executed with clear purposes.
3. Our philanthropic activities are performed practically in ways that can resolve concerns and problems in local communities.

Human Rights Policy

Hankook Tire & Technology Human Rights Policy

Hankook Tire & Technology recognizes the significance of human rights as a universal value of humankind. Moreover, we acknowledge that value can be realized through business activities. With such acknowledgement, Hankook Tire & Technology will respect and protect the rights of its own employees and stakeholders associated with its operations, products and services.

In order to fulfill the responsibility to respect human rights, Hankook Tire & Technology shall support and endeavor to observe the principles of the Universal Declaration of Human Rights, the UN Global Compact and the International Labor Organization Declaration on Fundamental Principles and Rights at Work.

Hankook Tire & Technology shall also support the UN Guiding Principles on Business

and Human Rights and implement human rights management system which includes assessments, taking appropriate action and tracking responses, internal and external communications and operation of grievance mechanisms and remediation procedures.

Hankook Tire & Technology, as an enterprise that is dedicated to fulfilling its social responsibilities and pursuing the happiness of all employees and stakeholders, shall comply with the laws of each country where it operates under all circumstances and by protecting and respecting human rights, it will contribute to the healthy development of society.

Hankook Tire & Technology Human Rights Principles

Hankook Tire & Technology supports and respects the protection of internationally proclaimed human rights and makes sure that we are not complicit in Human Rights abuses.

Prohibition of Forced Labor Hankook Tire & Technology shall not use or get involved in any kind of forced labor through physical and mental suppression of freedom of any person, including bonded labor, slavery and human trafficking.

Prohibition of Child Labor Hankook Tire & Technology shall comply with the minimum employment age regulations of each country where it operates and not designate tasks with safety and health hazards to individuals under the age of 18.

Prohibition of Discrimination Hankook Tire & Technology shall not discriminate against its employees based on race, age, gender, nationality, religion, disability, pregnancy, unionization, or marital status in its employment procedures.

Guarantee of Freedom of Association Hankook Tire & Technology shall offer opportunities for communication between the company and its employees, guarantee the freedom of association, and retaliate for unionization activities of its employees.

Fair Wage Payment and Stabilization of Livelihood Hankook Tire & Technology shall contribute to the stabilization of the livelihood of its employees by complying with the minimum wage, overtime, health insurance and employee rest and leave regulations of each country where it operates.

Health and Safety Hankook Tire & Technology shall establish a safe, clean work environment for its employees and protect its employees against various harmful substances.

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Category	Award	Details	Awarded by	
Sustainability Management	 MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM	Dow Jones Sustainability Indices	Entered the DJSI World for the third, DJSI Asia-Pacific for the sixth, and the DJSI Korea for the eighth consecutive year, respectively	Dow Jones & RobecoSAM
		CDP	Awarded the 2018 CDP Korea Carbon Management Sector Honors for two consecutive years	CDP Korea
Corporate Reputation & Corporate Culture		Korea's Most Admired Companies	Ranked top in the tire business for ten consecutive years	Korea Management Association Consulting
Quality & Technology		Korean Standard-Quality Excellence Index (KS-QEI)	Ranked top in the automobile tire sector for 10 consecutive years	Korea Standards Association
Brand Value		Korea Brand Power Index (K-BPI)	Ranked top in the passenger car sector for 17 consecutive years	Korea Management Association Consulting
		National Brand Competitiveness Index (NBCI)	Ranked top in the tire sector for 11 consecutive years	Korea Productivity Center
		Best Korea Brands	Won the award for 6 consecutive years	Interbrand
Design		Red dot Award	Won the main award(Ventus S1 evo 3)	Design Zentrum Nordrhein Westfalen
		IDEA	Awarded for Kinergy AS ev, second-generation electric vehicle tires	Industrial Design Society of America (IDSA)
		iF Design Award	Won three awards in the concept and product design categories (Hexonic, HLS-23, Kinergy 4S 2)	International Forum Design

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UNGC & Memberships

UN Global Compact

Since joining the UN Global Compact in 2012, we have respected and complied with its 10 principles. Relevant contents are disclosed through this report. We are committed to abiding by these principles so that we fulfill our role as a responsible corporate citizen.

Principle	Reporting Contents	Page
Human Rights	Principle 1. Businesses should support and respect the protection of internationally proclaimed human rights	Employee Value Creation 42~46
	Principle 2. Businesses should ensure they are not complicit in human rights abuses.	Win-win Supply Chain Partnership 63~67
Labor	Principle 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Employee Value Creation 63~67
	Principle 4. Businesses should uphold the elimination of all forms of forced and compulsory labor.	Employee Value Creation 42~46
	Principle 5. Businesses should uphold the effective abolition of child labor.	Win-win Supply Chain Partnership 63~67
	Principle 6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Employee Value Creation 42~46
Environment	Principle 7. Businesses should support a precautionary approach to environmental challenges.	Integrated Environmental Management 47~51
	Principle 8. Businesses should undertake initiatives to promote greater environmental responsibility.	Climate Change and GHG Management 38~41
	Principle 9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	
Anti-Corruption	Principle 10. Businesses should work against corruption in all its forms, including extortion and bribery.	Transparency & Business Ethics 59~62

Memberships

Korea Industrial Technology Association	Korean Human Resource Development Association	Korea Chamber of Commerce & Industry	UN Global Compact
Korea Fire Safety Association	Korea Environmental Preservation Association	Korea Management Association	Korea Business Council for Sustainable Development (KBCSD)
Korea International Trade Association	Korea Tire Manufacturers Association	Korea Academy of Business Ethics (KAOBE)	World Business Council for Sustainable Development (WBCSD), TIP ¹⁾
Korea Electric Engineers Association	Korea Industrial Safety Association	Korean Standards Association	U.S. Tire Manufacturers Association
European Tyre & Rubber Manufacturers' Association			

1) TIP refers to the Tier Industry Project, a subcommittee of the World Business Council for Sustainable Development. In 2005, we formed a consultative body along with 10 other global tire manufacturers to perform research and work together for the sustainable future of the tire industry. Research topics include the identification of the impact of tire particulate matters generated in tire use on the environment and human body as well as requirements for the eco-friendly recovery, recycling, and disposal of end-of-life tires and the environmental impact of tire materials. In so doing, we at Hankook Tire contribute to the sustainable development of the tire industry.

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Independent Assurance Statement

To the Stakeholders of Hankook Tire

The Korea Productivity Center (hereinafter the "Assurer") was appointed by Hankook Tire & Technology (hereinafter the "Company") to provide independent assurance of its "Hankook Tire & Technology 10th Anniversary Report 2018/19" (hereinafter the "Report"), and hereby presents the following assurance statement.

Responsibility and Independence

The Company is fully responsible for the reliability and accuracy of all the information and opinions presented in the Report. The Assurer is responsible solely for the third party assurance of the content in the Report. As an independent assurance agency, the Assurer was neither involved in the process of preparing the Report, nor in any conflicts of interest that may undermine our independence.

Assurance Standard

This assurance was conducted in accordance with the ISAE 3000 / AA1000AS (2008) to provide Type 2 assurance and AA1000AP (2018) to confirm compliance with the principles of inclusivity, materiality, responsiveness and impact. It means that a comprehensive review was conducted on the effectiveness and reliability of the reporting standards. The level of assurance is based on the reduction of risk at a limited degree as defined in the ISAE 3000 which is the same as the Moderate Level defined in the AA1000AS (2008).

Limitations

The Assurer confirmed the reliability of the 2018 data specified in the report based on the aforementioned verification range & standards. The on-site verification was carried out at the headquarters in Seoul. The scope and boundaries of this verification follows the boundaries of the report's time frame, region and the boundaries of the value chain. Accordingly, the scope of verification satisfies 100% of the consolidated revenue, and data on the supply chain is not included in the scope of verification unless otherwise noted. The financial data in the Report was verified through the financial statements and disclosure information which was audited by an auditor, while the aggregated data at the corporate level is used for the verification of Environmental and Social performance. In case of greenhouse gas, Scope 1 and 2 were confirmed in 2018, and greenhouse gas emissions of domestic plants were verified based on ISO 14064-3, the organization of standardization on emissions. The results may vary if further

verification procedures are performed. The Assurer expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

Methodology

This assurance was conducted through the following methods:

- Verified if the requirements for Comprehensive options of GRI Standard were fulfilled.
- Verified the compliance with the principles of the Report contents and quality based on GRI Standard.
- Verified the selection of material issues covered and the appropriateness of the technical content through media research and benchmarking analysis.
- Verified the suitability of the contents and any errors in expression through comparison analysis with other sources.
- Verified the basis of Comprehensive data and information and the internal process and system through on-site inspection at the headquarters in Seoul.

Findings and Conclusion

It is the verifier's opinion that the Report reflects Hankook Tire & Technology's sustainability management activity & performance faithfully and fairly. Through this verification process, the Assurer judges that Hankook Tire & Technology's report meets the GRI Standards requirements for Comprehensive Options, and secured the rational level which can be presented by Type 2 assurance level. In addition, General Standard Disclosures were prepared in full compliance with the requirements for Comprehensive options while Specific Standard Disclosures were reviewed in line the MA (Management Approach) and indicators of the material issues identified through the process of determining report content as follows:

Material Issues	Material Topic (MA & Indicators)
Customer Satisfaction & Quality Management	Economic Performance (MA, 201-1 ~ 4) Customer Health and Safety (MA, 416-1 ~ 2)
Employee Health & Safety Management	Occupational Health and Safety (MA, 403-1 ~ 4)
Climate Change	Emissions (MA, 305-1~7)
Employee Value Creations	Freedom of Association and Collective Bargaining (MA, 407-1) Training and Education (MA, 404-1 ~ 3)
Comprehensive Environmental Management	Materials (MA, 301-1~3) Energy (MA, 302-1~5) Water and Effluents (MA, 303-1~3) Effluents and Waste (MA, 306-1~5) Environmental Compliance (MA, 307-1~2)

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Inclusivity: Stakeholder Engagement

Hankook Tire & Technology defines major interested parties by dividing them into a customer, a shareholder investor, executives & staff, a cooperative company, local community and environment according to the influence on the management activity. The Company is gathering expectations and requirements by constructing the regular/irregular communication process by the interested party, and reflecting various opinions deducted through the communication channel in our management activity. In addition, the Assurer confirmed that this company is reflecting them in the report by conducting a survey and interviews targeting the interested parties every year, and grasping their opinions as to key issues which have an influence on the interested parties.

Materiality: Identification and Reporting of Material Issues

Hankook Tire & Technology is constructing the materiality evaluation process which selects major issues by taking into account the interested parties' concern and business materiality. Particularly, the Assurer confirmed that the same company is grasping the major issues associated with industries and enterprises through the external environment analysis on an annual basis such as global standard analysis (GRI Standards, DJSI, RBA, SDGs), media research and advanced corporation benchmarking, etc., and internal environment analysis. The same company is describing the deducted key issues by dividing them into 8 major key areas connected with CSR Steering Wheel, through which the same company is presenting Hankook Tire & Technology's response direction by systematically selecting management items.

Responsiveness: Organization's Response to Issues

The Assurer confirmed that Hankook Tire & Technology is managing the 8 core management areas by selecting them with the aim of systematically managing the major issues which were gathered from the interested parties, and the relevant contents were faithfully reported to their business report. Notably, the Assurer confirmed that the same company is systematically describing the management items, policies, organizations, major performance, goal, and plan, etc. for the 8 major core management areas, through which Hankook Tire & Technology is faithfully disclosing its response activity and performance by its sustainability management issue.

Impact: Organization's Social Impact

Hankook Tire & Technology considers the societal impact of the organization by establishing the boundaries of the impact of major issues. Moving forward, the Assurer recommends that the Company create an impact measurement index in order to enhance the measurement of the influence on economic, social and environmental sectors.

Recommendation

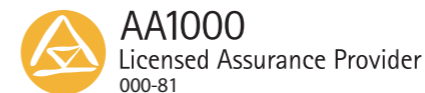
The Assurer recognizes the diverse efforts and performance made by Hankook Tire & Technology and suggests the following for the Company's publication of the Report in the future and the improvement of its sustainability standards:

- CSR Vision 2020 Roadmap, which is presented annually by Hankook Tire & Technology, is an important tool for stakeholders to understand the Company's CSR strategies and performances. It is recommended that new issues and internal goals are established through the creation of a CSR Vision Road map beyond 2020 and be disclosed in the Report.
- As a component of the corporate assessment, it is becoming increasingly important to measure and manage the social and environmental impacts that companies have on sustainable growth and development. It is recommended that the resulting qualitative and quantitative data be utilized to create a system to assess the Company's mid- to long-term impacts and for key indicators to be selected based on assessment levels consisting of input, activities, outputs, and outcomes.

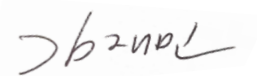
June 2019

CEO of Korea Productivity Center

Kyoo Sung Noh



Dong soo Kim, Director Yang ho Lee, Team Manager Jae min Kim, Consultant



The Sustainability Management Center of the Korea Productivity Center is a fully qualified independent assurance agency. It is officially certified by AccountAbility that established AA1000, the international standard for stakeholder engagement and assurance. It has the Assurance Committee with of experienced experts who are qualified for the consultation and assurance of sustainability practice.

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CSR Communication Channel

CSR Communication Channel

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