Lifestyle Innovator

2019 KOLON Industries SUSTAINABILITY REPORT

KOLON INDUSTRIES

About This Report

This report marks the 7 years of annual reporting on our sustainability progress. With an aim of sharing our sustainability performance with our stakeholders as well as inviting their feedback, we have released our annual sustainability report since 2014 (reports were published in the name of environmental report from 2014 through 2017). The latest report was published on December 5, 2019.

Criteria for Reporting   This sustainability report aligns with the Global Reporting Initiative (GRI) Standards and its Core Option.

Reporting Period   This sustainability report details our sustainability performance from January 1, 2019, to December 31, 2019. It contains quantitative performance of the recent 3 years and some of qualitative performance. The data in this report also covers first half of 2020 for significant management activities.

Reporting Scope and Boundaries   KOLON Industries consists of a manufacturing organization, a chemical material company, and FnC organization, a clothing/fashion company. This report covers the head office of the manufacturing organization and its eight domestic business sites (Gumi, Gyeongsan, Gimcheon 1, 2, Ulsan, Yeosu, Daesan, Incheon) and for some parts of this report, overseas business sites and the FnC organization.

Data Assurance and Additional Information   Data in this report, including reporting process, materiality assessment and stakeholder opinions, has been subject to independent third-party verification for data assurance. Verification data is available in the assurance statement on page 93-94. If you have any questions about our sustainability report or data, please contact us at the number below.

Date of Issuance	Dec, 22, 2020 Issuer Hee-Goo Jang
Place of Issuance	110, Magokdong-ro, Gangseo-gu, Seoul, Republic of Korea (KOLON One&Only Tower, ESH Management Team)
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Contents

CEO MESSAGE

Dear respected stakeholders,

In the year of 2020, the COVID-19, the worst infectious disease we have ever had, has wreaked havocs to the global economy that has already wrestled with chronic issues in politics, society, economy and the environment. Many industries, including the aviation, transportation, and travel sectors, have taken a big hit from the pandemic while each government's efforts around the world to overcome the status quo have been often curbed due to the rapid spread of the disease. The survival of human is now being threatened.

Paradoxically, 'sustainable development' comes into stark focus in the time of COVID-19 because the situation when many people couldn't be properly treated has reminded us of how salient the value of human prosperity and coexistence is. With the COVID-19 lockdown in place, nature has been healing with blue skies appearing, which has opened our eyes to how much we have damaged the earth.

As history testifies, humankind will finally overcome this COVID-19 pandemic. Multinational pharmaceutical companies have put elbow grease into developing vaccines and medications. And people are finding ways to effectively inhibit the spread of the virus while making the social and economic system run in this situation through social distancing or online-based non-face-to-face activities.

KOLON Industries has also been part of the efforts to overcome the pandemic. Wearing a mask is the most significant action in terms of disease prevention. But in the initial stage of COVID-19, we were in short supply of masks. So, KOLON Industries converted the facility for MB filter for medical use into MB filter for masks, and then donated a total of 2 millions of masks for free of charge. Furthermore, we provided our employees with Onnuri gift certificates worth KRW 1 billion as gifts for the founding anniversary as part of efforts to revitalize the local economy. On top of that, our employees also voluntarily donated to deliver gift certificates worth KRW 120 million to local communities. In recognition of these efforts, President Moon Jae-in visited our plant in Gumi on April 1, 2020 and extended his gratitude for our solidarity and cooperation to rise to the challenge.

Protection of the environment of our planet, especially the response to climate change, is an overarching duty and value to corporations. Companies which pollute the environment or do nothing to curb the emission of greenhouse gases have nowhere to go now. KOLON Industries has been involved in Responsive Care (RC), an international social responsible program in the chemical industry since 1999 in recognition of the gravity of the environment. With an aim of breaking the perception that the chemical industry is dangerous, we started RC activities. Through the RC activities, we have prevented any possible safety accidents and secured the health and safety of local residents as well as our employees. By doing so, our voluntary engagement in RC activities plays a huge role in terms of restoring trust and seeking for sustainable development. KOLON Industries is also well cognizant that climate change will pose the biggest threat to the survival of humankind in the long term, and the action is required to be taken immediately to mitigate greenhouse gas (GHG) emissions. In this regard, KOLON Industries is doing very well, having reduced our GHG emissions in 2019 by 5% or about 30,000 tons compared to the previous year.

Constant innovation in technology is essential for corporations to sustainably evolve. The COVID-19 has accelerated the paradigm shift in the industry and economy, which requires corporations to spur innovation. For the past 3 years, KOLON Industries has made every effort to secure future competetiveness under the banner of change and innovation. To take the lead in the hydrogen fuel cell electric vehicle market, we have developed diverse state-of-the-art materials including Polymer Electrolyte Membrane (PEM), Membrane Electrode Assembly (MEA), humidity control device (membrane humidifier), aramid fiber which has been in the limelight as a material for the fifth generation optical fiber cables, and Colorless Polyimide (CPI), a core material for foldable or rollable phones. We have also put our focus on the traditional material business such as tire cord, petroleum resin, film or electronic materials. Going forward, KOLON Industries will never stop various forms of innovation so that we can live up to the expectation of our customers.

KOLON Industries inherits the spirit and tradition of KOLON Group, and has devoted ourselves to laying the foundation for the national industry as well as to enhancing the quality of life for the past 64 years. We have always tried to be right in our management, putting our efforts into internalizing our core values of sustainability management such as compliance, human rights, environment, ethics or fair trade. Daunting challenges lie ahead of us such as the global economy downturn, trade disputes, rising protectionism and, of course, COVID-19 pandemic, but I am confident that we can rise to the challenges on the strength of our robust fundamentals. We will not be afraid of challenge.

All of our employees will embark on a new way in unity for the contribution to social value enhancement through sustainable development. I look forward to your interest and support and we will never forget your valuable support.

Thank you very much.

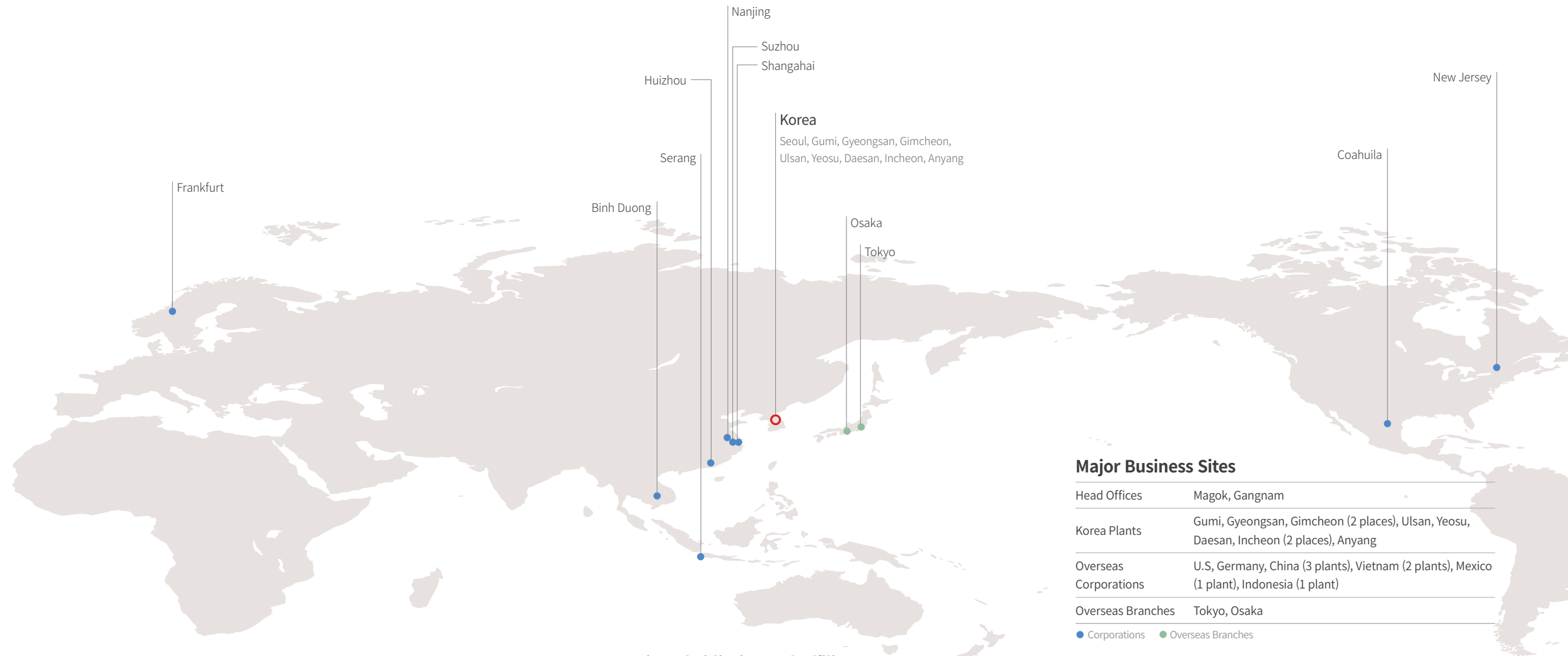CEO and President of KOLON INDUSTRIES, INC.
Hee-Goo Jang

Company Overview

Founded in 1957 as the first nylon producer in Korea in the name of Korea Nylon, KOLON INDUSTRIES, INC. was launched as the manufacturing department of KOLON, INC. had been split off into it in 2010. Since then, KOLON Industries has diversified our business portfolio, playing a leading role in the market. As a result, the current business scope of KOLON Industries ranges from industrial materials, chemical materials, film/electronic materials, fashion to clothing materials.

As of December 2019

Company Name	KOLON INDUSTRIES, INC.
Representative	Hee-Goo, Jang
Date of Foundation	January 5, 2010
Main Businesses	Industrial materials, film/electronic materials, chemicals, and fashion
Location of Headquarters	Magokdong-ro 110, Ganseo-gu, Seoul (Magok-dong)
No. of Employees[1]	7,614 (including both domestic and overseas employees)
Total Equity[2]	KRW 2.1263 trillion
Sales Volume[2]	KRW 4.4071 trillion

1) Based on an aggregate of the numbers of all region
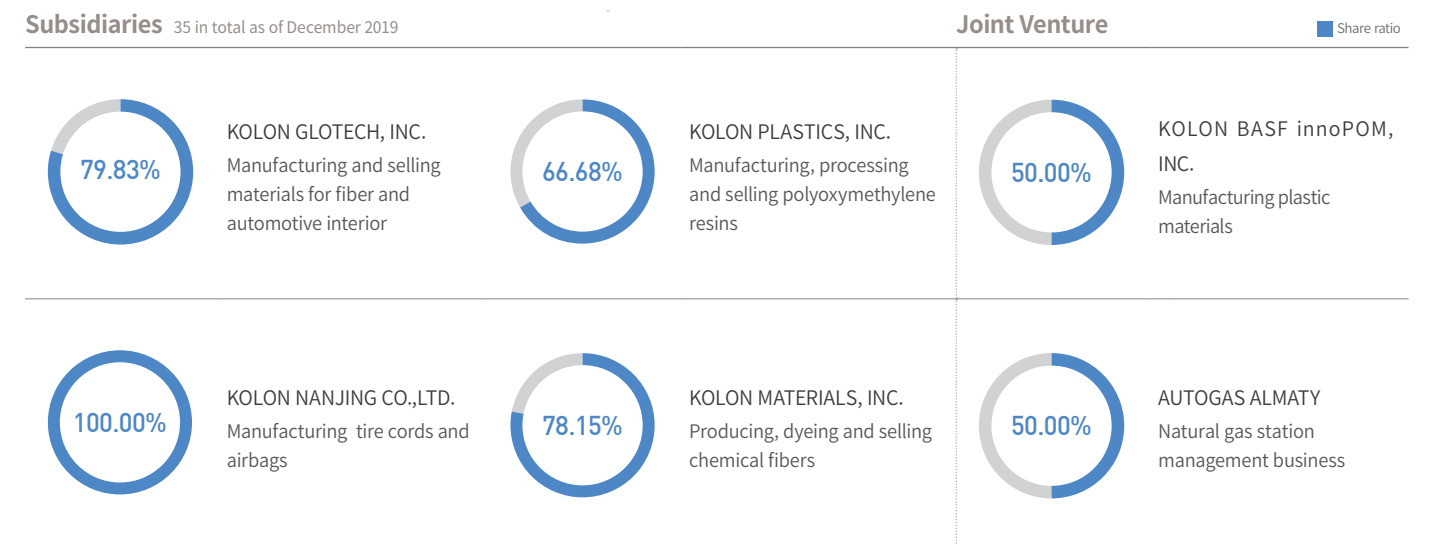2) Based on consolidated financial information

Management Philosophy and Vision System

Vision	LifeStyle Innovator	Serving as a lifestyle innovator through the provision of products and services contributing to a better life
Core values	One&Only	With a purpose of becoming the most beloved company by customers, cultivating unique and distinguished capabilities and competitiveness for all employees
Pursuit	One&Only Way	KOLON, most beloved by customers / We, as a unique and distinguished company / I, as an individual with top-notch competitiveness

Nanjing
Suzhou
Shangahai
Huizhou

Korea
Seoul, Gumi, Gyeongsan, Gimcheon, Ulsan, Yeosu, Daesan, Incheon, Anyang

Serang

New Jersey

Coahuila

Frankfurt

Binh Duong

Osaka
Tokyo

Major Business Sites

Head Offices	Magok, Gangnam
Korea Plants	Gumi, Gyeongsan, Gimcheon (2 places), Ulsan, Yeosu, Daesan, Incheon (2 places), Anyang
Overseas Corporations	U.S, Germany, China (3 plants), Vietnam (2 plants), Mexico (1 plant), Indonesia (1 plant)
Overseas Branches	Tokyo, Osaka

● Corporations ● Overseas Branches

Main Subsidiaries and Affiliates

Subsidiaries 35 in total as of December 2019

Joint Venture ■ Share ratio

79.83% KOLON GLOTECH, INC.
Manufacturing and selling materials for fiber and automotive interior

66.68% KOLON PLASTICS, INC.
Manufacturing, processing and selling polyoxymethylene resins

50.00% KOLON BASF innoPOM, INC.
Manufacturing plastic materials

100.00% KOLON NANJING CO.,LTD.
Manufacturing tire cords and airbags

78.15% KOLON MATERIALS, INC.
Producing, dyeing and selling chemical fibers

50.00% AUTOGAS ALMATY
Natural gas station management business

* Based on consolidated financial statements

Business Overview

KOLON Industries established ourselves as a market leader in the Korean chemical fiber industry based on nylon and polyester fiber businesses in the 1970s, and took a leap forward to becoming a large-scale material maker in the 1980s through the diversification of business into polymer and fine chemistry. Currently, we are doing our business not only in the domestic market but also in overseas markets with the broadened scope of business covering industrial materials, chemical materials, film/electricity materials and fashion. On the strength of this stable and diversified business portfolio, KOLON Industries has spared no effort to deliver diverse values to our customers as well as to live up to the expectations of our shareholders.

1   Petroleum Resin | **SUKOREZ®, HIKOREZ®, HIKOTACK®**   This product is used for various items including road marking paint, which is used for road marks so that people and cars can travel safely, tire adhesive, adhesive tape as office supplies and printing ink. Our products have contributed to a better life, being used in various places of our customers' lives.

2   Airbag | **SECURA®**   Most of automobiles are equipped with airbags, one of the representative safety device used for automobiles along with safety belts, and the use of the device is on the rise around the world. KOLON Industries has supplied cushions, the main part of airbags which functions as an air pocket in the event of clash, and fabrics to automotive module companies at home and abroad.

3   Membrane | **ECOMATE®**   Cleanfil-S, a separation membrane for water treatment purifying contaminated water, and Ecomate-H, a next generation of membrane humidifier for hydrogen fuel cell are emerging as eco-friendly materials. These products are used as core parts for fuel cell engines mounted on hydrogen-powered electric vehicles.

4   Aramid (Aromatic Polyamide) | **HERACRON®**   HERACRON® is a reinforced fiber which is five times stronger in terms of tensile strength on the same weight of other steel and lighter. In addition, it boasts outstanding heat resistance and low breakability. These properties make our product gain popularity in the fields that requires high strength and at the same time lightweight such as bulletproof jackets, optical cables, airplanes and ship parts.

5   Chamude | **CHAMUDE®**   CHAMUDE® is an innovative cutting-edge artificial leather. KOLON Industries uses a special process based on our microfiber technology which enables the product to express any color or to adjust its thickness. Our product also boasts outstanding durability, moisture and air permeability, comfort and thermal insulation, which allows to be used in various areas including fashion, sports and interior.

6   Industrial Yarn | **AKILEN®, SECURA STELEN®**   AKILEN® and SECURA STELEN®, used for automobile safety belts, are special industrial yarn with far better strength than other general polyesters, which has earned us the global No.1 polyester yarn in supply. One of every four vehicles around the world now uses KOLON Industries' AKILEN®, which proves that both domestic and overseas automobile industries recognize the very excellence of our product.

7   SPB (Spunbond) | **FINON®**   KOLON Industries was the first in Korea to produce polyester spunbond, a non-woven fabric made of polyesters with excellent physical and chemical properties. We have never stopped developing technology to provide optimal solutions for the material market for industrial use, engineering/building, automobile and carpet.

8   Tire Cord | **HIPERCORD®, ROADMASTER®**   Tire cord is a tire reinforcement material that determines the performance of tire such as maintenance of its shape or the weight of vehicle. We have gained a good reputation for our technology and quality from not only domestic corporations but also overseas buyers such as Michelin and Bridgestone since we started this business in 1973.

Petroleum Resin | **MKOREZ®, HIKOREZ®, HIKOTACK®**

Phenolic Resin | **HIRENOL®**   It has excellent heat resistance, chemical resistance, dimensional stability, and mechanical strength. A wide range of areas utilized it in casting (engine manufacturing), friction material (brake), FELT (interior material of vehicles), refractory (refractory BINDER such as smelting furnace), adhesive, paint, ink, tire/rubber, electronic material.

⑤ **Car Seats**
Chamude | CHAMUDE®

② **Airbag**
Airbag | SECURA®

⑦ **Trunk Carpet**
SPB (Spunbond) | FINON®

⑥ **Safety Belt**
Industrial Yarn | AKILEN®, SECURA STELEN®

③ **Engine**
Membrane | ECOMATE®

④ **Brake Pad**
Aramid (Aromatic Polyamide) | HERACRON®

⑧ **Tire**
Tire Cord | HIPERCODE®, ROAD MASTER®
Petroleum Resin | MKOREZ®, HIKOREZ®, HIKOTACK®
Phenolic Resin | HIRENOL®

① **Road Marking Paint**
Petroleum Resin | SUKOREZ®, HIKOREZ®, HIKOTACK®

1   Dry Film | ACCUIMAGE®   Our ACCUIMAGE® has excellent quality and price competitiveness comparable to global corporations, which allows us to become Korea's number 1 in PhotoResist field, garnering more than 60% of market share.

2   Nylon Film | AMIDROLL®   AMIDROLL®, first developed in Korea, is used for food packaging due to its exceptional shock absorption, wear resistance and gas barrier property. It can also be used for industrial materials containing electrolyte in secondary battery.

② **Window**
Nylon Film | AMIDROLL®

③ **PC**
Epoxy Resin | HIROXY®

④ **Film (PC)**
PET Resin | INOPET™

⑥ **Liquid Crystal Display**
Polyester Film | ASTROLL®
Panel Material | ONLYMER®
Prism Film | EverRay®
Colorless Polymide Film | CPI®

① **Electronic Goods**
Dry Film | ACCUIMAGE®

⑤ **Cosmetics**
PU Foam | ECO CHOUVEIL®, CHOUVEIL®
Material for Cosmetics | FUCOIN

⑦ **Floor Material**
PU (Polyurethane)/TPU (Thermoplastic Polyurethane) | KONY URETHANE™, ELLAS®

3   Epoxy Resin | HIROXY®   Epoxy resin is one of the best high-functional products among current polymer products, being used in high value-added industries ranging from cutting-edge electronic circuit used from automobile, TV, PC and mobile phone to the structure in the aerospace industry. KOLON Industries has met the needs of our customers through the vertical integration of the production of hardener, intermediate product and epoxy to have more competitive product portfolio.

4   PET Resin | INOPET™   This product is a PET resin used as core material for tire cord, film, spunbond or plastic. It is usually used for fiber and film. KOLON Industries' accumulated production know-how and continuous procedure allow us to provide same quality of product all the time for our customers, which contributes to superb productivity of our customers. We put customer satisfaction above as well as offer services tailored to each customer.

5   PU Foam | ECO CHOUVEIL®, CHOUVEIL®   KOLON Industries has developed ECO CHOUVEIL made of natural corn extract, taking advantage of our patent technology. This is polyurethane having anti-bacterial effect, which is used for powder puff. We are developing the technology further to expand its application into the sector of daily necessities.

Material for Cosmetics | FUCOIN   FUCOIN is a polysaccharide made through fermentation, being used as natural moisturizer. This product gives outstanding moisturizing and better feeling than hyaluronic acid.

6   Polyester Film | ASTROLL®   KOLON Industries succeeded in developing ASTROLL®, a functional film with physical, chemical and electrical properties, on the strength of our capabilities we have built in the fiber sector and began producing the product in 1985. ASTROLL® is used in a wide range of high-value products including one for polarizing plates, MLCC, OCA, solar devices and DFS.

Panel Material | ONLYMER®   ONLYMER®, used for overcoating, boasts outstanding coating uniformity, flatness, adhesion as well as transmission level and longitude similar to glass. LED/OLED using KOLON's ONLYMER is equipped with remarkable quality based on high resistance and high resolution.

Prism Film | EverRay®   Prism film is a core material concentrating light from the source of light into LCD BLU by forming a fine prism structure on a polyester film. Its excellent brightness and reliability allow us to sell the product overseas.

Colorless Polymide Film | CPI®   CPI®, a transparent PI film developed by KOLON Industries, is emerging as an essential material for future foldable display due to its remarkable heat resistance, mechanical property and flexibility.

7   PU (Polyurethane)/TPU (Thermoplastic Polyurethane) | KONY URETHANE™, ELLAS®   KONY URETHANE™ is a semi-permanent material equipped with outstanding shock absorption and durability. It is also possible to be made seamlessly which makes the product used as construction materials such as floor in parking lots or stadiums. Fiber PU is perfect for waterproof or permeable fabrics or high-functional outdoor clothes. TPU ELLAS® boasts excellent wear resistance, mechanical strength, rubber elasticity and flexibility, which allows it to be blended with other plastic or rubber materials to produce snow chains or air bags.

Business Overview_**FnC**

FnC organization is KOLON Industries' fashion business which started as KOLON SPORT in 1973. The FnC organization has more than 20 brands including its own brands of sportswear, men's clothing, women's clothing and fashion accessories as well as overseas premium labels. Along with these brands, we try to take advantage of competiveness we gained through KOLON SPORT, SERIES, RECODE and SUECOMMA BONNIE in the markets of China, the U.S., and Europe as a stepping stone to grow into a total brand platform most loved by fashion and culture-loving customers.

KOLON SPORT
2020
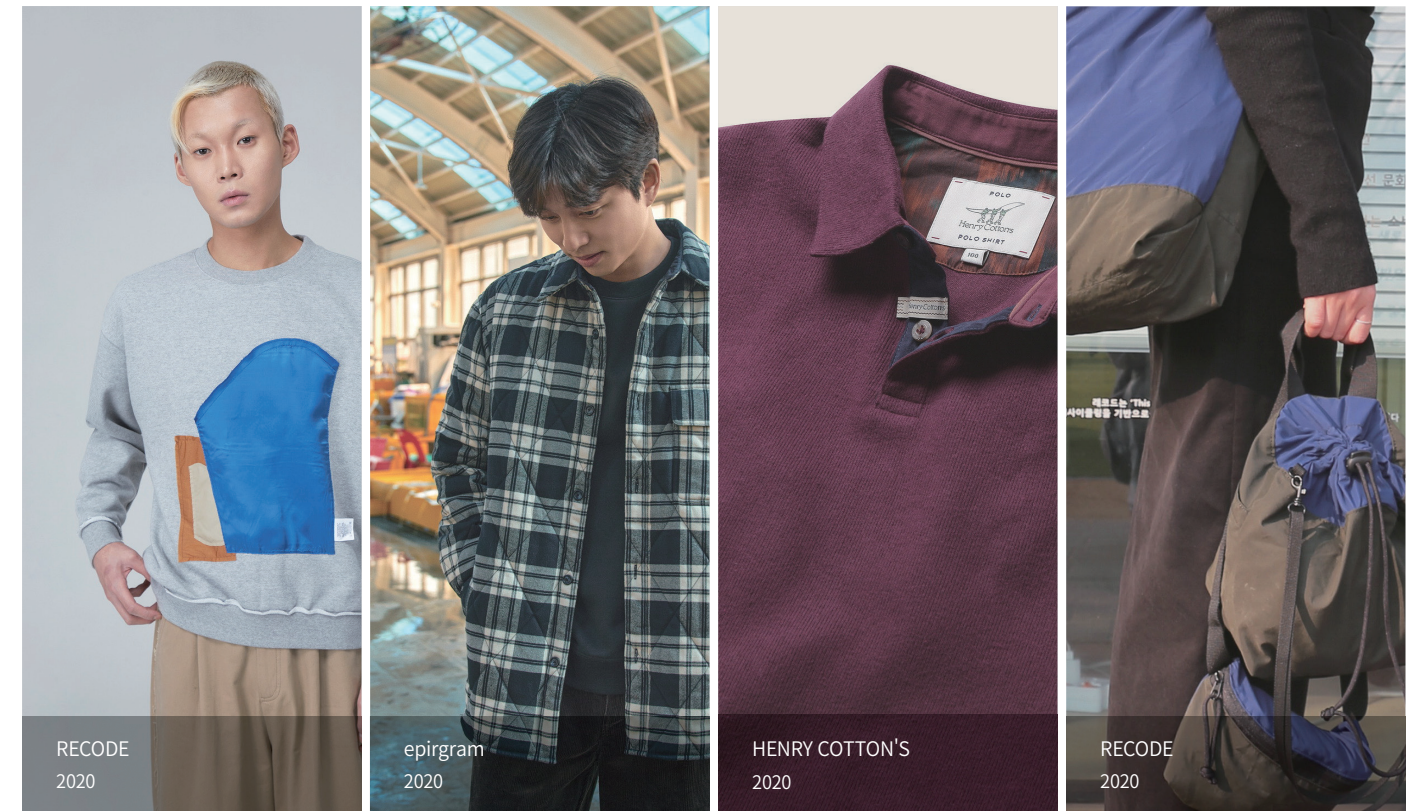
RECODE
2020

epirgram
2020

HENRY COTTON'S
2020

RECODE
2020

Launch of 'weDO,' Category for Sustainability

FnC organization of KOLON Industries is the first in the domestic fashion industry to add a category for sustainable lifestyle, 'weDO.' 'weDO' is a platform dedicated for sustainability-oriented brands in fashion, beauty as well as lifestyle sectors, and we bring together 30 domestic and overseas brands caring for humans, animals and the environment in the platform. Through the operation of 'weDO,' we aim to raise awareness about sustainability which has been in the spotlight in every corner of society as well as to increase contacts with customers. We are going to deal with not only independent brands but also projects regarding sustainability within FnC, and classify them into four categories including donation, upcycling, eco-friendly materials and vegan to introduce them, putting our focus not only on products but also their brand stories. We also plan to cover a variety of information and subjects in regard to sustainability ranging from terms related to sustainability, eco-friendly materials, the reviews of products, and interviews in the format of editorial, thereby communicating with our customers. 'weDO' is designed to create a virtuous cycle where products contributing to sustainable lifestyle and some portion of profits from them returns to the society. We are going to donate 1% of the profits we earn through this platform to social enterprises for sustainability projects as well as to create abundant contents so that our customers can keep up with the trend of sustainability through 'weDO.'

'weDO' has 30 brands including FnC KOLON's ones such as KOLON Sports, RECODE, epigram, SERIES, and COURONNE. The representative brands include the collection of Noah Project of KOLON Sports, Re;nano line of RECODE (eco bags and t-shirts made of stock fabrics), Timberland's eco-friendly line, 'VAN DER PIGGE' which is a real organic brand boasting 170 years of history, 'PAPPER' which is a brand using extracts of cedar to make bags and 'JERRYBAG' brand which gives an African child one container for delivering water whenever one bag is sold. In addition, a variety of brands and items are on the website including an eco-friendly denim brand, a hair product brand using natural extracts as ingredients and not conducting animal experiments and a vegan brand certified as a brand using only botanical ingredients.

R&D

The history of KOLON Industries emerged as a materials/chemical company starting from chemical fiber, and has flowed with constant investments in R&D. KOLON Industries' portfolio consists of four sectors; Auto (cutting-edge functional parts and materials for automobiles), IT (IT-based convergence technology and applied products), Life (high-functional and eco-friendly daily materials), and Eco (materials for green energy). In 2019, we invested KRW 97.5 billion, which accounts for 2.16% of our total sales. KOLON Industries will drive the needs of customers just beyond responding to changes in the industries of materials, chemistry and fashion on the strength of our advanced R&D capabilities and technology.

Innovation for Sustainable Future

R&D and Technological Innovation

KOLON Industries' R&D organization consists of R&D Center and Advanced Research Cluster. The R&D center was founded as a technology research institute, the first one in the chemical fiber industry in 1978, and then integrated Central Research Institute in 2003 and Incheon Technology Research Institute in 2011 into the current one. The head office has sought for R&D innovation enabling our technology management to evolve so as to set the stage for eco-friendly sustainable growth while focusing on establishing the broad R&D network through active outsourcing efforts. Furthermore, KOLON Industries aims to establish our stature as a company specializing in environmental-friendly chemical materials through the development of high-tech materials and application technology. To this end, taking advantage of our culture where creativity and challenge are encouraged, we are going to draw up technological strategies in four areas including Auto, IT, Life and Eco as well as to develop core materials and application technology in each area, thereby sharpening our competitiveness as well as laying the foundation for new businesses for the future. Our R&D portfolio comprises Film, Electronic & Display Materials, High Performance Industrial Materials, Green & Energy Materials, Automotive Materials and Chemicals.
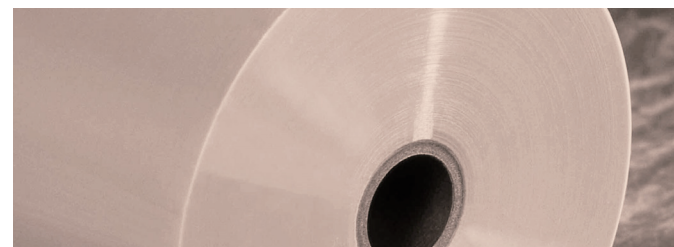
Film, Electronic & Display Materials

Innovation in material technology is essential to the advancement of information technology and its equipment. The R&D center has put its focus on developing core materials and components of PCB, IC, TSP and flexible display, capitalizing on technologies we have developed over the past 30 years ranging from film, coating, polymer structure design and formulation. In addition, we have joined diverse technologies together to create new application. By doing so, we are not only meeting the needs of our customers but also delivering new value through the creation of materials.

As part of efforts, the R&D center focused on ameliorating existing polyimide film in order to replace glass which is used for displays such as LCD or OLED. As a result, in 2016, we succeeded in removing its yellow property while maintaining its other physical properties including thermal resistance and strength, which led to the mass production of transparent polyimide film (CPI®) for the first time in the world. The transparent polyimide film is a perfect substitute for mobile phone cover glass and is also used for a variety of flexible displays such as foldable or rollable one. The R&D center, an owner of core patents in this field at home and abroad, will take the lead in terms of innovation of display to create new experiences.

· Colorless flexible materials for large-sized substrate
· Film & Chemical for touch screen panel
· Insulating materials for optical & transparent adhesive film and OLED
· Materials for transparent organic electrode and LCD color filter

Green & Energy Materials

Fuel cell creates electricity and water by combining oxygen and hydrogen, which put itself in the spotlight as one of upcoming eco-friendly energy sources. As more stringent environmental regulation has forced automakers across the world to formulate plans for reduced production of internal combustion engine vehicles by 2030, fuel cell is drawing more attention.

The R&D center has put its focus on core materials and components for fuel cell in Green & Energy Material area, which resulted in the commercialization of membrane humidifier for the first time in the world in 2013. The membrane humidifier, a humidity control device used for fuel cell, is one of core components enabling fuel cell to create electricity in a stabilized manner. This product boasts durability which allows itself to endure extreme temperatures from –140℃ to 120℃, which led to the commercialization for the first time in the world in 2013. In 2018, the R&D center succeeded in developing the second-generation humidity controller. In addition to the controller, we are also developing Polymer Electrolyte Membrane (PEM) and Membrane Electrode Assembly (MEA), core materials for fuel cells. PEM is electrolyte membrane which delivers hydrogen ion between electrodes as well as functions as a separation membrane preventing direct blending of hydrogen and air. MEA, which accounts for more than half in terms of the cost of fuel cell, is membrane electrode assembly referring to the whole structure generating electricity of fuel cell embracing PEM, anode, cathode, catalyst and gas diffusion layer. The R&D center started developing it in 2013, and now is going through the development stage of PEM mass production while we began developing MEA in 2014 and signed a contract with Core of the United States to adopt the critical technology of MEA. The R&D center has installed MEA pilot equipment in Seoul Magok Industrial Complex with an aim for mass production in the year to come. With the development of membrane humidifier, PEM and MEA, we plan to expand the scope of hydrogen fuel cell into housing & buildings, drones, heavy equipment, trains, vessels and aircrafts just beyond hydrogen fuel cell vehicles.

· Membrane humidifier, for fuel cell
· Electrolyte membrane and reinforced composite electrolyte membrane for fuel cell
· Next generation eco-friendly materials for membrane

Advanced Research Cluster

Advanced Research Cluster, established in 2018, takes charge of new technology development to create engines for future growth as well as R&D to expand our business portfolio for generating synergy between our affiliates. To this end, the research cluster has put its efforts into identifying new businesses and new items including the BIO sector in order to maximize the value of future while having strengthened R&D and basic capabilities to secure sustainable future growth. Global network establishment is also one of our significant tasks that the research cluster has put its focus on.

Platform Material
Design / Application
Energy & Environment
Health Science
Informatics
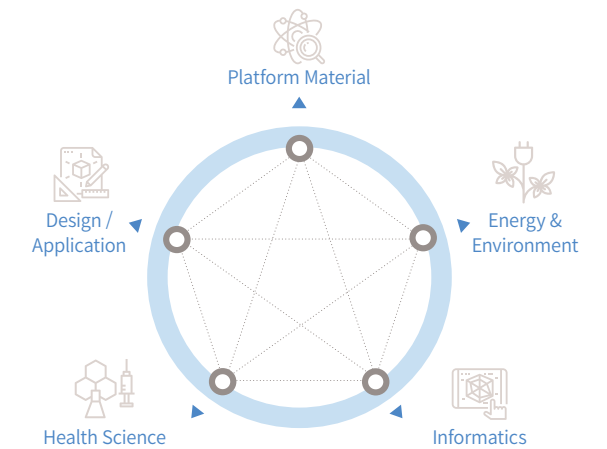
|	
· Platform Material	Identification and commercialization of basic materials which will underpin the future business in the chemistry sector
· Design/ Application	Expansion of new application providing the concept of design, taking advantage of new material platforms and existing materials based on materials, technologies and information within our KOLON network
· Energy & Environment	Creation of value contributing to human society through identification of new businesses in the energy and environmental sector
· Health Science	Identification of high value-added substances in the health and beauty sector, development of bio-based process and commercialization of it
· Informatics	Capitalizing on information technology including AI, conducting joint research for reinforcing capabilities for material development and its acceleration and providing consulting and IT services

Materiality Assessment

KOLON Industries has conducted materiality assessment to figure out a wide range of interests of our stakeholders as well as internal and external corporate environments affecting our sustainability management. For the assessment, we went through the process consisting of the analysis of internal issues, media scan, and the analysis of external environment such as the trends of other companies in the same filed. In 2019, we drew a total of 564 topics through the process, reclassified them according to GRI Standards, and selected 15 salient topics in consideration of the significance and likelihood of the topics from the perspective of impact on business and our stakeholders. Among the final topics, the priorities were 'response to climate change,' 'minimization of environmental impact' and 'expansion of eco-friendly product portfolio.' The details of the process are as follows.

Materiality Assessment Process

STEP 1	STEP 2	STEP 3	STEP 4
Collection of relevant issues	**Analysis of impact on stakeholders**	**Analysis of impact on businesses**	**Analysis of priorities**
· Review of internal and external issues · Formation of an issue pool	· Formation of issues to be reported · Selection of material issues	· Prioritization of material issues · Selection of issues to be reported	· Third-party verification

Materiality Assessment Results

Ranking	Topic	Report Page
1	Response to climate change	19-20, 69-70
2	Minimization of environmental impact	20-22, 68-70
3	Expansion of eco-friendly product portfolio	12-13, 55, 58-60
4	Compliance & ethics management	40-42
5	Economic achievement	4, 6-11, 67-68
6	Win-win growth	50-51, 78-79
7	Occupational safety and health	34-37, 73-74, 76-77
8	Governance	42-45
9	Participation of shareholders	15
10	Respect for human rights and prevention of human rights abuse	26-29
11	Information security	45-47, 77
12	Local communication engagement	61-65, 74-75
13	Job creation and labor-management relations	29-31, 71-72, 75-76
14	Work-life balance and organizational culture	31, 72-73
15	Risk management	81-84
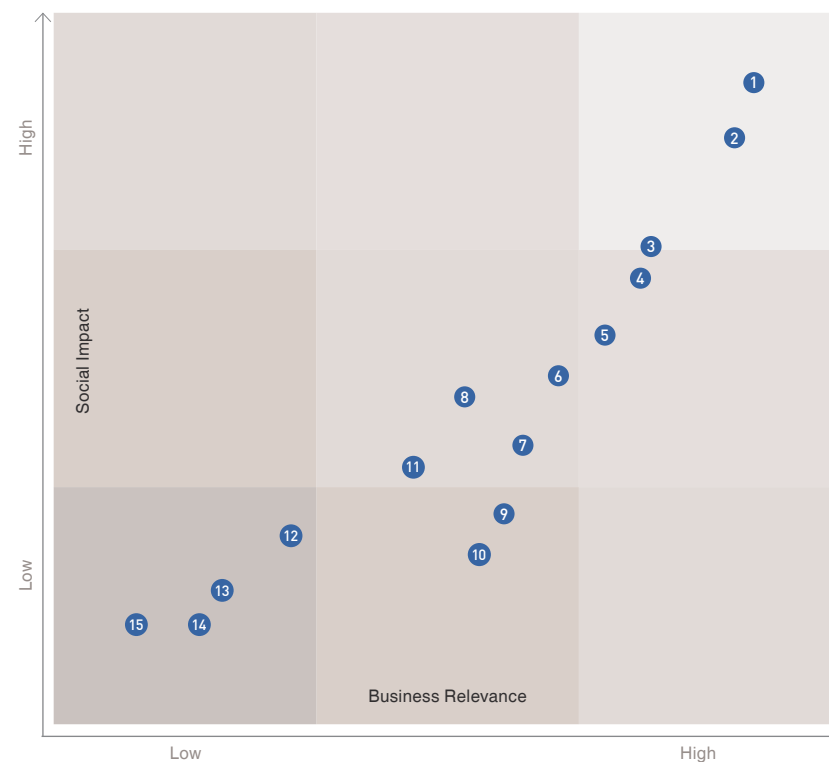
Engagement of Stakeholders

With an aim of attaining our sustainable management, KOLON Industries has reflected the opinions of both internal and external stakeholders including shareholders, customers, the government, associations, NGOs, local communities, suppliers, employees. As part of efforts to boost the participation of stakeholders, we have established communication channels for each type of stakeholders. Not only offline but also online channels are also being offered to make communication more efficient. We take into account opinions and information obtained through the communication channels when we set the vision or strategies regarding sustainability. By being more communicative, KOLON Industries will continue to listen to our stakeholders and reflect them into our management.

Communication Channels for Stakeholders

Stakeholder Group	Main Issues	Communication Channel
Shareholders	· Transparent disclosure of corporate information · Economic performance · Stable governance	· Shareholders' meeting · Earnings release · Board of directors · Financial information disclosure · Credit evaluation
Customers	· Product quality enhancement · Product safety · R&D	· Collection of clients' feedback · Product liability monitoring
Government	· Compliance with environment and safety laws	· Policy briefing
Association	· Sharing information on regulations of home and abroad and hearing of opinions, establishment of countermeasures	· Relevant industrial and business associations
NGOs and Local Communities	· Product safety · Investment in local communities · Employment of local talents	· Employee volunteer group · Recruitment fair for local talents
Suppliers	· Communication with suppliers · Win-win growth	· Newsletter · Boram Association · Mutual Growth Promotional Committee
Employees	· Reinforcement of employees' safety and health · Work-life balance	· Labor-management council · Occupational Safety, Health and Environment Committee · Newsletter · Intranet · Employee survey · Company magazine

LIFESTYLE INNOVATOR | Sustainability Management

Environmental **Management** | Labor and Human Rights | Safety and Health | Ethics Management | Sustainable Procurement | CSV Activities

01

Environmental Management

Global corporations have reached a consensus on new principles of ESG management (Environment, Social, Governance), which requires corporations to be more responsible for the environment. The paradigm shift in terms of environmental management has an impact on the assessment of corporate sustainability as well as investment. Against this backdrop, environment-friendly management is not a matter of choice but necessity. As companies are being faced with the growing demand for more accountability for environmental issues, the scope of corporate environmental policy is now being expanded into the establishment of strategy for environmental impact minimization, creation of values through the production of green products and consideration of environmental assets we will pass on to the future generation. This change is challenging but will serve as a momentum for corporations which adjust to the change and achieve innovation in environmental management to secure a new growth engine for the future.

2019 Our Performance

5.05%	4.87%
Greenhouse gas reduction rate compared to the previous year	Energy consumption reduction rate compared to the previous year
76.47%	53.64%
ISO 14001 certification rate	Growth rate in environmental investment compared to the previous year
Based on whole business sites of manufacturing organization and FnC organization	
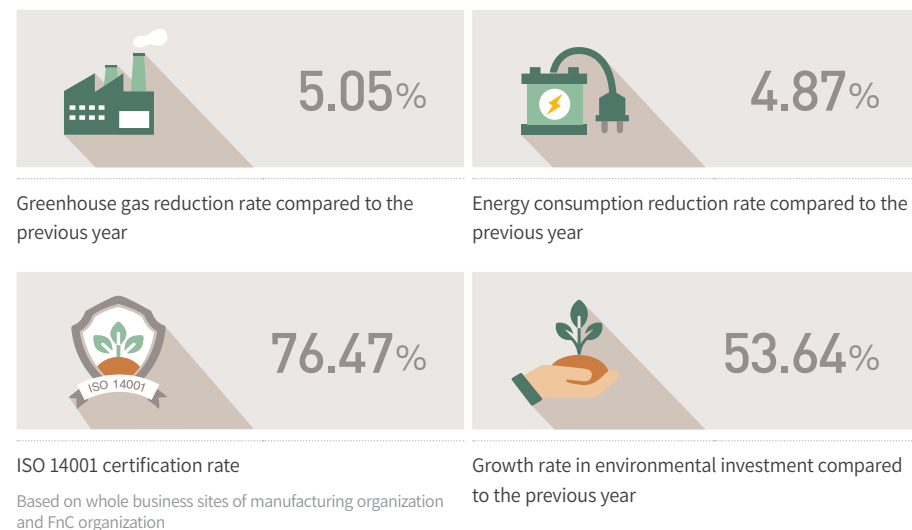
Our Approach

KOLON Industries has carried out a variety of activities to secure competitiveness in response to climate change at home and abroad. We have made investments in installing eco-friendly facilities as well as ameliorating procedures to meet the emission reduction targets annually allocated by the government. As part of efforts, we have also established greenhouse gas inventory system in our overseas business sites to systematically manage the current status of GHG emissions and our carbon credit. Along with this, we focus on the future, developing green products such as membrane electrode assembly for fuel cell, a core part of hydrogen electric vehicle. Going forward, KOLON Industries continues to spare no effort to mitigate GHG emissions as well as to develop eco-friendly products including materials required for hydrogen economy and electric automobiles.

Performance Measurement

GHG emissions in total (Scope 1 + Scope 2)

Unit: tCO₂eq

Year	Emissions
2017	660,183
2018	668,423
2019	634,635
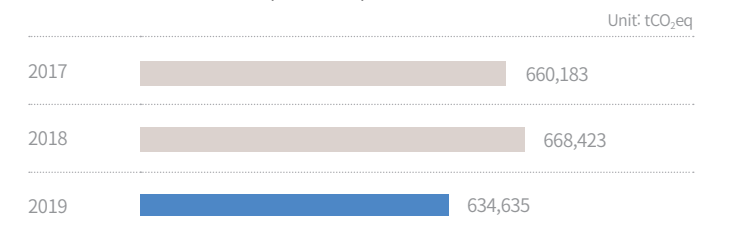
*Based on HQ and domestic business site

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management | Labor and Human Rights | Safety and Health | Ethics Management | Sustainable Procurement | CSV Activities

Environmental Management Strategy

With the purpose of minimizing environmental impact, KOLON Industries has constantly conducted research to thoroughly analyze all the stages from sourcing of base materials to disposal because the chemical business has a huge impact on the environment. As part of efforts, we have formulated our strategies including the adoption of ESHQ system, the pre-registration for EU REACH and the establishment of strategy for green management while abiding by home and overseas relevant regulations embracing Act on the Registration and Evaluation, etc. of Chemical Substances, Chemical Substances Control Act, Act on the Integrated Control of Pollutant-Discharging Facilities and laws regarding emission trading. On the basis of all those efforts, we have set a medium- to long-term roadmap to meet the target of the government, which is a 37% reduction against BAU by 2030. Furthermore, KOLON Industries has put our efforts into establishing sustainable development system with our material providers and suppliers and expanding our business into the green economy sector.
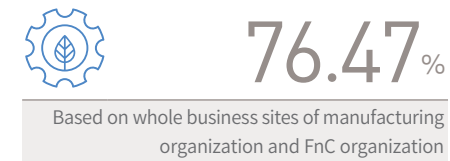
Environmental Management System
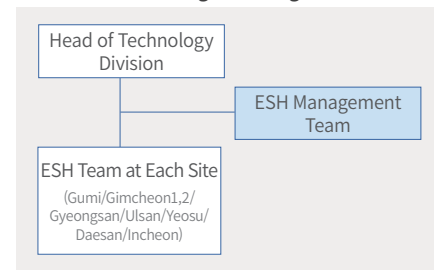
KOLON Industries has put in place a system to check environmental impact we have as well as whether to be in line with environmental policies and relevant laws at home and abroad. To make this system properly function, we have appointed the head of Technology Division as the general director of environmental management and have ESH Management Team fully in charge of this.

When it comes to environmental management system certification, we have adopted ISO 14001, the international standard defined by the International Organization for Standardization (ISO) for environmental management. And we have been certified 100% for all domestic manufacturing sites (Gumi, Gyeongsan, Gimcheon 1, 2, Ulsan, Yeosu, Daesan, Incheon), and some of our overseas business sites achieved the certification. A total of 76.47% of the business sites have been certified. We continue to expand the coverage to include all of overseas sites.

Environmental Management Organization

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┌─────────────────────┐
│ Head of Technology  │
│     Division        │
└──────────┬──────────┘
           │      ┌──────────────────┐
           ├──────│ ESH Management   │
           │      │     Team         │
           │      └──────────────────┘
┌──────────┴──────────┐
│ ESH Team at Each Site│
│ (Gumi/Gimcheon1,2/  │
│ Gyeongsan/Ulsan/Yeosu/│
│ Daesan/Incheon)     │
└─────────────────────┘
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Environmental Regulations Environmental regulations cover environmental management and the operation of all relevant activities, based on which KOLON Industries has complied with all related obligations as well as removed risks.

Regulations	Main Issues
Energy and Greenhouse Gas	To minimize environmental contamination, such as the emission of GHG, KOLON Industries has sought for reasonable consumption of all kinds of energy including electricity, heat and fuel by defining the scope of application and a work procedure. In addition, we have put in place a process for GHG emission target management so that we can reduce the emission. To this end, we have established and actively implemented a work process, GHG target at the company level and a reduction target management process.
Water Quality Management	Each and every business site of KOLON Industries has taken action to abide by all regulations and laws regarding water quality, such as water environment conservation law (Water Quality And Aquatic Ecosystem Conservation Act). To this end, we have defined roles and responsibilities for the installation, modification and operation of facilities for wastewater discharge waste and water pollution prevention facilities as well as specified a procedure, legal and our own standards for the management of the facilities.
Waste Management	All of our business sites have implemented entire activities to be in line with Wastes Control Act and all other related laws as well as to reduce waste and dispose of waste without harming the environment. As part of efforts, we have set roles and responsibilities for waste discharge and disposal while having come up with legal and our own guidelines for the management.

ISO 14001 certification rate

76.47%

Based on whole business sites of manufacturing organization and FnC organization

Local Contamination	Each and every business site of KOLON Industries has taken all the measures to comply with the environmental protection law for each type of pollution and all other relevant laws for sustainable preservation of local environments such as soil, odor, noise level and air. To this end, we have specified roles and duties for the installation, modification and operation of management facilities for each type of contamination while having drawn up legal and our own guidelines for the management.
Customer Health and Safety	KOLON Industries has collected all the issues related to the health and safety of our customers created by our products or our management in order to analyze them, and prepare countermeasures.
Environmental Impact Assessment	We have set and conducted the environmental impact assessment while having defined salient environmental impacts and followed the detailed management so that our business sites can minimize the impact on the environment. To this end, we have defined responsibilities and the scope of authority as well as formulated a work procedure, criteria for the assessment and checklists.

Action on Climate Change

Management of GHG Emissions and Energy

KOLON Industries has made every effort to manage GHG emissions and energy since we established a GHG inventory system in 2009 before the Framework Act on Low Carbon and Green Growth was enacted. Every year, we have formulated a GHG mitigation plan including outdated equipment replacement, waste heat recovery, procedure enhancement, and mobile combustion management while having built a data-based management system through the establishment of greenhouse gas/energy management system (GEMS). GEMS is our comprehensive management system for GHG emissions and energy, which handles data on the amount of energy use, GHG emissions and reduction rate against the target.

Response to Mandatory Mitigation of GHG Emissions KOLON Industries has drawn up our own roadmap for the reduction of GHG emissions in accordance with 2030 Greenhouse Gas Reduction Roadmap formulated by the government. As part of efforts, we have participated in Carbon Disclosure Project (CDP) since 2016 to set the strategy for climate action based on more quantified data. On top of that, we have met the reduction rate for GHG emissions, which is annually more than 5% on average, in line with the government adopting an emission trading system in 2015 for GHG mitigation. Also, we came up with the response strategy such as the purchase of carbon credit and reported to CEO for constant mitigation and stable securing of carbon credit. Potential amount of GHG emissions reduced is predicted on the basis of science, and we are trying to use it for lack of amount needed when the expected emissions exceed the amount of emissions allocated by the government. These efforts have enabled us to cut back on the annual amount of emissions by 5% on average. Some of our action plans are permitted by the government, so we have received additional allowances for emissions.

Action on GHG Emission Mitigation Operation sites have implemented a wide range of activities for GHG emission mitigation as well as energy saving. Representative cases are the utilization of waste heat and the amelioration of trap which has led to the saving on steam used, the replacement of equipment such as circulating pumps and refrigerators and the improvement of operation and comprehensive operation which has resulted in the cutback on electricity.

In line with the international demand for GHG reduction, KOLON Industries has put its efforts into

GHG Mitigation Activity Performance

Action	Amount of GHG Emissions	Amount of Energy Used
25 activities	Reduction of 33,788 tons (compared to 2018)	Reduction of 618TJ (compared to 2018)

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Environmental Management Labor and Human Rights Safety and Health Ethics Management Sustainable Procurement CSV Activities
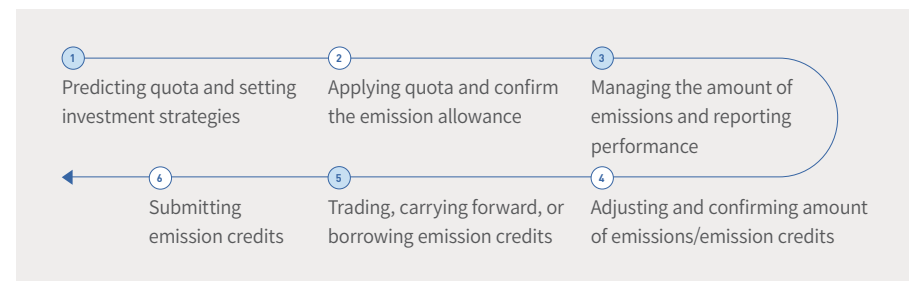
overseas business sites. It is not easy to figure out the exact amount of GHG emissions in countries of Southeast Asia because they do not institute the emission trading system. Yet, we have built inventory systems for GHG emissions in our overseas business sites. We continue to efficiently manage and mitigate GHG emissions in all of our overseas business sites, thereby contributing to GHG reduction.

Renewable Energy KOLON Industries has invested in a wide range of facilities such as photovoltaic generating facilities to boost the use of renewable energy. In particular, we installed a photovoltaic generating facility in the parking lot of Gumi Plant in 2011. The facility annually generates a total of 93,904kWh on average, which saves an average of KRW 11 million in cost per year.

Carbon Offset

Carbon Offset Program, a part of the government's response to climate change, has been implemented since 2008. The program encourages individuals and corporations to reduce their GHG emissions in their daily lives. KOLON Industries has taken part in this program since 2015 when the emission trading system was first adopted while having carried out a campaign for carbon offset to save energy in our daily lives. As part of the campaign, we are working on substituting lights of regional business sites with high-efficiency LED lights as well as installing detecting sensors with lights for brightness control, which contributes to the prevention of unnecessary waste of electricity. We have also joined Voluntary Agreements for Energy Efficiency Target, operated by the government. Through the program, we have signed an agreement with the government, set a mitigation target for saving on energy intensity and implemented activities for it. The government monitors and evaluates our performance while providing support and incentives to help us achieve the target.
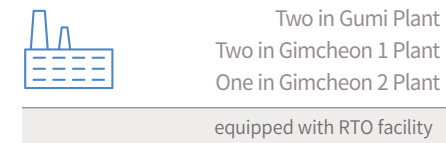
Procedure of GHG Management Guidance

① Predicting quota and setting investment strategies
② Applying quota and confirm the emission allowance
③ Managing the amount of emissions and reporting performance
④ Adjusting and confirming amount of emissions/emission credits
⑤ Trading, carrying forward, or borrowing emission credits
⑥ Submitting emission credits

Minimization of Environmental Impact

KOLON Industries has enacted environmental management regulations for the management and operation of our business sites' environments. The regulations aim to remove risk factors by creating standards related to the management and operation of each business site's environment, covering air, water quality, waste, soil, noise, vibration, and chemical substances. In addition, we have set roles and responsibilities for jobs, procedures and internal management standards for the discharge and disposal of waste in order for the proper and sustainable preservation of environments as well as for compliance with relevant laws.

Air

KOLON Industries has adopted regulations on air management in our whole business and all of our products for removal and reduction of air pollutants. We have set a clear standard for air pollution along with regulations stipulating that necessary actions should be taken and causes for the pollution should be figured out if the pollution level surpasses the standard. In addition, we have put an

VOCs Reduction Facility

Two in Gumi Plant
Two in Gimcheon 1 Plant
One in Gimcheon 2 Plant

equipped with RTO facility

Investment in Water Pollution Preventive Facility

About KRW **300** million

in 2019

emergency response process in place.

Regenerative Thermal Oxidizer (RTO) has been installed to prevent greenhouse gas emissions containing Volatile Organic Compounds (VOCs). But one of RTO's disadvantages is the possible excess consumption of fuels if the recovery of waste heat is not made in direct-fired system. To complement it, we make VOCs pass through heat storage material to oxidize gases. This method enables the heat quantity created by VOCs combustion to be used for warming, allowing the removal of organic bad smell and heat of combustion as heat storage material for heat exchange without discharge. By doing so, we have earned two beefits; the prevention of air pollution and energy saving. We are currently equipped with two RTOs in Gumi Plant, two RTOs in Gimcheon 1 Plant, one RTO in Gimcheon 2 Plant.

Besides, low NOx burners have been installed for fine dust reduction, while optical cameras have been placed in flare stacks for more thorough management of fugitive emission facilities. In 2020, we have replaced equipment to meet the amount of emissions allowed in all our business sites except for Gumi Plant, which will also replace equipment soon. On top of that, efforts have been made in response to regulations on reducing fine dust caused by air pollution, such as ultrafine particles and global air pollution.

Water Quality · Bad Odor

All our business activities and products are under the influence of regulations on water quality management and bad odor management which stipulate the responsibilities and procedures for the prevention of water quality contamination and odor occurrence. KOLON Industries has set clear standards for pollution measurement and put regulations in place. If the pollution level surpasses the level allowed, causes of it shall be identified and necessary measures will be taken.
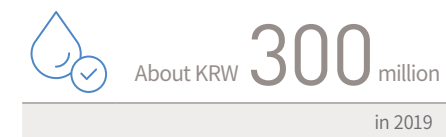
Investments in facilities for water contamination prevention have been constantly made. In 2019, we have invested about KRW 100 million in sump and pools of Gumi Plant and about KRW 200 million in sludge, drying equipment, aeration tanks, and pilot equipment of Gimcheon 2 Plant's wastewater disposal facility. By doing so, Gimcheon 2 Plant has the wastewater disposal facility equipped with the most advanced technology among eight sites in Korea. One of its representative state-of-the-art technologies in water quality management is Quick Bio-Reactor (QBR). QBR is a biological wastewater treatment facility with one-tenth of volumetric loading compared to Activated Sludge Process. It uses specific bacteria to dispose of high-density heavily contaminated wastewater which is extremely difficult to treat biologically without pre-treatment process. These characteristics of QBR have many advantages; smaller area for installation curtailed cost for operation and reduced load on organic matter treatment without secondary pollution. Especially, smaller area for the installation of wastewater disposal facility creates less stench and makes it easy to manage bad smell emitted. On top of that, excess air input for treating high-density wastewater contributes to less bad odor.

In addition, we have reduced water and energy use and chemical treatment cost through the closed cooling water system. As part of efforts to prevent microbial contamination in cooling water and pipe corrosion within the system for industrial cooling water, we have complemented the existing chemical treatment method of cooling water. Chemically treated cooling water has also been legally managed to prevent any problems.

Each business site has also conducted a water quality contamination test by independent external institutions to figure out the performance and areas of improvement of the investments in facilities and activities for alleviating water quality pollution. We have inspected the PH level, nitrate nitrogen, chlorine ion, lead, and phenol to decide whether they are suitable or not. Decisions are made following the regulation on water quality management and we figure out causes while taking action when improper discharge occurs.

We will put great interest and make investments in environmental equipment that could be neglected due to cost competition, thereby setting local communities at ease.

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management Labor and Human Rights Safety and Health Ethics Management Sustainable Procurement CSV Activities

Soil · Noise

KOLON Industries has formulated regulations on the management of soil, stench and noise level and applied them into our whole business and all products as we have made the regulations on the management of water quality and air pollution. The regulations stipulate responsibilities and authority, and clear standards for pollution measurement. If the level of pollution exceeds the level allowed, culprits should be identified and necessary measures should be taken according to the regulations.
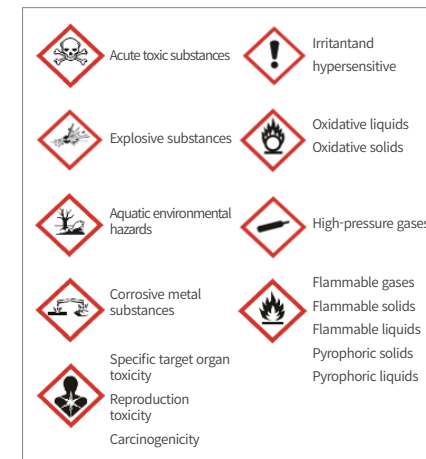
Soil	KOLON Industries has a soil pollution level test for each business site on a yearly basis. The test inspects the level of benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons (TPH).
Noise	KOLON Industries has measured the noise level of working environments to check processes creating noise. We designated four business sites creating noise levels exceeding 90db as excess processes. For hearing protection of workers in the four working sites, we have carried out many activities, including education on the prevention of noise-induced diseases, hearing management programs, noise map management, noise management bulletin board, the provision of hearing protective gear and the monitor of provision status. Meanwhile, we input oil into rotary machines, attach covers to high-speed rotating parts, and install double doors in lounges for noise reduction to alleviate the stress level caused by noise for both our workers and local residents.

Management of Harmful Chemical Substance and Waste

KOLON Industries has put in place regulation on chemical substance management, Guideline on Raw Materials and Packaged Items Management, Guideline on Hazard Assessment and Guideline on Waste, and applied them into the entire stages from treatment, storage, transport to disposal. Hazardous substance transport is regulated by Regulation on Toxic Substance Transportation, Regulation on Control of Nonconforming Products and Guideline on Harmful Substance Packaging. Inspection of checklist for safety management is also conducted when the substance is either loaded or unloaded. In terms of disposal, we have put our focus on the reduction of waste and the prevention of leakage. To do so, we have a process for harmful waste mitigation, recycling and reuse in place while having established our internal system for chemical classification and labeling to be used in the stage of storage. Furthermore, we have translated safety-related materials such as manuals into multiple languages, including English, Vietnamese, Spanish, and Chinese to distribute them to employees and foreign workers in overseas business sites. We have also shared revisions or changes of them swiftly and accurately.

REACH **[Registration, Evaluation, Authorization and Restriction of Chemical]**   REACH is a regulation concerning chemical substance management. REACH requires chemical substances manufactured or imported into the EU in quantities of 1 tonne or more per year to be registered, assessed, and evaluated. The regulation also applies to mixtures and finished goods containing chemicals, affecting not only corporations within the EU but also companies exporting applied substances to the EU. Accordingly, KOLON Industries started registering all chemicals used for exports in the European Chemicals Agency (ECHA) in 2010 and completed the registration in 2018. We have also registered our suppliers' chemical substances and thoroughly managed them through the system for chemical substance management.

Management of Material Safety Data Sheet (MSDS) [1]   MSDS is a document required when chemical products or products containing chemicals are exported, used, delivered, or stored. The document
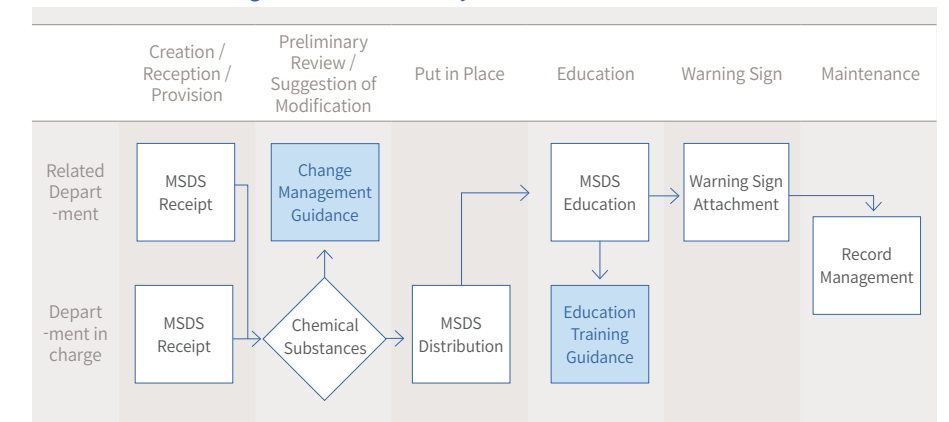
GHS hazard pictograms

Acute toxic substances	Irritantand hypersensitive
Explosive substances	Oxidative liquids Oxidative solids
Aquatic environmental hazards	High-pressure gases
Corrosive metal substances	Flammable gases Flammable solids Flammable liquids Pyrophoric solids Pyrophoric liquids
Specific target organ toxicity Reproduction toxicity Carcinogenicity	

No. of Chemical Leakage Accidents

ZERO

Based on whole business sites of manufacturing organization and FnC organization

lists comprehensive information from the name of the chemical product, the way to work safely with the chemical product, the potential hazards of the material, the way to respond when it explodes or starts a fire, the physical and chemical properties, carcinogenicity to the impact on the environment. It also contains the hazards of the product, warning signs based on the classification of its hazards, the preventive and responsive ways, and the way to store and dispose of KOLON Industries has put MSDS in place in each business site for the sake of our employees and provided education on target chemical substances, the hazard of them, how to safely handle, how to properly use protection devices, what to do if accidents or emergency situations occur, and how to understand warning signs according to GHS[2]. MSDS is also provided for our customers when they purchase products. Revisions are also offered to make sure that our customers are safe with the products.

1) MSDS (Material Safety Data Sheet, Substances, Safety data sheet): Records of the name of the chemical substance, safety and health handling precautions, hazards, fire/explosion measures, physicochemical properties, carcinogenicity, environmental impact when importing, using, transporting, or storing a chemical substance or a material containing chemicals

2) GHS (Globally Harmonized System of Classification and Labeling of Chemicals): Standards for displaying warning signs fixed or printed on packaging containers of hazardous products

Work Procedure for Management of Material Safety Data Sheet (MSDS)

	Creation / Reception / Provision	Preliminary Review / Suggestion of Modification	Put in Place	Education	Warning Sign	Maintenance
Related Depart -ment	MSDS Receipt	Change Management Guidance		MSDS Education	Warning Sign Attachment	
Depart -ment in charge	MSDS Receipt	Chemical Substances	MSDS Distribution	Education Training Guidance		Record Management

Work Procedures in Accordance with Management Guidelines on Harmful Chemical Substances   KOLON Industries has followed our management guidelines when importing, using, storing, and disposing of all harmful chemical substances. Our guidelines comply with legitimate management criteria, aiming to protect handlers from any form of damages and prevent property loss and environmental pollution. Each business site strictly sticks to the guidelines. We have created MSDS for all chemicals and products containing chemical substances, put them in business sites, attached labels with a warning sign on them and provided education to prevent occupational diseases and accidents for the sake of workers. We have guidelines for this in place and ensure all of our business sites to follow the guidelines based on legal standards.

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   Ethics   Sustainable   CSV
Management   Human Rights   and Health   Management   Procurement   Activities

02

Labor and Human Rights

The international community has raised its voice for more corporate accountability for respecting universal human rights, which requires corporations to put human above in terms of their management. Against this backdrop, various international norms formulated such as UN Global Compact Ten Principles, the Universal Declaration of Human rights and the ILO Fundamental Conventions have been enacted. As the corporate accountability for human rights is deemed a universal principle, global corporations are expanding their scope of human rights management to cover their supply chains while complying with international norms to be more competitive in the global market. Our government is not an exception. According to the recommendation of the international community, it has provided corporations with guidelines on human rights management as well as introduced relevant laws and policies. Human rights issues will cost companies not only a financial loss but also a huge damage to their competitiveness, which forces corporation to communicate with a variety of stakeholders to identify human rights risks and resolve them.

2019 Our Performance

100%

Ratio of employees receiving training on human rights
Based on domestic workplaces

100%

Ratio of workplaces assessed for human rights impact
Based on domestic workplaces

89.5%

Ratio of employees working for more than 12 months after taking childcare leave
Based on domestic workplaces

55%

Ratio of employees joining labor union
Based on domestic workplaces

Our Approach

KONON Industries has made every effort to prevent any human rights abuse, which can occur throughout the whole management from material sourcing and production to sale, and we are systematically managing them. In 2019, we have drawn up the policy for human rights and carried out human rights impact assessments for all domestic business sites. Following the assessment, we resolved potential risks found and happened, and then made an amendment to relevant regulations to beef up the level of protection of human rights, promote rights and interests of our employees and protect minorities more. Furthermore, KOLON Industries has delivered the meaning of mutual growth through Labor-Management Council, Occupational Safety and Health Committee and Labor-Management Joint Workshop. Going forward, we continue to deliver human rights so that all of our stakeholders including our employees and suppliers can be fully respected.

Performance Measurement

Proportion of female managers

Unit: %

Year	Value
2017	9.76
2018	11.79
2019	12.29

*Based on domestic workplaces

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management Labor and Human Rights Safety and Health Ethics Management Sustainable Procurement CSV Activities

Human Rights Management

Policy on Human Rights Management

As a corporate citizen, KOLON Industries is well aware of our economic, environmental, and social impacts and accountability for them. Accordingly, we have established the human rights policy, the Code of Conduct for Suppliers, and the Code of Ethics for Employees and strictly abided by them. The provision regarding the bans on any form of discrimination and workplace bullying were added to the employment rules in 2019 while the bans on child and forced labor were added to our HR policies. By doing so, we make our human rights principles clear to make sure that our diverse stakeholders' human rights are not infringed. Furthermore, we have inspected all of our regulations following company standard management to respond to global trends and revise relevant regulations effectively.

Our Policy on Human Rights

1. Principle

KOLON Industries respects and protects the human rights of all stakeholders who are affected by our business activities, including our employees, clients, suppliers, and local communities. We are in line with a variety of international norms in human rights (hereinafter guidelines) embracing the Universal Declaration of Human Rights, UN Global Impact, UN Guiding Principles on Business and Human Rights, OECD Guidelines for Multinational Enterprises, UN Convention on the Rights of the Child, labor-related principles recommended by the International Labor Organization and ratified the government and laws of countries where we are doing our business.

Goal

Maintaining **zero** worker aged under 18 by 2030

including both home and overseas business sites

2. Guidelines

Category	Contents
Human Treatment	KOLON Industries makes every effort to create a safe working environment free from any form of inhumane treatment and threats, including mental or physical coercion and abusive language so that human rights of employees are fully respected.
Anti-Forced Labor	KOLON Industries does not restrain mental or physical freedom or force employees to work against their will. We do not require the transfer of identifications issued by the government, passports, or work permits in return for employment.
Anti-Child Labor	KOLON Industries is in compliance with national and regional laws of each country on minimum age of employment and imposes the ban on the labor of children under the age of 15 at all sites. When we hire children aged under 18, we make sure that they are not involved in any dangerous or harmful work for the sake of safety in line with labor relations act and laws.
Anti-Discrimination	KOLON Industries gives all of our employees and applicants fair opportunities in terms of personnel operation, including employment, promotion, reward and disciplinary actions. We do not discriminate against them for the reasons of race, gender, age, place of origin, academic background, marital status, religion, political view, social status and disability.
Working Hours	KOLON Industries abides by regulations on regular and overtime working hours and holidays and days off stipulated by national and regional laws.
Wages and Working Conditions	KOLON Industries follows regulations on wages and working conditions, including minimum wages and overtime pay specified in national and regional laws.
Freedom of Association	KOLON Industries guarantees the freedom of association and collective agreement in accordance with national and regional laws. We do not give disadvantage to employees for a reason for organizing, joining a labor union, and being involved with a labor union.

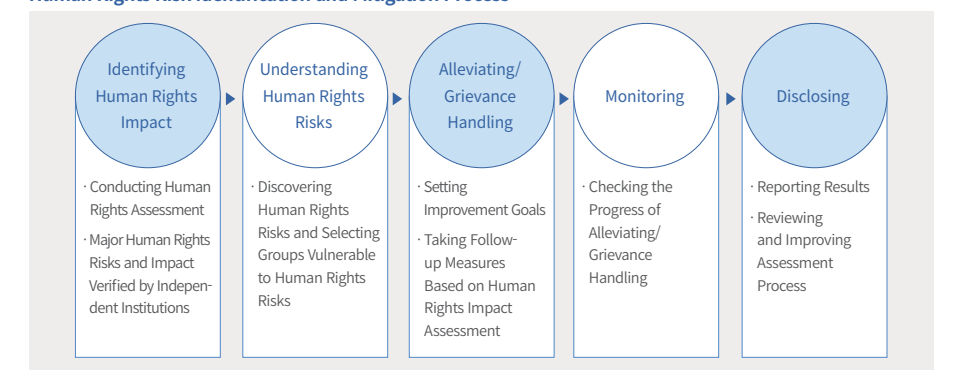|	
Human Rights Protection of Local Residents	KOLON Industries respects and protects the right to life, the freedom of movement, the right to safety and property ownership of local residents in areas where we operate business.
Environmental Rights Protection	KOLON Industries sticks to the principle of preventive approaches in order to protect local residents from difficulties caused by harmful substances and noises while providing a means of remedy for affected individuals or groups in areas where we operate business.

Promotion System for Human Rights Management

KOLON Industries has introduced a process to identify and mitigate human rights risks to protect the human rights of our various stakeholders, including employees, suppliers, and local communities. We find out human rights risks and those impacts through human rights impact assessment, then conduct grievance handling activities while alleviating them followed by monitoring and disclosure of the results.

Ratio of Business Sites Undertaking Human Rights Impact Assessment

100%

Korean Sites

Human Rights Impact Assessment To find out potential human rights risks in our domestic management activities and prevent and alleviate them, we conducted our first human rights impact assessment in 2019. The human rights impact assessment followed the HRIAM Guide (Guide to Human Rights Impact Assessment and Management) and the human rights impact assessment from the National Human Rights Commission. Based on those, the assessment analyzed 10 areas; establishment of human rights management system, non-discrimination in employment, assurance about association and collective agreement, the prohibition of child/forced labor, the guarantee of occupational safety, supply chain management, the human rights protection of local residents, and the security of environmental rights. Conducted by an independent external institution, the assessment covered the overall KOLON Industries' management system, including the head office and domestic business sites' policies and systems.

Alleviating, Grievance Handling, and Monitoring Human Rights Issues As a result of the human rights impact assessment, we were advised to stipulate items such as the ban on workplace bullying, respect for diversity, and the prohibition of child/forced labor in our recruitment rules or HR regulations so that they can be actually applied across entire management system. Following the advice, we added the items in our rules and regulations in 2019. Although we have never had any workers aged under 15 in all our business sites including overseas ones so far, we plan to take measures against any possible child labor as a precaution. We will ensure that the measures shall include the provision of educational opportunities or other remedies for minor workers rather than immediately dismissing them.

Human Rights Risk Identification and Mitigation Process

Identifying Human Rights Impact	Understanding Human Rights Risks	Alleviating/ Grievance Handling	Monitoring	Disclosing
· Conducting Human Rights Assessment · Major Human Rights Risks and Impact Verified by Independent Institutions	· Discovering Human Rights Risks and Selecting Groups Vulnerable to Human Rights Risks	· Setting Improvement Goals · Taking Follow-up Measures Based on Human Rights Impact Assessment	· Checking the Progress of Alleviating/ Grievance Handling	· Reporting Results · Reviewing and Improving Assessment Process

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Environmental Management   Labor and Human Rights   Safety and Health   Ethics Management   Sustainable Procurement   CSV Activities
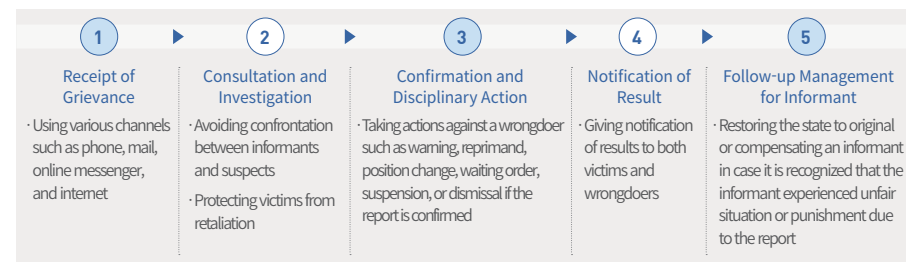
Respect for Employees' Human Rights

Human Rights Awareness Education

As part of our efforts to prevent discrimination, we have provided various human rights education for employees. Legally compulsive educations, including the education on sexual harassment prevention and awareness improvement for the disabled have been implemented annually. In addition to them, we have also offered educations on gender equality, anti-discrimination and workplace harassment prevention to raise the level of satisfaction for learning while enhancing effectiveness. In 2019, 100% of domestic employees as well as 28.6% of employees in 9 overseas corporations, including China, Asia, Mexico, Europe, and the U.S. completed the human rights education. Going forward, we will set the stage for a culture of respecting human rights with raised human rights sensitivity through more diverse human rights educational programs.

Handling Grievance Raised by Employee

With our permanent online grievance handling system, KOLON Industries is swiftly responding to various human rights violation issues such as sexual harassment, workplace bullying, and power abuse. An informant can report anonymously through the online report channel. The person's identity and all information in relation the report are strictly protected by our 'prohibition of search activities for informant' regulation. Any activities of tracking down will be rigidly reprimanded. The informant and the report's content is strictly confidential, and our reporting system is safely protected with tight security system. In addition, the information is only managed by limited personnel who pledged to comply with a confidentiality agreement. A grievance office consists of two persons from each, labor union and the management, by the Operational Regulation on Labor-Management Council. Grievance officers notify workers of measures taken within 10 days from hearing a grievance.

Grievance Handling Process

1	2	3	4	5
Receipt of Grievance	**Consultation and Investigation**	**Confirmation and Disciplinary Action**	**Notification of Result**	**Follow-up Management for Informant**
· Using various channels such as phone, mail, online messenger, and internet	· Avoiding confrontation between informants and suspects · Protecting victims from retaliation	· Taking actions against a wrongdoer such as warning, reprimand, position change, waiting order, suspension, or dismissal if the report is confirmed	· Giving notification of results to both victims and wrongdoers	· Restoring the state to original or compensating an informant in case it is recognized that the informant experienced unfair situation or punishment due to the report

Anti-discrimination and Respect for Diversity

KOLON Industries has imposed the ban on any form of discrimination based on gender, age, race, disability, religion, political orientation, and region of origin in a number of our regulations including Human Rights Management Declaration, Human Rights Policy, Employment Rules, and Personnel Regulations. Taking the perspective of the equality in opportunities and outcomes, we have fully respected diversity throughout all of stages from recruiting, evaluation, compensation to education.

We continue to hire female workers and put no difference in salary between men and women on equal conditions. Besides, we have conducted a women's mentoring program since 2006 so that our female employees can find role models in the workplace. To prevent our female workers from career interruption due to pregnancy and childbirth, we have prepared a lounge for women and introduced a variety of family-friendly welfare systems such as a work-hour reduction system during pregnancy/ childcare period. These endeavors have resulted in the average wage for female workers standing at 96.2% of that of male workers, and constantly reduced gaps in terms of wages for managing position.

We have also paid considerable attention to the equitable social employment for people with

Ratio of Average Base Pay of Female Employees to Male Employees (Unit: %)

2017	2018	2019
81.0	83.8	85.9

* Limited to managing positions (executives, above manager level)

disabilities and local talents. Despite the nature of the company with high number of production workers, the employment rate for the disabled in 2019 was maintained at 1.4%. We have made our efforts to enhance the convenience of employees with disabilities and to expand employment of them by securing exclusive parking spaces and toilets that can be used by disabled employees.

Fair Recruitment and Employment Relationship

Recruiting Process

KOLON Industries has created decent jobs and guaranteed fair opportunities in recruitment. Our newly overhauled personnel policy in 2019 forbids any form of discrimination based on race, gender, and religion. When hiring, we conduct blind interviews, excluding information irrelevant to the job, such as gender or academic background. In 2020, we enhanced the regulation concerning the anti-corruption management system in the HR regulations, minimizing corruption risks in recruitment. On top of that, to prevent unfair hiring and human rights violations that may occur in the course of interview process, we have intensified the education toward interviewers. Furthermore, national merit recipients and veterans are treated favorably in our recruitment to benefit the socially disadvantaged.

Besides, with an objective of preventing imbalance of information created by educational background or the region of job seekers in advance, we disclose the recruitment process through the website. Fair hiring process has also led to the greater diversity in the composition of employees. Of the 196 newly hired employees in 2019, 70% (138 people) was local talents, which was up by about 21% compared to the previous year. The proportion of female employees increased to 32.6% in 2019 while female manager ratio went up to 12.3% from 9.76% in 2018.
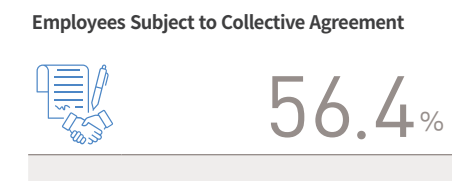
Communication and Win-win for Labor and Management

KOLON Industries guarantees the freedom of association so that employees can form and join labor unions. As of 2019, the union membership rate was 54.7%, and the rate of workers subject to collective agreement with the union was 56.4%.

We have operated the labor-management council for facilitating communication between labor and the management while building constructive cooperative relationships. The labor-management council consists of an equal number of employers and workers, and they quarterly discuss issues related to workers' safety and welfare. In addition, we have strived to maintain a cooperative and productive labor-management relationship by communicating through various channels including not only the bargaining of wage and collective agreement with labor union, labor-management council, but also the Occupational Safety and Health Committee and labor-management joint workshops.

We have stipulated 'working conditions' and 'employee health and safety management matters' in the collective agreement. It contains the items like working hours, overtime/night/holiday work, holidays, allowances, special leave for celebration or condolence, promotion, wage payment in case of emergency, Occupational Safety and Health Committee, safety education, safety gear provision, health check-ups. The issues not stipulated in the agreement are covered by the employment rules. In 2019, Feedback on discrimination and harassment in the workplace, education for retirees and former employees and requests for maternity protection support were invited. In addition, the employment rules and collective agreement were reflected through labor-management agreements while education was supported through the WCD center (education support center).

With the efforts of both labor and the management to forge a stable cooperative relationship, there has been no dispute under the values of 'Win-win Partnership' and 'Win-win Unity' since 2007. In 2019, we proclaimed 'Win-win Accord' adding suppliers on top of labor and the management, thereby practicing the spirit of win-win in a more advanced way. In recognition of our endeavors, we were awarded the Silver Tower Order of Industrial Service Merit in 2014, the prime minister's citation in 2016, and the Korea Labor-Management Cooperation Award in 2018.

Employees Subject to Collective Agreement

56.4%

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   Ethics Management   Sustainable Procurement   CSV Activities

Talent Management

Evaluation and Compensation

KOLON Industries has operated a transparent performance evaluation system to motivate employees and provide fair opportunities. Performance evaluation has been conducted once a year toward regular workers. The evaluation takes into account the achievement of target tasks, level of difficulty of work, contribution, and others. In 2019, 89.22% of employees eligible for it were evaluated. As regular evaluation can be the ground of job transfer, promotion, and pay raise, we put great effort to be fairer in the evaluation by operating an objection system after notifying personnel evaluation results.

On the other hand, we have implemented a cumulative annual salary system for employees above manager level in general/research position so that employees are able to receive compensations corresponding to their performance. Under the cumulative annual salary system, an individual's annual salary is defined according to the performance grade in the previous year, and high-performing employees can receive higher salaries than those in higher level. For general workers and researchers below managing level as well as workers in general, technical, and special employment positions, the standard annual salary table is applied so that we can reward them fairly without impartial discrimination due to personal factors such as gender and age.

Cultivating Talents

Investment in Employee Education

40 hours
Education Hours Per Person

KRW **1,971** million
Amount of Education Investments

To secure business competitiveness for sustainable growth and consistently raising capabilities of employees, we have supported various programs for our employees. We have provided a variety of educational programs systematically tailored to the position and level of employees by setting the annual education plan based on satisfaction survey regarding educational programs, the results of appliance to field, the analysis of employees' needs, and the research on HR trend.

Leadership Reinforcement Program   Our leadership program consists of two pillars; motivating and performance coaching. As the significance of horizontal communication comes into focus, we encourage the growth hand in hand with seniors and juniors based on the better understanding of people. Composed of executive coaching course, advanced manager course (for new team leader, newly promoted senior manager), and middle manager course (for manager, deputy manager) by level, we are contributing to the creation of organizational performance through motivating and performance managing and the raised awareness of fostering workers with less experience. Since KOLON Industries is part of the manufacturing industry, we have operated a field manager course for field managers and programs to harmonize generations of seniors and juniors in technical positions in order to consolidate communication-based leadership at the production site. The harmonization program between generations was conducted four times in 2019 in total, and it served as a platform to vitalize communication among generations through learning how to listen, communicate, and sympathize with one another.

Personal Competency Development Program   For the objective of improving job competency of our employees, we have been planning and operating education courses for each job and level. Besides, we are boosting the effectiveness of courses considering the applicability in fields when developing education courses for systematically improving capabilities of our employees.

First of all, 13 job training courses in sales, production, and research areas are operated to enhance basic work skills, and we keep upgrading the curriculum on the basis of training results and field application evaluations every year. Along with that, each head office and department runs seminars and special lectures inviting experts if needed. In addition, we have a strategic thinking process program to nurture the skills of organized work planning and execution for the junior manager level. For the level of manager and above, we are operating a 4-month long internal MBA course combined with online and offline to strengthen comprehensive thinking and decision making skills as well as professional competency.

Magok KOLON Daycare Center

Fitness Center Exclusive for Employees

New Employee Training Program   In order to help newly joined workers adapt organization quickly, we are providing various training programs. New employees with no work experience go through an introductory course for group's new employees (4 weeks) and an introductory course for company's new employees (3 weeks) to study core values, items of organization, and corporate etiquette. New employees having career experience go through a group's new employee course (4 days) and a company's introductory course (1 day) to learn the basic knowledge necessary to understand the company such as core values and systems.

In the future, we plan to actively utilize non-face-to-face education methods to cope with the emergence of various educational ways, the development of IT technology, the rising number of the millennial generation in organization, and the rapid change in the work environment. On top of that, we are expanding and improving the curriculum to improve diverse personal competencies such as self-produced micro-learning education content, job, leadership, language, and certification by investing in the in-house online education platform. With our sufficient support, it will continuously make our employees improve in their competency even in the non-face-to-face environment.

Fringe Benefits

Family-friendly System   KOLON Industries has operated multiple family-friendly programs to create a culture of work-family balance. We care and protect pregnant women through pregnancy celebration gifts, exclusive parking space for them as well as the reduction of working hours during pregnancy, which is 4 weeks longer than the legal standard. With an aim to prevent a career break due to child-raising, we have operated the Magok KOLON Daycare Center, which is a childcare center in the office building. The reduction of working hours during childcare period, and family-care leave system are also parts of our solution. Besides, various systems are set in operation, such as financial support for infertility leave and treatment as well as congratulatory payment when a child enters a school. With such endeavors, we achieved 100% return rate after parental leave for both males and females for two consecutive years.

More Flexible Work   In the aftermath of COVID-19 outbreak, various types of flexible work systems, including flexible working hours, different time commuting system, and working from home have become a New Normal in companies. Against this backdrop, KOLON Industries is introducing and expanding a variety of flexible work systems. In order to improve work efficiency, a flexible working hours system has been used for flexible use of working hours when the continuity of work is required or when work is concentrated at a specific time. In addition, to minimize the possibility of COVID-19 infection due to commuting in busy hours, we have enabled a different time commuting system to ensure individuals' work-life balance such as spending time for schoolwork or child-rearing. The system allows flexible commuting time based on 8-hour work per day. Particularly as the government's social distancing level is raised due to COVID-19 in 2020, we have introduced a circular telecommuting system.

Health Management Program   We have offered regular health check-ups once a year to all of our employees and their spouses. We have also helped employees improve their daily habits in a healthier way. As part of it, we are equipped with 'healthtron' and a fitness center exclusive for employees. The fitness center can be used freely before and after working hours, and free one-point lessons gains favorable responses from employees. Above these, we have created an environment for our employees to take care of health in their busy daily lives through a systematic obesity management program or smoking cessation program.

Retiree Support Program   We have operated a number of retiree support programs so as to help people prepare themselves for the life after retirement. In 2019, we conducted career planning, life planning, and economic education to lend practical support to retirees. Going forward, we plan to newly design an online/offline combined course and a regular education course at office so that they can make the most out of the information they acquired in the course of the program.

03

Health
and Safety

A safe and healthy working environment is directly linked to social stability. The chemical industry is required to thoroughly manage it in terms of production management to prevent any possible accidents because the accidents might bring about a huge impact on the environment, causing human and material losses. Accordingly, corporations should always take into consideration the safety of employees and people who are likely to be affected in doing their business. And it is required for all employees to raise awareness of safety, identify risks and solve the problems. As the safety issue of suppliers draws attention, we also need to manage the safety issue of suppliers to avoid industrial accidents in a constant manner.

2019 Our Performance
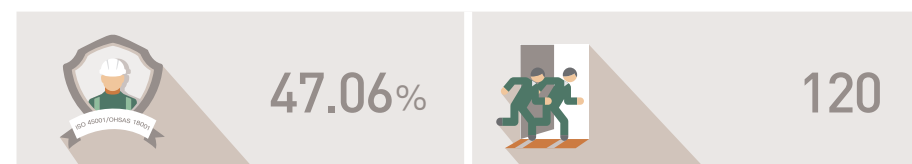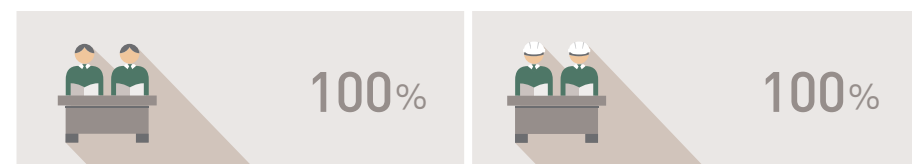
|	
100%	**100%**
Ratio of employees receiving health/safety training	Ratio of resident suppliers trained on safety and health
47.06%	**120**
Ratio of business sites ISO 45001/OHSAS 18001 certified	No. of emergency response training in 2019
Based on whole business sites of manufacturing organization and FnC organization	

Our Approach

We are seeing more stringent regulations regarding chemical substances at home and abroad. In proactive response to this trend, KOLON Industries put safety and health management first and systematically manage the issues. As part of efforts to establish a leading management system for safety and health, we have provided safety training on a regular basis as well as conducted a wide range of activities with all our employees, which has led to zero-accident workplaces. ISO 45001 (management systems of occupational health and safety) has also been adopted and will be expanded to more business sites. KOLON Industries is well aware that the treatment of harmful chemical substances could do damage to the environment as well as to handlers, so we have taken various measures to protect the safety and health of our employees by conducting group training, emergency response training and regularly inspecting equipment. Along with this, we invite feedback from customers in this regard and share our emergency response procedure while delivering education to our suppliers regarding safety and health so that our stakeholders remain healthy and safe.

Performance Measurement

LTIFR (Lost Time Injury Frequency Rate) for Direct Employment
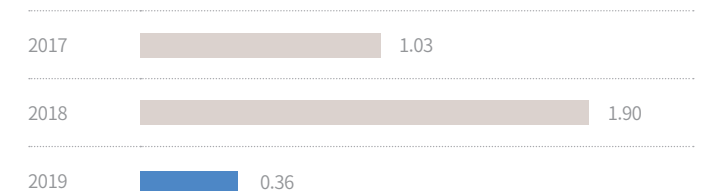
2017	1.03
2018	1.90
2019	0.36

* Lost Time Injury Frequency Rate = (No. of Work Loss Cases in Total) * 1,000,000 / Total Work Hours

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   **Safety and Health**   Ethics Management   Sustainable Procurement   CSV Activities

Safety and Health Management System

Safety and Health Management Policy

Our top priority is the safety and health of our employees and workers of suppliers. We declared the implementation of safety and health management through 'sustainable management policy' on the foundation of the environment, safety, and quality management system*. In order to make it happen, we have drawn up about 70 related internal regulations. In addition, each business site systematically manages safety and health management as well as emergency countermeasures including safety health management structure, education and training, workplace safety health management, accident investigation management, and risk assessment based on the company-wide 'safety health management regulation'. As safety of workers in suppliers has become a social issue, we have stipulated safety and health of suppliers in our workplace safety and health management item and made 'Safety Health Management Guidance for Suppliers' in each business site. For reference, KOLON Industries is managing ESH compliance risks by establishing 'Regulation for Management of Environment Safety Law' and swiftly reflecting international agreements and clients' requests on our internal policies.   *ISO 14001, ISO 45001, KOSHA 18001, ISO 9001
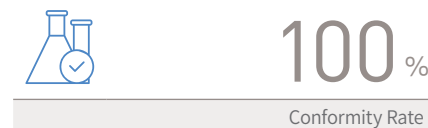
Our Safety and Health Management System

Category	Contents	
Integrated Management System Sustainable Management Policy	· Putting safety and health first and minimizing life loss and damages through promoting an accident-free movement Securing process · Securing process safety by achieving and maintaining PSM grade 'P' on the foundation of Process Safety Management (PSM) · Realizing customer satisfaction with highest competitiveness through consistently improving quality and building product reliability · Disclosing relevant information when requested by stakeholders to ensure transparency	
Regulation on Safety and Health Management Safety and Health Management in Workplace	· Dangerous machinery and equipment · Safety and health rules for workers · Handling of hazardous substances · Safety and health signs · Safety and health monitoring and inspection · Approving a procedure for safety-related work	· Change management · Safety and health of suppliers · Health checkup of workers · Working environment for workers · Protective gear · Other necessary matters

Quality Management Q System

Quality Management and Innovation   KOLON Industries has secured the safety of customers and end consumers through exhaustive quality management. Thanks to our Fool-Proof System that automatically prevents errors, we are trying to reduce a defect rate. On top of that, Goal Driven Innovation (GDI) quality innovation activities are conducted every year. GDI is a series of activities checking overall corporate management system and on-site quality management level and finding tasks, which is the cornerstone of our technology and workforce training. In 2019, 374 employees participated in the GDI technical workforce training course to reinforce quality innovation capabilities.

Safety of Chemical Substance   All chemical substances in KOLON Industries' business sites are strictly managed under the review and approval of the Environment and Safety Department. In accordance with the 'Preliminary Review Manual for Chemical Substance', we conduct a preliminary review in case of using new chemicals, switching suppliers, and making changes in ingredients and contents. For the preliminary review, we make use of SERC BC, which contains regulatory information on about 250,000 chemical substances in 57 countries around the world as well as domestic laws

Nurturing Course for GDI Technical Professionals

374 People Completing

Preliminary Review of Chemical Substances

4,060
No. of Reviews

100 %
Conformity Rate

including K-REACH (Act on Registration and Evaluation, etc. of Chemical Substances) and Chemicals Control Act. The chemical substances that have been verified for safety after going through a preliminary review, we register them with our KCMS (Kolon Chemical Management System) for the purchase, usage, and production. In 2019, we conducted preliminary reviews on 4,060 chemicals, and 100% of them were acceptable.
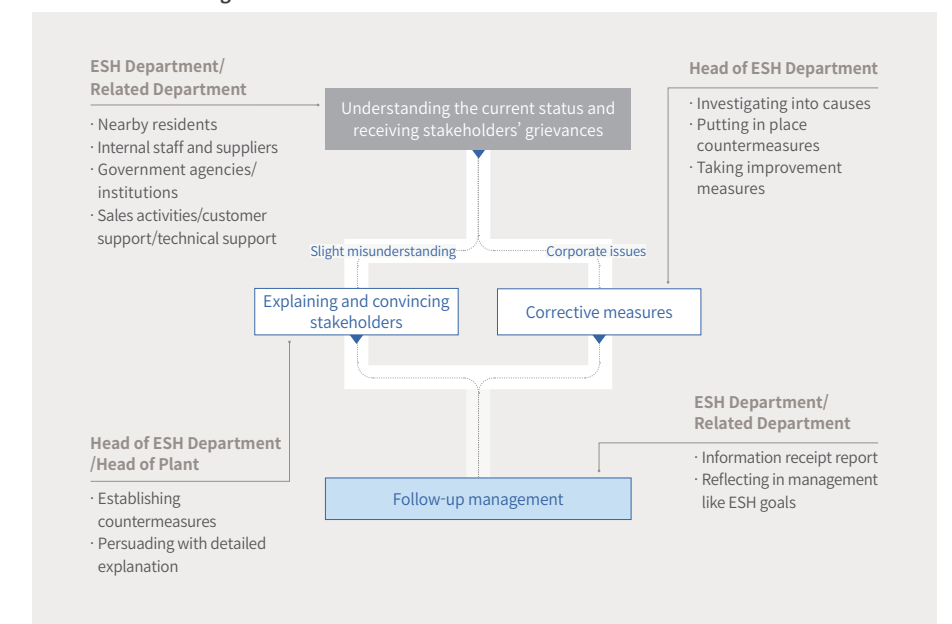
Occupational Safety and Health Committee

KOLON Industries operates a labor-management joint Occupational Safety and Health Committee at the head office and business sites in line with the relevant laws, corporate-wide safety and health management regulations, and collective agreement regulations. The committee is comprised of the equal number of people from labor union and the management respectively, which is nine from each. Its role is to manage entire workers' health and working environment and bring up prevention measures against occupational accidents while establishing or amending safety and health regulations. The representative of workers collects opinions from employees of KOLON Industries and suppliers and strives to apply their voices in making decisions that applies to all employees including executives.

Provision of Information and Feedback Process

KOLON Industries has a process to provide timely and accurate information on products and chemicals for the protection of customers' safety. When selling chemical-containing products, we provide GHS and MSDS for customers, and revisions are updated and redistributed. Besides, we have also stipulated a procedure to gather feedbacks from internal and external stakeholders on safety and health and responded to them in the 'Communication Management Regulations'. Environment and Safety Department heads of each business site receive complaints from stakeholders through document, phone call, and visits. And then, if necessary, we take corrective actions such as investigation into causes and the establishment of countermeasures. We also established an emergency action plan according to the 'Emergency Management Regulations' in preparation for emergency situations such as serious defects in products.

Communication Management Process

ESH Department/ Related Department
· Nearby residents
· Internal staff and suppliers
· Government agencies/ institutions
· Sales activities/customer support/technical support

Understanding the current status and receiving stakeholders' grievances

Head of ESH Department
· Investigating into causes
· Putting in place countermeasures
· Taking improvement measures

Slight misunderstanding   Corporate issues

Explaining and convincing stakeholders   **Corrective measures**

Head of ESH Department /Head of Plant
· Establishing countermeasures
· Persuading with detailed explanation

Follow-up management

ESH Department/ Related Department
· Information receipt report
· Reflecting in management like ESH goals

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   **Safety and Health**   Ethics Management   Sustainable Procurement   CSV Activities

Safety and Health Activities

Improvement Measures Taken through Labor-Management Inspection

128
No. of items discovered

116
No. of items corrected

Safety of Working Environment

KOLON Industries has identified and reacted to safety and health risks on site in advance through risk assessments on a regular and frequent basis when new projects are implemented or workplace is relocated. We are estimating the likelihood and severity of injuries and diseases by finding harmful and risk factors in building material, machinery, equipment, facilities, raw materials, and processes dealing with them and formulating measures to minimize those risks. In addition, we have also conducted joint inspections, visiting guidance, and regular checks on our working environments in accordance with 'Safety and Health Management Guidance for Suppliers' and monitored whether hazardous chemicals and noise exposure in their work process do not exceed standards. We have implemented these reviews and improvement actions under the deliberation and resolution of the Occupational Safety and Health Committee.
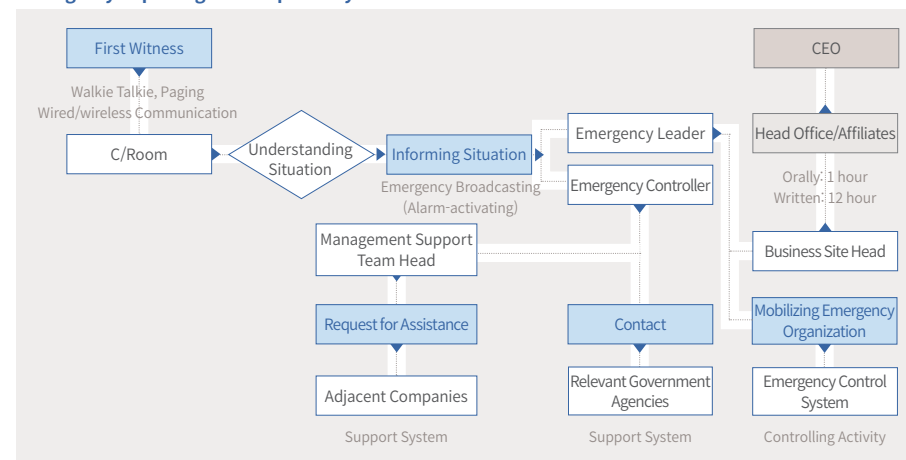
Protective gear like safety glasses, earplugs, and safety hats are given to all on-site workers including workers from suppliers without exception. Equipment deemed inadequate from our regular monthly inspections is immediately replaced. Earplugs in particular are essential protective gear to prevent noise and stress, so we conduct separate adhesion tests for the sake of the safety of our workers including those from suppliers.

Emergency Response System

By categorizing emergency types into fire/explosion, leakage of toxic chemicals, interruption of utility supply, and natural disasters, we have come up with an emergency action plan including missions, procedures, and actions for each emergency type. On top of that, emergency action plan includes evacuation procedures, internal and external contact and communication system, guidelines for wearing protective gear, emergency aftermath procedures including removing pollutants, public relations plan for neighboring workplaces and residents, and cooperation system with external organizations.
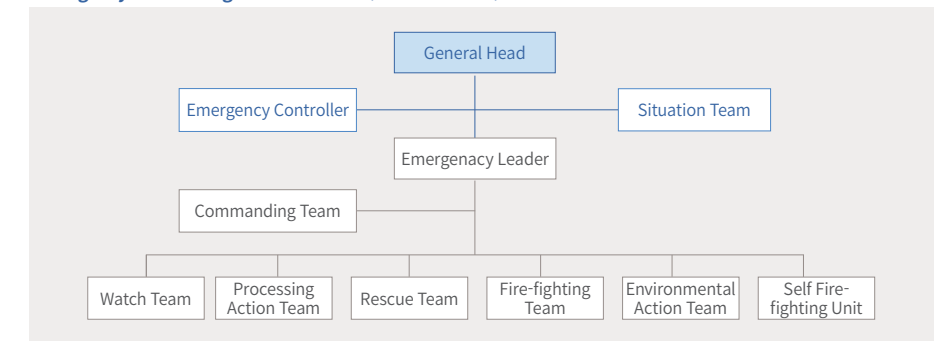
Emergency Response Training KOLON Industries has carried out emergency response training for each scenario on the assumption of various emergency situations such as process emergency response, emergency rescue in confined space, and chemical leakage during transportation. The identified items to be improved during training are redressed when establishing the next emergency action plan so that we can swiftly respond to an actual emergency situation. In 2019, a total of 120 emergency response drills were conducted at all domestic business sites.

Emergency Reporting and Response System

First Witness — Walkie Talkie, Paging Wired/wireless Communication — C/Room — Understanding Situation — Informing Situation — Emergency Broadcasting (Alarm-activating) — Emergency Leader — Emergency Controller — Management Support Team Head — Request for Assistance — Contact — Mobilizing Emergency Organization — Adjacent Companies — Relevant Government Agencies — Emergency Control System — CEO — Head Office/Affiliates — Orally: 1 hour Written: 12 hour — Business Site Head — Support System — Support System — Controlling Activity

Emergency Response Organization In the event of an emergency, we follow the emergency control organization chart with only essential personnel so as to minimize human and material damage. The personnel in the emergency control organization chart performs tasks such as saving lives in case of any human damage, preventing or removing environmental pollutants, predicting any harm to adjacent areas, and giving evacuation orders.

Emergency Control Organization Chart (business hour)

General Head — Emergency Controller — Situation Team — Emergenacy Leader — Commanding Team — Watch Team — Processing Action Team — Rescue Team — Fire-fighting Team — Environmental Action Team — Self Fire-fighting Unit

Safety and Health Education

KOLON Industries has provided various education programs to raise employees' awareness of safety and health and to build a company-wide consensus in this regard. Once a month, we conduct an education program for all regarding the Chemicals Control Act, the Occupational Safety and Health Act, the ways to manage hazardous and dangerous working environments, and health improvement. Along with that, each department uses the results of risk assessment for training people in charge while operating tailored education programs considering special characteristics of work and in-depth training programs for managers. We have also provided safety and health education, including information on hazardous and dangerous matters as well as safety rules and emergency action plans for workers from suppliers. In an effort to help students better understand and learn about educational content, we have held company-wide ESH quiz contests and given financial incentives. These continuous efforts will make workers familiarize themselves with ESH-related knowledge and improve their capabilities, ultimately leading to the prevention of safety accidents.

Ratio of Employees Receiving Health Check-ups

97 %

Regular Health Checkup

We have offered health checkups to all employees working in the workplace including workers of our suppliers. In addition to general and comprehensive health checkups for all employees once a year, special health checkups have been provided for workers who are exposed to harmful factors before and after the placement for the position so that occupational diseases can be detected early.

Spreading Culture of Safety and Health

KOLON Industries has been participating in the shared growth program of the Korea Occupational Safety and Health Agency with an objective of strengthening the capabilities of our suppliers in disaster prevention activities. Leading support activities to improve the level of safety and health management of suppliers, we acquired excellent evaluation results including S grade for Gyeongsan Plant in 2019 and A grade for Gimcheon 1 and 2.[1] We also promoted zero-accident movement in Gumi plant and 28 suppliers while sending Environment and Safety newsletter to all employees, making strenuous efforts to permeate safety and health through all of our business sites.

1) Gumi Plant is exempted from 2019 evaluation as it received grade S in 2018.

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   **Ethics**   Sustainable   CSV
Management   Human Rights and Health **Management** Procurement Activities
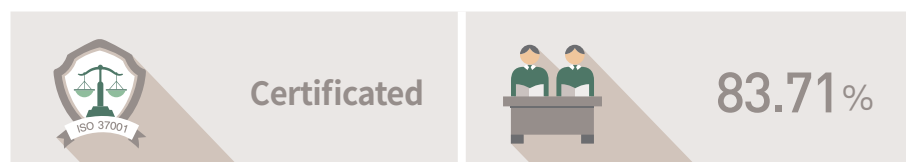
04

Ethics Management

As the importance of corporate ethical responsibility grows, stakeholders including investors and consumers are also raising their voices for a high level of ethics management. Against this backdrop, companies need to actively make every effort not only to make profits but also to implement ethics management. To this end, CEO's robust will toward this is integral and a system for ethics management along with a culture of integrity is needed as well. In other countries, international agreements and laws regarding corporate ethics have been formulated while the Korean government is pushing for the legalization of the bills for social value realization as well as encouraging corporations to adopt stewardship cord.

2019 Our Performance

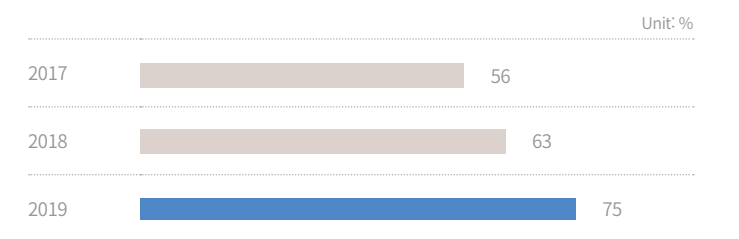|	
100%	**B**+ Grade
Ratio of domestic employees pledging compliance with the Code of Ethics Based on new employees	ESG evaluation (Korea Corporate Governance Service)
Certificated	**83.71**%
ISO 37001 certification Certified in 2020	Ratio of employees receiving training on information security

Our Approach

KOLON Industries has constantly supplemented our ethics management system and complied with the Code of Ethics and the relevant guideline since we established an ethics management organization in 2005. As part of efforts, we have provided our employees with online and offline ethics education programs so that all of our employees are in line with our ethics management. KOLON Industries has also focused on our suppliers to elevate our ethics management throughout the whole value chain by issuing compliance newsletters to our suppliers. Furthermore, we have made an effort to make our governance transparent to stick to the principles and protect our shareholders' value. Establishment of a management system for information security is also one of our jobs we put our effort into along with raising awareness in this regard. KOLON Industries continues to take a close look at potential risks regarding ethics, such as compliance, governance or information security, and manage them.

Performance Measurement

Percentage of business sites undergoing internal audit on ethics and risk assessment

Unit: %

2017	56
2018	63
2019	75

* based on both domestic and overseas business sites

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   **Ethics Management**   Sustainable Procurement   CSV Activities
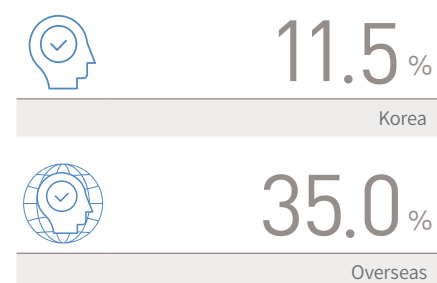
Ethics Management

Ethics Management Policy

On the basis of the Code of Ethics established by our holding company, Ethics Management Office of KOLON Industries has formulated our own Code of Ethics. The detailed rules for the code are now being enacted to implement the detailed provisions stipulated in the Code of Ethics. We have also formulated Code of Ethics for Employees and regulations on compensation for report, and communicated with our employees about the regulations. Regular reviews will be conducted on a yearly basis to invite feedback from our employees and reflect them. KOLON Industries will continue to add necessary ethics regulations to supplement, and also communicate with our employees so that the sense of ethics permeates all of our employees.

Key Contents of Code of Ethics

Category	Contents
Anti-Corruption and Bribery	We have a basic principle in place which stipulates the strict compliance with laws and regulations in regard to anti-corruption of each country and international agreements in doing business, and the ban on the provision of money and valuables for public officials in return for illicit gains. For cases that can be deemed violations against anti-corruption laws, reporting to the management overrides arbitrary decisions. We also follow the 'Improper Solicitation and Graft Act' as a detailed code of ethics while drawing up detailed standards for principles and actions so that we are thoroughly in line with anti-corruption laws.
Conflict of Interest	Conflict of interest refers to a situation in which the interest of a person conflicts with the professional duties of that person or the interests of others or the company. KOLON Industries has a principle that the interests of company override that of individuals. Employees should make a clear distinction between public and private matters and are prohibited from seeking for personal benefits taking advantage of their position.
Fraud	KOLON Industries bans employees from making illegal and unfair profits, which is one of our principles. In detail, we impose the ban on the laundering of money earned through illegal or fraudulent activities, bribe- taking from stakeholders, the unlawful use of company assets, equity participation and join investment in stakeholders, infringement on intellectual property right and the manipulation of documents and figures. In addition, employees are supposed to follow the Code of Ethics and related regulations or can be provided Ethics Guideline from Ethics Management Office when they are in a situation of ethical conflicts.
Anti-Competitive Activity	KOLON Industries adheres to the principle of free market order achieved through fair and free competition and respect for competitors. To this end, we impose the ban on the abuse of a dominant market position to gain a competitive edge. As part of efforts to prevent any anti-competitive activities through suppliers, illegitimate favors for suppliers or any type of discrimination are prohibited.

Ratio of Employees Completing Ethics Education

11.5 %
Korea

35.0 %
Overseas

Disseminating Ethical Culture

KOLON Industries has annually conducted training on ethics for all employees organized by the HR team. Ethics Management Office has conducted audits on credit card usage and made an amendment to Regulation on Corporate Credit Card in order to prevent our employees from personally using the assets of the company, thereby making the sense of ethics permeates every corner of the company. In addition, we have also provided education for workers in charge of internal audit to sharpen their

professional skills in terms of audit. In particular, we focus on cultivating professional talents such as Certified Internal Auditor (CIA).

Ethics Reporting and Action   Our ethics reporting program uses the ethics reporting platform on the group's ethics management website. We have complied with the principle of strict security and protection for informants in accordance with the 'Protection and Compensation Regulation for Reports' in case they disclose their names when reporting. Also, any act that exposes or implies identity without the consent of the informant is prohibited by the informant protection principle. If any activity of searching to identify the informant is detected, severe disciplinary action will be taken under the internal disciplinary regulations. A system to check if an informant is disadvantaged is operated as well. Besides, we are redressing problems by receiving ethics reports through a number of conventional ways such as mail, telephone, and e-mail. We make sure the protection of informants comes first under any circumstances.

In the event that any inappropriate gift or money such as a holiday gift is received from a stakeholder relevant to business, a gift receipt report should be written and reported to the Ethics Management Office. In the case of receipt report, the provider and the contents of the provision must be clearly stated, and the details of receipt and way of handling are also recorded and managed. In order to spread this receipt reporting culture, we are sending compliance letters to our suppliers, promoting campaigns, and operating a gift receipt reporting center in each business site. Gifts that cannot be returned are donated to charities.

Compliance

Anti-Corruption

In the face of the growing demand for corporate legal compliance and anti corruption, KOLON Industries has strived to established a compliance system meeting the global standards while having implemented a variety of activities such as the CEO's declaration of Fair Trade Compliance Program, the distribution of compliance guidelines of each area and the issuance of compliance newsletters. Since we adopted the Fair Trade Compliance Program (CP) in 2012, we have designated Compliance Day to raise awareness of compliance and encourage practices at the company level. These efforts earned us Grade AA in the CP evaluation conducted by Fair Competition Federation under the umbrella of the Fair Trade Commission in 2015. Furthermore, we obtained ISO 37001 (international anti-bribery management system standard) certification in 2020 to be in line with domestic and overseas anti-corruption laws including the Improper Solicitation and Graft Act.

Anti-Corruption Due Diligence Program   KOLON Industries has carried out anti-corruption activities and also gone through the third-party audits so as to advance our compliance management system. In particular, we have obtained reliable accounting information through the Internal Accounting Control System, and at the same time, we kept control of anti-corruption such as corruption or irregularities. The revision to the Act on External Audit of Stock Companies in 2018 includes direct reports to CEO and elevated certification level from review to audit, which requires more transparent operation of the Internal Accounting Control System. And we have actively responded to it. Going forward, KOLON Industries will be active in response to the Internal Accounting Control System's audit system such as illegal financial report, thereby taking our anti-corruption management to a more advanced level.

Distribution of Compliance Manual   As part of efforts to encourage our employees to have raised awareness of compliance and to practice, we made an amendment to and distributed Compliance Manual. The manual details useful information that our employees can take advantage of when they

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   **Ethics Management**   Sustainable Procurement   CSV Activities

do business. It contains legal knowledge of each area, answers to FAQs and the internal process. In 2019, we distributed the manual giving guidelines to main compliance issues including trade secret and subcontract.

Compliance System   KOLON Industries has monitored our employees for their compliance on a yearly basis while receiving legal advice and providing education for employees so that the culture of compliance permeates every corner of the company. In 2019, we have established a fair practice in subcontract transaction between large companies and SMEs and laid the foundation for win-win cooperation through the revision to four practices to follow proposed by Fair Trade Commission. And we have amended our standard contracts (subcontract area, agent area, and confidential agreement) on the basis of relevant laws and revised standard contracts recommended by Fair Trade Commission so as to solidify our compliance system.

Compliance Education

KOLON Industries has bimonthly issued compliance letter for all employees to share ways of practicing compliance policy. Compliance letter gives a better understanding on compliance, containing the recent trends of home and overseas laws and systems along with examples. Contributing to the prevention of risks regarding compliance in advance, the letter issued in 2019 detailed follows: major issues regarding trade secrets under the subcontract law and ways of responding, note for English contract, the company's responsibility for the quality, and defect of products and key contents of Incoterms (international rules for trade terms interpretation.) In addition, we have provided education on anti-competitive activities taking advantage of the guidelines on contact with competitors, FAQ for unfair collusive acts.

Governance

Composition of Shareholders (Unit : No. of shares, %)

Shareholder	No. of Shares	Percentage of Shareholding
KOLON, INC.	8,642,707	32.04
National Pension Service	3,694,680	13.69
KB Asset Management	1,989,608	7.37
Ung-yeol Lee	326,177	1.21

※ This is based on the data as of December 31, 2019 with only common stocks (stock that gives shareholders voting rights) included in the number of shares and percentage of shareholding

Principles of Corporate Governance and Protection of Shareholder Value

KOLON Industries has formulated and implemented a policy for governance, which underpins our management under the principles of transparency, stability, integrity and the protection of shareholder value. Regular general meeting of shareholders is held within three months after the end of each business year while temporary meeting is convened if necessary. To help shareholders making informed decisions in terms of expressing their vote, KOLON Industries gives shareholders a notice about the date and agendas of the shareholders' meeting at least one month before by announcing the resolution of the meeting, and gives the details for each agenda through the announcement of the convocation of the meeting. As part of efforts to grant shareholders the right to vote in a fair manner so that they can express their vote as well as to provide them with corporate information at an opportune time, we have implemented various policies and constantly examined other options to improve the process. We have avoided the busy period when the general meetings of shareholders are held frequently since 2019 when the 9th general meeting of shareholders was held while having implemented Proxy Solicitation to secure the quorum for resolution and make it easy for shareholders to express their vote. By doing so, we have created a better environment for shareholders in expressing their vote and boosted their participation in the meeting. To provide information for all of our shareholders in a timely manner we published our IR materials on our website in Korean and English. In addition, we conduct visiting IRs or conference calls about the topics discussed at general meetings of shareholders, business performance or huge investments to give our home and abroad shareholders a better understanding.

Dividend Policy

KOLON Industries has a basic principle of actively returning profits generated through the growth to our shareholders. Dividend can be paid out in two forms; cash dividend and bonus shares in accordance with our Article of Association. We take a number of factors into consideration, such as the growth of the company, cash flow, the dividend trend of KOSPI and the uncertainty of external environment, then define the level of dividend at a level that maximizes the interest of shareholders as much as possible.

Composition of Board of Directors

Directors of the Board of Directors are appointed through the general meeting of shareholders. As of March 2020, the Board of Directors consists of seven registered directors and four out of them are outside directors in accordance with the clause 30 of the Article of Association specifying that outside directors should constitute the majority of the directors, which allows the board to hold company management in check. In addition, our outside directors come from various backgrounds, which enables the professional review and supervision of the management. As part of efforts to make our board properly function with its authority, we appoint experts in diverse areas as the directors. As for outside directors, they are experts in various fields including accounting/finance, technology, law and administration, which leads our board to do its job on the basis of expertise. Expertise, the sense of responsibility and compliance come first when we select directors. We don't have specific requirements for race, nationality, religion, gender and where they come from.

Composition of the Board of Directors (As of March, 2020)

Category	Name	Position	Date of Appoint-ment	Term of Office Expiry Date	Area of Expertise	Main Career
Inside Director	Hee-Goo Jang	· Chief Executive Officer, President · Chairman of the Board of Directors · Chairman of the Outside Director Candidate Nomination Committee · Chairman of the Management Committee	Mar. 28. 2018	Mar. 28. 2021	Corporate management	· Chief Executive Officer of KOLON PLASTICS, INC. · Chief Executive Officer of KOLON BASF innoPOM, INC.
	Gwang-Bok Yoon	· Member of the Management Committee	Mar. 25. 2020	Mar. 25. 2023	Accounting, financing	· Head of Management of KOLON, INC · Incumbent Head of Management Support Department of Manufacturing Organization of KOLON INDUSTRIES, INC.
	Min-Tae Kim	· Member of the Management Committee	Mar. 26. 2019	Mar. 26. 2022	Accounting, financing	· Head of Ethics Management Department of KOLON INC. · Head of Management Strategy of KOLON ECOONE · Incumbent Head of Management Support Department of Fashion Organization of KOLON INDUSTRIES, INC.
Outside Director	Je-Won Lee	· Member of the Audit Committee	Mar. 26. 2019	Mar. 26. 2021	Administra-tion	· Head of Urban Regeneration Office of Seoul Metropolitan Government · Vice Mayor II for Administrative Affairs of Seoul Metropolitan Government · Current visiting urban engineering professor at the University of Seoul
	Yong-Taek Hong	· Member of the Audit Committee	Mar. 25. 2020	Mar. 25. 2022	Materials, technology	· Senior researcher of Eastman Kodak · Current electronic information engineering professor at the Seoul National University
	Gi-Yong Bae	· Chairman of the Audit Committee · Member of the Outside Director Candidate Nomination Committee	Mar. 25. 2020	Mar. 25. 2023	Accounting, financing	· Partner of Deloitte Korea · Deputy Leader of Deloitte Korea
	Tae-Hee Kim	· Member of the Outside Director Candidate Nomination Committee	Mar. 25. 2016	Mar. 26. 2022	Law	· Prosecutor of the Seoul High Prosecutors' Office · Outside Director of Daelim Industrial Co., Ltd · Current representative lawyer of Samji Law Firm

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   **Ethics**   Sustainable   CSV
Management   Human Rights   and Health   **Management**   Procurement   Activities
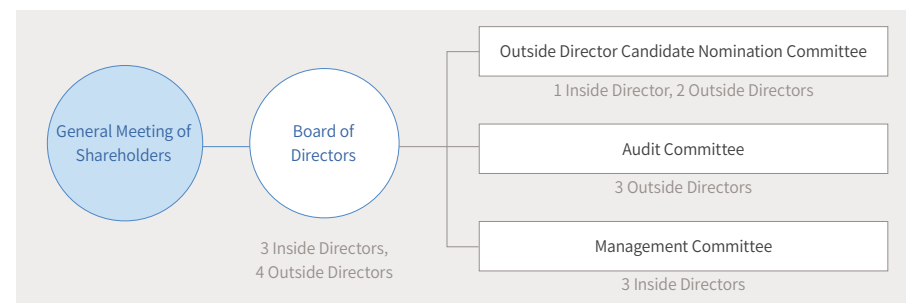
Operation of Board of Directors

KOLON Industries has established the Article of Association and Board of Directors Regulations to efficiently operate the board as well as to make authority and responsibility of it clear. In accordance with the clause 6 ② of the Board of Directors Regulations, we hold the regular board meeting once a quarter on a regular basis and temporary board meetings when there is a need for some reason. Board meetings are convened by directors according to the Clause 33 of the Article of Association, and a notice is given about the date, place and topics of the meeting at least one day before the date of conVOCsation. When directors cannot participate in the meeting, they are allowed to attend the meeting and take part in the resolution by means of communication that allows them to deliver and receive voices in accordance with the clause 38 ② of the Article of Association. Meanwhile, when directors have a special interest in a specific agenda, they could be restricted in terms of exercising their voting rights to prevent interest conflicts through the system with the clause 38 ③.

Operating Status of the Board of Directors

Category		Unit	2017	2018	2019
Board of Directors Convened		Case	17	13	13
No. of Agendas Deliberated			22	18	22
Rate of Attendance at Board Meetings	Outside Directors	%	91	92	89
	Inside Directors		72	62	97

General Meeting of Shareholders → Board of Directors
3 Inside Directors, 4 Outside Directors

Outside Director Candidate Nomination Committee — 1 Inside Director, 2 Outside Directors

Audit Committee — 3 Outside Directors

Management Committee — 3 Inside Directors

Outside Director Candidate Nomination Committee   Outside Director Candidate Nomination Committee takes charge of reviewing candidates for outside directors and selecting the final candidates who are nominated for the general shareholders' meeting. The committee comprises three directors, and two out of them are outside directors. The purpose of it is to make the selection process fair. The members of the committee are appointed through the resolution of the board of directors. In accordance with laws and our own regulations, we do not have specific requirements for the members except for one condition that outside directors should constitute two out of three members.
On February 19, 2019, we convened a committee to newly appoint outside directors for expected openings, and nominated candidates Je-Won Lee and Tae-Hee Kim. These nominated candidates received high approval ratings at the general meeting and the nomination passed.

Management Committee   Management Committee is responsible for deliberating and making decisions on issues that are delegated by the board but not mandatory ones the board should resolve. The committee is comprised of three inside directors to make instant and efficient decisions. In accordance with the article 3 of the Committee's Regulation, the appointment and retirement of the members and operational details of the committee are resolved by the board. The members of the committee are appointed among the directors through the deliberation at the meeting of board and

there is no specific qualification for the members.
In 2019, we resolved a total of 54 agendas. We notify the resolutions to all outside directors on the same day, and also report again at the regular board meeting. We have had no experience of receiving any requests for correction or re-decision for the agendas we resolved during the period of public announcement, which proves that the committee is operated both legally and efficiently.

Audit Committee   Audit Committee supervises directors and the management for the performance of their duties regarding accounting, such as conducting audits on accounting and major business activities or assessing the operational status of internal accounting control system. The committee consists of three outside directors including two accounting experts, and the members are selected as candidates among outside directors including at least one accounting expert at the board meeting, and then appointed by the resolution at the general shareholders' meeting. The qualifications required for the members are the same as those required for outside directors.
A total of five meetings were held in 2019 and agendas resolved were reported. During the period of public announcement, there was no request for correction or re-inspection from the committee. The approbation of financial statements submitted as an agenda after the review of the committee to the general shareholders' meeting was also passed with the majority of our shareholders approving of the case, which proves that the committee is operated efficiently.

Information Security

Policy and System for Information Security

KOLON Industries has responded to external regulations in relation to domestic and overseas information protection. Our protection measures meet the mandatory security requirements for national core technology designated by the Act on Prevention of Divulgence And Protection of Industrial Technology. We have also made a liability insurance contract in order to fulfill our liability for damages arising from personal information leakage following the domestic law, the Personal Information Protection Act.
We have established a security management system so that we can identify information flows in the process of conducting business while discovering and managing points where information security risks may occur. Through security monitoring and inspection, we discover risks in advance and proactively prevent them. An organization responsible for security has conducted security activities such as responding to internal information leakage and intrusion incidents to protect our trade secrets. The group's regular information security council plays a role in medium- to long-term risk management and security activities. We plan to revise and specify the security regulations and guidelines in 2021 for the purpose of reinforcing the management system.

Reinforcement of Security System

Introduction of E-DLP
security solution for information leakage protection

Operation of Security System   To protect information leakage from inside and counteract external hacking attacks, we have operated various security solutions. We have also responded to security accidents by developing our risk detecting, managing, and analyzing system integrating security logs collected from each security solution. In addition, we have put in place a network access control solution blocking unauthorized devices from accessing our network as well as a DB access control solution controlling access of users with no authority.
Furthermore, E-DLP, a new security solution, was introduced to reduce the threat of information leakage that may occur in new working environments such as working from home due to COVID-19, and a new VPN for accessing work from outside was newly introduced and expanded. For managing risks of internal information leakage through storage devices such as PC, we have strengthened security by improving the company asset transfer system.

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management Labor and Human Rights Safety and Health **Ethics Management** Sustainable Procurement CSV Activities

Infringement accident response organization chart ● Serious ● Alert ● Caution ● Attention ↑ Report
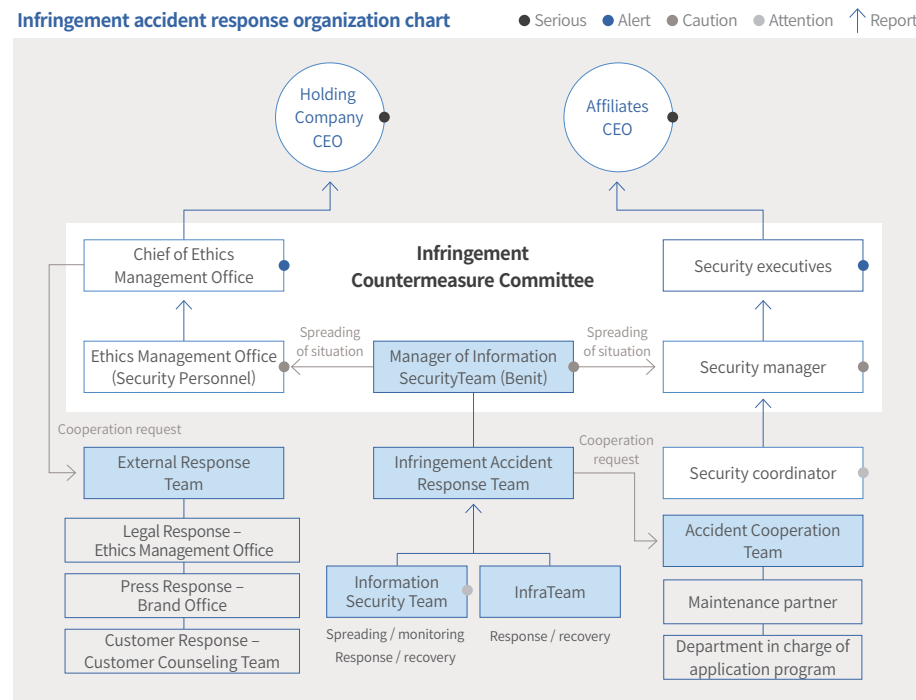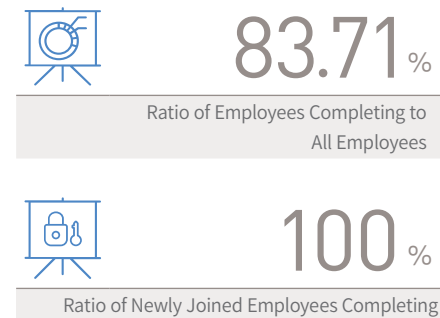

Consent to Collect and Use Personal Data KOLON Industries has applied security management regulations to all tasks that handle personal information such as recruitment, website usage, access to head office, and asked for consent to collect and use personal information through related systems including 'Personal Information Collection and Usage Agreement'. It provides information on personal information items to be collected, purpose, retention period, and the details of provision to the third party in addition to the right to refuse consent. We request confidentiality pledges according to the characteristics of business and stakeholders, and receive inquiries related to personal information protection arising from using products or services by specifying the person in charge of personal information protection.

Personal Information Protective Measures As more and more people are using mobile phone, internet, and e-mail, privacy protection is getting more underscored. Personal information can be abused for seeking illegal interests by third parties and be also recognized as a matter of ethics and human rights related to privacy. Acknowledging this, we have paid particular attention to the management of personal information.

Especially, FnC organization communicates directly with customers through offline stores and online malls, so security regarding suppliers and customer information are getting extra focus in our management. On top of enhancing our personal information protection system by fulfilling all the requirements of the Information and Communication Network Act and the Personal Information Protection Act, we are systematically managing related policies such as personal information protection guidelines, handling guidelines, internal management plans, and designation of personal information handlers. Besides, we have checked personal information, related handlers, a processing system, and quarterly advertising information, and continue to redress any deficiencies identified.

Signing a non-disclosure and information protection agreement is mandatory for suppliers consigned to handle personal information such as call centers, product forwarding, delivery companies, and resident companies. We support their personal information protection by providing guidance tailored

Completion of Information Security Education

83.71%

Ratio of Employees Completing to All Employees

100%

Ratio of Newly Joined Employees Completing

to their results of self-check and sharing the status of personal information protection training within suppliers. For those major suppliers which are considered to have high risks in terms of personal information, we have conducted on-site inspections and direct due diligence.

Internalization of Information Security

KOLON Industries has internalized integral security rules and issues in various ways through security education and promotion to let our employees are equipped with raised awareness of security. Online and offline information security education has been provided for all employees in Korea at least once a year to improve awareness among our employees about security. We have expanded the coverage of security education to overseas business sites in China and Vietnam. Mock training to handle malicious emails has been conducted four times a year to prevent external breach accidents. We continuously improve the security awareness of anyone showing poor training results by giving additional education and having them submit written materials.

By making employees of suppliers well cognizant of essential security compliance matters, we have strived to create a culture in which all personnel working at KOLON Industries conduct business on the basis of the correct awareness of security. For newly hired employees, it is compulsory to sign the information protection agreement regardless of experience, so that they have a higher awareness of information security. For retiring employees, we inform them of mandatory regulations prohibiting them from working in competing companies for the prevention of the leakage of confidential information they handled while working in business. We have conducted a computerized audit of retirees to manage the risk of trade secret leakage efficiently. Personal information consignment management training and personal information protection training have also been conducted once a year to ensure customer personal information stability, compliance with legal obligations and prevention of infringement accidents.

Familiarization with Document Security We have operated a DRM and document management system to manage grades and set retention periods for document when creating, processing, and storing document. The documents exceeding the set period are informed to be discarded. In addition, we have operated an external mail approval system to detect the leakage of document through e-mail and block them to prevent any leakage.

Simulation Training for Malicious E-mail

The training is implemented four times a year to check the security level of employees, raise security awareness, and awaken them by sending a fraudulent email that is actually rampant in reality following the scenario.

Training Scenario	Grade	Follow-up Action
Sending malicious e-mails for mock-training ▼ Inducing receivers to open attached files or access harmful websites ▼ Inducing them to input ID and password	**Satisfactory**: Received an e-mail but did not have access to harmful sites or open attached files	-
	Poor: Accessed harmful sites or opened attached files	· Notice of warnings and security rules
	Dangerous: Violated twice poor security activities (during annual simulation training)	· Notice of warnings and security rules · Carrying out online tests regarding e-mail security rules
	Highly Dangerous: Input ID/password or violated three times poor security activities (during annual simulation training)	· Sending a warning letter from the ethics management head of holding company · Requesting a pledge for recurrence prevention · Implementing offline tests regarding e-mail security rules

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   Ethics   **Sustainable**   CSV
Management   Human Rights   and Health   Management   **Procurement**   Activities

05

Sustainable Procurement

The scope of sustainable management is now being expanded from the corporation itself to the whole supply chain. The issues of suppliers which threaten sustainability, such as child labor, bring about the crisis of sustainability. Strict supply chain management is a necessity. In this context, global corporations strive to ameliorate their supply chains to accomplish sustainability throughout the whole stage from the selection of suppliers, production to sales. More and more corporations check risk factors regarding sustainable management before they enter into contracts when they select suppliers, and also request them to submit their compliance with sustainable management, such as labor or human rights. In addition, suppliers are also induced into managing their own risks by adding a condition that contract could be canceled when issues related to human rights abuse, environmental impact or labor occur. By doing this, corporations can be more competitive and elevate their sustainability.

2019 Our Performance

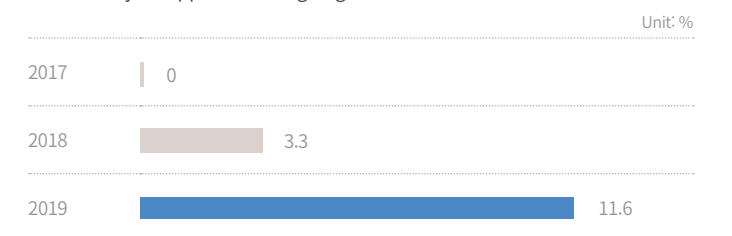|	
Satisfactory	KRW **5** billion
Mutual Growth Evaluation Grade	Win-Win Fund KOLON Industries' deposit amount aside from KRW 5 billion bank balance
58%	**100**%
Ratio of Main Suppliers Pledging to Comply with Code of Conduct	Ratio of Procurement Employees Received Training on Sustainable Procurement

Our Approach

KOLON Industries has endeavored from various angles to prevent any possible risk factors that could occur within our supply chain. As part of efforts to expand our sustainable management to the entire supply chain, we have implemented various activities, including formulating the Code of Conduct for suppliers and requesting a written pledge for compliance with the Code of Conduct for new suppliers, since we started conducting CSR assessment for main suppliers in 2018. Furthermore, we have supported our suppliers in establishing their systems and education programs for sustainable management so that they can improve their competency as well as raise their awareness. KOLON Industries will take our sustainable management to an advanced level for the supply chain by more communicating with our suppliers, fulfilling and disseminating the responsibilities for sustainable management.

Performance Measurement

Ratio of Major Suppliers Undergoing CSR Assessment

Unit: %

2017	0
2018	3.3
2019	11.6

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management Labor and Human Rights Safety and Health Ethics Management **Sustainable Procurement** CSV Activities

Sustainable Supply Chain Management System

Sustainable Procurement and Supply Chain Policy

Policy for Procurement and Transaction	· Four practices for fair trade (making desired contracts/ selecting suppliers in a fair manner/installing and operating an internal deliberation committee/issuing and preserving written forms) · Standard contract and standard agreement for fair trade
Policy for Supplier Management	· Code of Conduct for Suppliers · Checklist for Selection and Evaluation for New Suppliers · Pledge of Fulfillment for Integrity Contract

No. of suppliers pledging for compliance with Code of Conduct

40 suppliers (58%)

Management Rules

KOLON Industries has drawn up policies for sustainable procurement and supply chain management in terms of two aspects, which are procurement and management of suppliers. We have launched Mutual Growth Secretariat and Mutual Growth TFT to promote fairness in terms of purchases or transactions with suppliers while having enacted four practices for fair trade as our company rules for our employees to follow when they make a purchase or deal. Besides, we sign fair trade standard agreements with the first-tier suppliers on a yearly basis, encouraging the permeation of a fair trade culture.

Meanwhile, KOLON Industries has anticipated risk factors related to quality, the environment, human rights as well as financial elements from the stage of supplier selection and contract in order to comprehensively manage the sustainability of whole supply chain. We evaluate suppliers in accordance with our checklist for the selection of suppliers including items regarding human rights, work environment and corruption regulations. Only suppliers who meet the standards are allowed to enter into contracts with us. And all of the first- and second-tier suppliers should abide by the Code of Conduct for Suppliers if they are selected. The Code of Conduct for Suppliers consists of five categories, including labor and human rights, safety and health, environmental protection and ethics management, and 33 items embracing the ban on forced and child labor, anti-discrimination, compliance with environmental laws, and integrity and prohibition on illicit gains. Furthermore, we include the Code of Conduct Pledge and Pledge of Fulfillment for Integrity Contract in the contract from 2020, and make it clear that any violations could lead to disciplinary measures including requesting for correction, the cancelation of contract or permanent disqualification.

Implementation Process for Integrity Contract   In proactive response to risks of the supply chain, KOLON Industries has established a process to request integrity contract pledge from clients and suppliers when we sign new contracts with them. We formulated a form of integrity contract pledge for clients and suppliers in 2019, and have asked them to sign the pledge to make sure that they will follow regulations on the ban on collusion, the prohibition of illegal gain provision, and the management of human rights risks from 2020. The pledge also makes it clear that any violation could bring disadvantages to them such as the cancellation of contract or the disqualification from bidding. KOLON Industries continues to include more existing and new suppliers to receive the pledge down the road.

CSR Assessment for Suppliers

KOLON Industries has added CSR category in the audit on suppliers which is conducted according to the annual audit plan. CSR assessment covers four areas including human rights and labor, safety and health and the environment, fair operation, and product stewardship and customers, consisting 22 indicators. CSR on-site inspection is also conducted if necessary. Suppliers are evaluated on a scale from A to E and the results are reflected in terms of deciding audit frequency and assessing contracts or bids. For those who receive a grade lower than Grade D (Grade C for new suppliers), we recommend them to correct, and for those who receive Grade E or poorly correct the areas of improvement, we terminate transactions under term or suspend signing new contracts with them.

Communication Channels for Suppliers

KOLON Industries declared 'Win-Win Partnership' with our suppliers in 2019, and has strived to listen to suppliers while handling their grievances. As part of efforts, we have operated an organization called 'Boram Association' dedicated to supplier grievance handling since 2002 while having in place a channel for grievance counseling through the online purchase portal system. Suppliers also can report any violations, such as misconduct or illegal actions conducted by the employees of KOLON Industries,

Suggestion and Greivance Counselling for Suppliers

Suggestion and Areas of Counseling	· Programs for Win-win Growth · Win-Win Fund · Joint research and development · Payment terms and conditions · Other grievances and suggestions for enhancement

2019 CSR Capability Enhancement Support

81 companies 501 people participated

National Human Resource Development Consortium

KRW 5 billion

Win-Win Fund (KOLON Industries' deposit)

through the website. And we have established a direct reporting system between the head of the Dispute Mediation Committee and CEO to resolve any disputes with suppliers in a swift manner. In addition, the Mutual Growth Promotional Committee conducts a survey for mutual growth index on a yearly basis to figure out how our suppliers feel about the business relationship with KOLON Industries and our system for win-win growth, and we received a satisfactory level in 2019.

Management of Conflict Minerals

KOLON Industries does not use minerals including cobalt, tin and copper coming from dispute areas which could lead to severe human rights infringement or environmental contamination. KOLON Industries makes sure to procure minerals mined only in accordance with global standards such as ones of the U.S., EU or OECD. We have also screened the information on suppliers registered on our purchase portal system to ensure that the purchase of conflict minerals is blocked, and stipulated the ban on the use of conflict minerals in the Code of Conduct for Suppliers.

**<KOLON Industries' Code of Conduct for Suppliers>**
...

5) Legal Materials Management

Suppliers are not allowed to use raw materials including conflict minerals obtained through illegal or unethical methods that bring about severe human rights abuse or environmental pollution. It is a duty for suppliers to manage the use of materials throughout their whole supply chain including the origin of materials and their accounts. And suppliers must submit guarantees and data on the origin and their suppliers of raw materials upon KOLON Industries' request.

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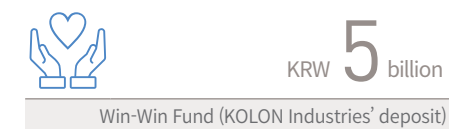
Technology and Training Support

KOLON Industries has lent support of technology and education so that suppliers can refine their competencies in four CSR areas (human rights & labor, safety & health & environment, fair operation, and product responsibility & customers). Since 2018, we have been selected as a joint training center for the Consortium for HRD Ability Magnified Program, providing a workforce management system including job competency development education and human resource development for workers of suppliers. In particular, we support them in the improvement of job competency by offering practical contents required across the entire business areas such as technology, quality, production, safety, and business management in the chemicals and industrial materials fields, which are our main businesses for the annual curriculum. Furthermore, we have signed joint technology development agreements with suppliers when pursuing commercial technology development projects, and supported project costs, research equipment, and research facilities. We also created a win-win fund worth KRW 5 billion to assist financing and stable management of suppliers.

Internal Education on Sustainable Procurement   For the sustainability of our supply chain, we have not only established and implemented regulations for suppliers, but also conducted CSR assessments, managed communication channels, and provided technical and training supports while consistently making internal employees undergo training to improve capabilities. On top of that, we have educated employees through sending newsletters by issue with an effort to eradicate inappropriate practice of receiving graft or money from stakeholders within the supply chain. The compliance newsletters are sent regularly in order to share domestic regulation amendments, which is important for work, the trend of laws and regulations in and outside Korea, and global supply chain issues.

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   Ethics   Sustainable   CSV
Management   Human Rights   and Health   Management   Procurement   Activities

06

Creating Shared Value Activities

In the face of growing expectations for corporate accountability, corporations have expanded the scope of their responsibility into the creation of shared value with diverse stakeholders just beyond social contribution at the level of charitable work. Accordingly, global corporations are now seeing the creation of social value as a new future growth engine, thereby finding new strategies to fulfill their social accountability. Likewise, social responsibility has established itself as one pillar for corporate management, which requires corporations to communicate with a wide range of stakeholders including local communities and civil society. This trend has induced corporation to work together with stakeholders to identify social issues and consider them from the perspective of business to resolve. By doing so, corporations can elevate their brand value as well as realize authentic cooperation by experiencing the mutual growth with local and civic communities.

2019 Our Performance

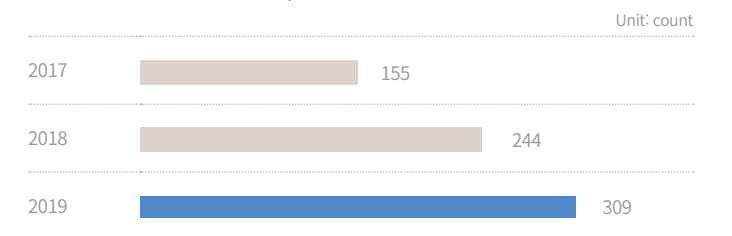|	
4.53 hours per employee	**2** million MB filters for mask
Volunteering Hours	Donation of Mask MB Filters
KRW **250** billion	KRW **1,235** million
Donating Clothes to the Fire Victims in Gangwon	Social Contribution Cost

Our Approach

KOLON Industries has carried out activities for social contribution enabling Created Shared Value (CSV) just beyond lending simple support to local communities. In particular, FnC Organization provides solutions to various social issues related to the environment, the arts, women and the vulnerable through our products. We have practiced environmental protection and spread the movement to our customers as well through the entire business value chain with our brands, such as our upcycling brand, RECODE and Noah Project aiming to protect endangered fauna and flora. Furthermore, we support artists, women and the vulnerable in collaboration with our brands. We also displayed our ability to help people stabilize their lives during the pandemic. Likewise, we continue to play a leading role in sustainable management by creating social value throughout the entire business down the road.

Performance Measurement

KOLON Social Volunteer Group Activities

Unit: count

2017	155
2018	244
2019	309

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management Labor and Human Rights Safety and Health Ethics Management Sustainable Procurement **CSV Activities**

COO MESSAGE

FnC creates a New Normal for sustainable fashion.

'Sustainability' is an issue that the fashion industry cannot ignore as we have to keep up with the 'spirit of the times' faster than any other field due to the nature of the business. More and more customers put ethical value before economic gains in terms of their standards of living, while demanding businesses to bring more benefits to the world. Against this backdrop, the fashion industry, which inevitably brings about social and environmental problems from the course of design, production, and distribution, can no longer ignore these issues.

As a representative fashion company in Korea, KOLON Industries' FnC Organization has continuously lived up to this demand. On top of social contribution activities to help the nation overcome its grave crisis, around 30 brands have conducted a variety of projects reflecting sustainability value including environment-friendly, shared growth with region, and women, and one of them is 'Noah Project' led by KOLON Sports. In particular, RECODE, an upcycling brand launched for the first time in the industry, is now globally recognized as Korea's leading sustainable brand. Besides, for the first time as a fashion company, we established a sustainable brand platform called 'weDO' in KOLON Mall in 2020.

As we will never be complacent about the achievements through the challenges we have taken so far, FnC Organization would like to take one step further to take our sustainable management to new heights. In order to achieve it, we will first secure transparency in overall value chain of the fashion industry.

We will also strive to become a business that can confidently answer three questions; how do you make it? how much do you make it?, and where do you make it? In addition, we will do our best for the key basic principles of sustainability management, including compliance, human rights, environment, ethics, and fair trade, to permeate every corner of our management. Going forward, the sustainable fashion that FnC Organization suggests will become a 'New Normal' of the era. We wish you to join us on our journey while sharing these values with great interest and support. Thank you very much.

COO of KOLON INDUSTRIES, INC. FnC Org.
KYU-HO LEE

Environment

Upcycling (RECODE)

RECODE is a leading upcycling fashion brand in Korea launched by FnC Organization in 2012, recreating clothes by transforming deadstock fabrics with creative ideas. Clothing stocks that have been three years after launching are generally incinerated, but RECODE uses these stock fabrics, takes them apart and puts together again to produce new fashion items. Designers and skilled tailors manually work on them in the entire process at the brand atelier. Since all clothes are manually produced and the number of clothes in stock is limited, only around 5 pieces of each design are produced with a concept of limited edition.

RECODE has expanded the scope of materials into a variety of collections; Inventory Collection using clothes in stock for more than three years, Industrial Collection using industrial wastes such as airbags and car seats, and Military Collection employing old military equipment.

In recognition of such efforts for craftsmanship, experimentation, and aesthetics, RECODE was recently invited to a number of events at home and abroad including Frieze Art Fair and Capsule Show. As 'sustainable' fashion continues to be in the limelight, RECODE has become a best practice in its ethical consumption and CSR activities as a leading brand in the field. FnC Organization will keep disseminating sustainable culture with diverse projects through collaborations.

▶ 1. RECODE Making Procedure 2. RECODE Atelier 3. RECODE Participating in Seoul Design Festival

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   Ethics Management   Sustainable Procurement   **CSV Activities**

KOLON Sports' Animal/Plant Welfare and Noah Project

KOLON Sports has been continuously conducting 'Noah Project' since 2016 as part of endeavors to safeguard and protect endangered animals and plants in Korea.

The first campaign we launched was 'Save Our Bees' under the banner of honeybee protection in S/S season 2016. Capsule Collection with a honeybee motif was produced and some proceeds from the collection were partially donated to successfully breed 3 million native honeybees. For F/W season in the same year, 'Keep Eagle Play' campaign was proceeded to inform that an eagle is a first-grade endangered animal, raising the voice for eagle protection. 10% of the collection's sales profit went to the protection of eagles. The third Noah Project in S/S season 2017 was 'Flower Power' campaign aiming to protect Halla Edelweiss which blooms around the cliff on the top of Halla Mountain in Jeju Island. As part of the campaign, a music video was made participated by an actress Bae Doona and a rapper Dean and 10% of sales revenue from the Capsule Collection inspired by Halla Edelweiss was donated to the Gotjawal Trust of Jeju. The fourth project in S/S season 2018 was called 'Sea Horse Sea Love' campaign with a view to protecting seahorses which are sorted as the second-grade globally endangered species and they were witnessed around Ulleungdo Island. Musician Hayes participated in a music video of the project, and it became a major topic. Fund raised through the campaign was delivered to the Korea Marine Environment

3 million
No. of native honeybees bred

10 % of profits
Contribution to eagle protection activities

10 % of profits
Donation of proceeds from Halla Edelweiss Capsule Collection to the Gotjawal Trust of Jeju

10 % of profits
Contribution to protective activities for marine ecosystem around Ulleungdo Island and sea horses

1,000
Pine tree plantation completed with donation of some of proceeds from Noah Project (first half of 2020)

▶ 'Evergreen, Pinegreen', photo shoot campaign recycling abandoned items

Management Corporation for the protection of Ulleungdo's marine ecosystem and seahorses.

For the fifth project, we conducted 'Noah Butterfly' campaign in S/S 2019 to preserve the number of butterflies on the decrease due to global warming. A song and music video were released in collaboration with musician Zion.T, and its objective was to raise awareness about environmental protection of the generation in the 10s and 30s who are particularly familiar with online media. Proceeds from the campaign were delivered to the Institute of Ecology aiming at funding the research on the conservation of endangered butterflies. 'Evergreen, Pinegreen' campaign as the sixth project was conducted in S/S 2020 with the purpose of protecting pine trees, which are also a symbol of KOLON Sports. Profits from it partially went to the plantation for

the restoration of forest in Gangwon province damaged from fire.

Since 2020, we have expanded the number of Noah Project campaign from once to twice a year, and eco-friendly materials and techniques have been applied to the entire collection. On top of that, all down jacket products have been filled with goose down certified with RDS (Responsible Down Standard)[1]. The overhaul of Noah Project will be the platform for KOLON Sports to apply eco-friendly materials or techniques to 50% of all products by 2023, the year that marks the 50th anniversary of brand launch, and to keep reducing plastics in stores.

1) RDS is the certification given to 'ethical down' which considers animal welfare throughout the entire process from down production to distribution.

▶ 'Evergreen, Pinegreen', photo shoot campaign recycling abandoned items

▶ Zion.T music video as part of 'Noah Butterfly' campaign ▶

epigram's Endangered Marine Life T-shirt

Lifestyle brand 'epigram' launched a t-shirt with a graphic of endangered marine life printed on it as part of its environmental campaign. Marking the Sea Day on May 31st, epigram made t-shirts with artwork inspired by three endangered marine life; green sea turtle, euplexaura crassa, and red-foot crab, in order to raise awareness of marine life in danger owing to ocean waste and climate change. Since 2020, we contribute to reducing reckless use of resources by utilizing polyester yarn, an eco-friendly material extracted from discarded PET bottles. Besides, epigram encourages environmental protection in daily lives, suggesting various lifestyle products such as handkerchiefs, tumblers, and bamboo toothbrushes made of environmentally friendly materials. Going forward, epigram will gradually expand sustainable fashion.

Our oceans, Our future.
epigram

PET
epigram
Plastic Chip
Recycle Fiber

▶ T-shirt of epigram with 'Our oceans, Our future' slogan printed for endangered marine life protection

LIFESTYLE INNOVATOR | Sustainability Management

Environmental   Labor and   Safety   Ethics   Sustainable   **CSV**
Management   Human Rights   and Health   Management   Procurement   **Activities**

▶ COURONNE's Soft C-Quatre Bag

COURONNE's Eco-friendly Soft C-Quatre Bag

COURONNE, a female handbag brand, rolled out 'Soft C-Quatre Bag' taking advantage of eco-friendly materials. This eco-bag is 100% made of yarn extracted from plastic PET bottles, so it is great for users trying 'good consumption' in line with ethical consumption trend. Starting from this season, we will also take part in the 'good deeds' by using eco-friendly materials in our products including non-leather line. By doing so, we will continuously endeavor to take the lead on the journey toward sustainability.

Archivépke's Recyclable Package

Archivépke makes stylish and comfortable shoes made of flexible soft leather. Since the launch in 2019, Archivépke has been using recyclable eco-bags and shoe boxes instead of paper bags as a package when selling products. In addition, a shoe box is designed to be utilized as a drawer. The fundamental motto of the brand's package design is 'reusable' so that its package is able to be utilized in various ways rather than just being thrown away.

100% Eco-friendly Materials and Techniques Applied to Entire KOLON Sports Noah Project Collection

KOLON Sports has applied eco-friendly materials and skills to all products of Noah Project collection. By making use of recycled yarns extracted from waste PET bottles and waste nets along with organic cotton, we are practicing environmental protection by reducing the amount of waste to be landfilled, thereby curbing carbon dioxide emissions generated during yarn production by about 30%. We also introduced an eco-friendly denim product that saves up to 99% of water consumption by capitalizing on 'ozone washing' technique, which is a washing method that uses oxygen and electricity instead of water to create color without chemicals. Furthermore, we made product packages with eco-friendly materials.

Product tags are made of recycled paper and shopping bags are 100% biodegradable resin so that they can be disposed of together with landfill-type general garbage. Starting from S/S season 2019, KOLON Sports will introduce Noah Project as a culture that communicates the meaning and responsibility of the brand's sustainability. As part of this, we will spare no effort to produce environmentally meaningful items from yarns, production, design, graphic to packaging.

KOLON Sports Launching Recycled Products in collaboration with 'Mother Ground'

In coalition with 'Mother Ground,' the sneakers brand with a design inspired by nature, KOLON Sports launched a sneaker model and a lightweight shoulder bag with a theme of JAE (再). The sneakers were made of recycled materials for each part. The upper part of the sneakers applied recycled leather and nylon provided by KOLON Sports while PET recycled material was used in shoelace and webbing part at the back of ankle. Recycled leather is produced in a manner that minimizes chemical processing after grinding used or remaining leather into a fiber form. The production throughout the entire process is eco-friendly; for example, the processed water is reused. Thus, we acquired international GRS (Global Recycle Standard) certification. Recycled nylon is produced by reprocessing leftover thread or sewing waste. KOLON Sports will continue to follow the spirit of our brand slogan, 'The Best Way to Nature.'

▶ 1. Archivépke's recyclable dust bag for shoes
   2. Archivépke's recyclable dust bag for bags
   3. Archivépke's recyclable shoe box
   4. Recycled products in collaboration with Mother Ground

LIFESTYLE INNOVATOR | Sustainability Management

Environmental
Management

Labor and
Human Rights

Safety
and Health

Ethics
Management

Sustainable
Procurement

**CSV
Activities**
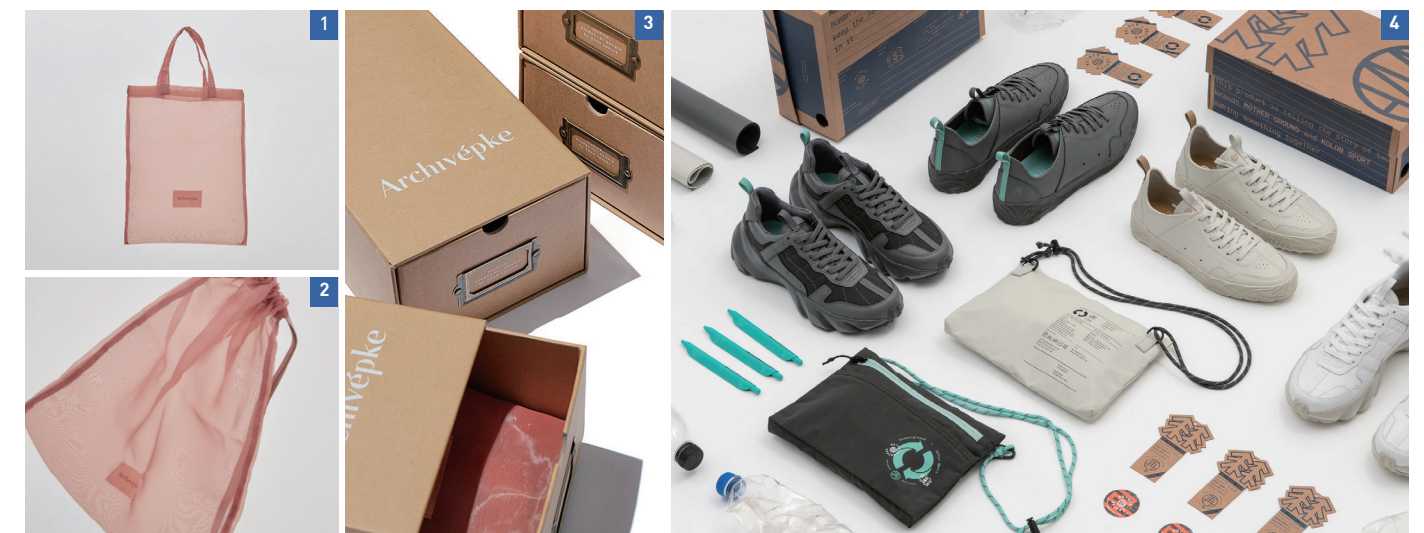
▶ Biodegradable hangers within about 180 days after burying will be firstly used in Gwanggyo Galleria store, will be further expanded into other shops.

Changes toward Eco-friendly Stores

KOLON Sports is bringing eco-friendly changes to stores on top of our products, starting with Gwanggyo Galleria store opened in March 2020. Through minimizing the use of plastics and applying environmentally friendly finishing materials and natural materials, we would like to deliver the value we pursue. For instance, we produce hangers with corn starch extract and reuse mannequins colored with eco-friendly paints. Display equipment such as shelves is also designed to be reused after dismantling and assembling them again using wrench and bolts. The transformation into eco-friendly stores will gradually expand to other stores.

Eight of Brands' Upcycling Sweatshirt Launched[1]

A total of 8 brands including KOLON Sports, RECODE, SERIES, CAMBRIDGE MEMBERS, CUSTOMELLOW, HENRY COTTON's, epigram, and S'LOW jointly launched eco-friendly upcycling sweatshirt under the theme of a valuable thing for the environment called 'Our 24 Hours'. The product used recycled yarn extracted from stick or PET, and each brand presented different designs using three materials representing recyclable material including paper, plastic, and aluminum cans. In addition, a video with a theme of 'perfect recycling' was made to explain the way to dispose of recyclable waste, delivering messages about the environment to customers.

1) Ratio of production quantity to sales was 50%. (1,570 pieces produced / 784 pieces sold in total)

Items Using Stock Fabrics and Materials of SUECOMMA BONNIE

SUECOMMA BONNIE produced 2,600 shoehorns and 2,300 mini bags as gifts for customers using leftover stock leather after shoe production.

1 **2**

1. Launch of upcycling sweatshirts 'perfect recycling' campaign video ▶
2. SUECOMMA BONNIE's mini-bag and shoe horn

Art / Women

SERIES' Warm Heart Campaign

SERIES has been continuously running a Warm Heart campaign to support the underprivileged culture and the art industry since 2011. Under the campaign, SERIES has sponsored various fields including Jecheon International Music Film Festival, Cinematech Renewal Project, short film production in Jeonju International Film Festival, Another Way Of Seeing Foundation for artists and visually impaired people, collaboration with natural indigo dyeing artisans, eco-friendly design fair, cultural and art activities of intellectually handicapped artists. In 2019, we donated the profit from a product collaborating with artist Naeol to Compassion, contributing to the cultivation of artistic talents such as painting and music for children around the world suffering from poverty.

Marking the 10th anniversary in 2020, we expanded the operation of Warm Heart Film Fund to facilitate diverse films while supporting domestic independent short films and short documentaries at the same time. KRW 10 million for the total production cost of a couple of selected works will be sponsored. We are also considering the support for mentoring from expert groups and promotion and marketing cost. FnC Organization will further assist marginalized pop culture artists in their activities through Warm Heart Film Fund.

RECODE & COURONNE's Support for Independence of Single Moms

RECODE signed an MOU with social welfare organization, 'Eastern Social Welfare Society' and offered jobs to single moms so that they can work as instructors at the upcycling workshop for their consistent economic activities. As hand-made workshop instructors, single moms contributed to spreading the value of upcycling by teaching classes in the workshop operated by RECODE.

COURONNE, which marked the 10th anniversary of the brand launch in 2019, helped single moms stand on their own as well. As part of the 10th anniversary campaign under the theme of 'We are Stephanie,' we brought celebrities to do photoshoots. The cost of celebrity model fees and partial sales profit of Stephanie were donated. Also, COURONNE donated shopper bags to single moms with babies for bringing diapers around and gave out daily bags for working single moms.

▶ T-shirts created in collaboration with intellectually disabled artists in 'Rawside', a non-profit art group

▶ Support for Independence of Single Moms

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   Ethics Management   Sustainable Procurement   **CSV Activities**

Supporting Local Communities and Vulnerable Class

Spporting Local Community by epigram

'epigram' is a lifestyle brand that focuses not only on clothing but also on communicating with customers by merging everyday life around us into projects. Since 2017, epigram has introduced beautiful small cities in Korea such as Jeju, Gyeongju, and Gwangju in seasonal pictorials. Local projects for win-win growth with regional communities are also being carried out every season. Among them, 'Almost Home Stay,' a program to experience living in a small town, particularly won praise for its effort for shared growth with local community while maintaining the characteristic of the brand. 'Almost Home Stay' began in Gochang, Jeollabuk-do in 2019 followed by Cheongsong, Gyeongsangbuk-do. Currently, it is in Hadong, Gyeongsangnam-do for long-period operation. Besides, the brand store located in Gyeongridan-gil Road sells lifestyle products linked to local small towns by reducing the ratio of clothes in the store, expanding opportunities for coexistence with local regions. Going forward, epigram will continue to convey hidden beauty and story of small towns in Korea.

▶ epigram photography shot in Cheongsong, Gyeongbuk (2019)

Providing Clothes Worth KRW 250 million to Gangwon Area Damaged from Fire by FnC Organization

We supported residents and firefighters in Gangwon-do area damaged from fire with emergency relief supplies worth about KRW 250 million. Clothes including 1,200 pieces of functional t-shirts for men and women, 500 outer clothes, 1,000 pairs of socks from KOLON Sports and HEAD were urgently supplied to Sokcho City Hall, while emergency relief goods were offered to displaced people staying at shelters due to fire, firefighters and volunteers.

Supporting the Vulnerable Children & Teens by SUECOMMA BONNIE & Archivépke

'SUE COMMA YOU' is a campaign meaning SUECOMMA BONNIE and you, and was conducted with Song Hye-kyo, the brand muse. In collaboration with Song Hye-kyo, we launched boots called 'KYO' that reflects the design and fit she desires to wear, and produced sneakers with partial profit from it to donate to the Korea Youth Counselling & Welfare Institute. As an affiliated organization of the Ministry of Gender Equality and Family, the institution has operated programs for the children outside of schools who cannot afford to study for financial reasons. The project in collaboration with Song Hye-kyo was the first social contribution activity of SUECOMMA BONNIE, and we plan to continue to carry on projects so that we can give back to society as much as we have been beloved.

Archivépke formed a CSR épke crew with diverse artists and carried out a relay donation campaign called 'Learn and Share.' In coalition with artists in Seoul, we provided the cost for operating classes while they donated their

talent and the space for the class. The entire class tuition was donated to the Community Chest of Korea. In addition, we donated the entire proceeds earned through our signature product in F/W season 2019, 'epke flat (mint toothpaste)' as well. The contribution went to young patients who could not get treatment although their disease is curable owing to their dire circumstances. Archivépke will continue the relay donations by operating classes.

Helping International Refugees by RECODE

RECODE has been working on various projects every year in cooperation with 'Refuge pNan' which is an organization to lend support to international refugees since 2017. Through the first project called RE;light, domestic refugees helped overseas refugees. RECODE gave sewing training to refugees living in Korea, and the upcycling fabric cabinets and play balls made by them were delivered to overseas refugee camps. For the second project, we invited a refugee performance team to a remix party to have cultural exchanges with the aim of better understanding the culture of refugees. Through these projects, refugees having great skills were given opportunities to become designers and participated in the production of accessories such as parachute bracelets and card wallets. RECODE has been continuously engaged in collaboration activities that can nurture refugees' talents and give them a sense of accomplishment. Furthermore, at the end of 2019, we gifted 50 padded jackets to refugees in collaboration with KOLON Sports so that they can keep warm in winter.

*Refuge pNan': a non-profit organization that provides shelters for international refugees

▶ 1. RECODE Supporting international refugees   2. Loading relief supplies to be delivered to areas affected by wildfires in Gangwon-do   3. SUECOMMA BONNIE's Campaign   4. Archivépke's relay donation campaign 'Learn and Share'   5. Local food event 'epigram X Market Lazy Heaven'

LIFESTYLE INNOVATOR | Sustainability Management

Environmental Management   Labor and Human Rights   Safety and Health   Ethics Management   Sustainable Procurement   **CSV Activities**

Response to COVID-19

Coronavirus Disease-19 (COVID-19) first emerged in December 2019 and spread across the world. The World Health Organization (WHO) declared the COVID-19 outbreak a pandemic (an epidemic occurring worldwide), which is the highest level of alarm in terms of infectious diseases. At that time, the number of confirmed cases around the world exceeded 120,000 in more than 110 countries. KOLON Industries recognized COVID-19 a grave corporate risk as well as a global disaster at the early stage. Thus, we have responded to the crisis together by joining hands with local communities suffering from the spread of COVID-19, supporting national-level measures.

**Donation of MB Filters
(Core Material of Masks)**

2 million pcs

Free Supply of Mask Core Parts

In the face of the national disaster brought by the outbreak of COVID-19, KOLON Industries produced MB (Melt Blown) filter, a core part of masks, thereby contributing to the alleviation of mask supply shortage. Due to the soaring demand, domestic mask manufacturers were having a great deal of trouble in production owing to the short supply of materials, and it led to the situation where the general public have difficulty in securing masks. Against this

▶ Providing clothes for public health doctors dispatched to Daegu

backdrop, KOLON Industries produced 2 million filters by transforming a pilot facility for medical MB filter to mask MB filter. Then, those filters were supplied to mask manufacturers free of charge after consultation with the government.

Providing Clothing for Public Health Doctors Dispatched to Daegu

FnC Organization provided clothing items worth KRW 200 million in total for public health doctors who were struggling to prevent the spread of corona virus in the front line. Following the close consultation with the Korean Association of Public Health Doctors, we decided to offer functional t-shirts and comfortable pants that are not tight, aiming at improving the working environment of public health doctors who exert themselves to restrain the spread of COVID-19. Accordingly, we swiftly secured 2,000 pieces of quick-dry functional t-shirts from KOLON Sports and 887 pairs of pants from the casual brand, Hideout, and delivered them to public health doctors dispatched to Daegu.

Distributing Support Packages

With a spirit of having more compassion and wisdom while sharing difficulties, KOLON Social Volunteer Group produced a support package containing hygiene products and psychotherapeutic items with donations from employees, and delivered them to the underprivileged children in 40 regional child centers. Also, when the number of blood donors for blood transfusion had been highly insufficient due to the spread of COVID-19, KOLON Industries additionally conducted a blood donation campaign at the company level. Furthermore, we donated functional t-shirts and pants to Daegu City for medical staff who sweat a lot due to the thick layers of equipment they wear such as protective clothing, circulating pump gear, and a mask.

▶ President Moon Jae-in's visit to the Gumi Plant

Providing Masks for Overseas Customers

No one can escape the strong grip of the COVID-19 around the world. When the mask exports were strictly limited as it became a strategic item, we found a way to deliver masks to European customers who were severely damaged by COVID-19. As you know, masks are essential to the prevention of the disease and the alleviation of the damages. So customers receiving masks from us were deeply moved by our sincere efforts. This is one of the examples of our various endeavors to prevent and curb the damages from COVID-19 in Korea and beyond. In recognition of these efforts, President Moon Jae-in visited the company and encouraged us on April 1st, 2020. The President acknowledged KOLON Industries as a best practice for overcoming COVID-19. We will never settle for the current praise, yet will actively participate in through preventive actions against COVID-19, thereby sharing the value of adding, multiplying, and sharing with all the people.

Supporting Small Business Owners and Local Communities

In order to support local communities and small business owners taking a big hit from the COVID-19, the labor union of KOLON Industries distributed Onnuri gift certificates to employees for foundation day gifts worth around KRW 1 billion on a foundation day. Since the major business sites of KOLON Industries are located in Gumi, Gyeongsan, and Gimcheon in Daegu/Gyeongbuk area particularly hit hard by the COVID-19, this support for regional economic revitalization is expected to be of great help. In addition to the support at the company level, employees of KOLON Industries voluntarily donated some of given certificates to local organizations.

Performance

Financial Performance

Item		Unit	2017	2018	2019
Condensed Consolidated Financial Statements					
Current assets			2,094,599	1,955,216	2,079,126
Non-current assets			3,567,350	3,617,644	3,213,977
Total assets			**5,661,949**	**5,572,860**	**5,293,103**
Current liabilities			2,126,149	2,324,355	2,245,001
Non-current liabilities		KRW million	1,213,352	1,039,971	921,765
Total liabilities			**3,339,501**	**3,364,326**	**3,166,766**
Ownership of the parent company			2,183,301	2,096,547	2,015,844
Non-controlling standard			139,147	111,987	110,492
Total equity			**2,322,447**	**2,208,534**	**2,126,336**
Condensed Consolidated Comprehensive Income Statement					
Sales Volume			4,342,125	4,459,802	4,407,190
Operating income		KRW million	223,558	166,930	172,948
Net income			122,736	42,925	22,122
Ownership structure			218,708	-13,004	-44,253
Management Performance by Business Division[1]					
Industrial materials	Net sales		1,719,014	1,786,173	1,900,822
	Operating income		118,133	91,165	80,681
Chemicals	Net sales		874,321	900,295	760,196
	Operating income		95,053	83,913	74,702
Film/electric materials	Net sales		499,502	558,012	592,250
	Operating income	KRW million	-21,029	-14,351	23,189
Fashion	Net sales		1,096,730	1,045,633	972,932
	Operating income		48,113	39,947	13,529
Others and clothing materials	Net sales		152,558	169,688	180,991
	Operating income		-16,712	-33,742	-19,152
Total	**Net sales**		**4,342,125**	**4,459,802**	**4,407,190**
	Operating income		**223,558**	**166,930**	**172,948**
Distribution of Economic Outcome					
Government	Cost of corporate tax	KRW million	56,743	46,126	24,076
Shareholders and investors	Total amount of dividends		31,400	26,910	26,910

1) Summarized consolidated financial status data by business division of a business report

Item		Unit	2017	2018	2019
Social Contribution Cost					
Social Contribution Cost			7	14	10
Contributions in Cash		KRW million	617	1,201	1,225
Win-win Fund[1]			5,000	5,000	5,000
Total Cost for Social Contribution[2]			**624**	**1,215**	**1,235**
Ratio of Social Contribution Cost to Operating Income		%	0.28	0.73	0.71
R&D Investment Status[3]					
R&D Investment Cost[4]		KRW 1,000	97,521,301	89,305,509	97,385,725
Domestic Patent	No. of Registered		76	55	129
	No. of Pending		100	95	123
Domestic Trademark	No. of Registered		5	7	9
	No. of Pending	-	0	1	15
Overseas Patent	No. of Registered		148	166	172
	No. of Pending		128	71	142
Overseas Trademark	No. of Registered		7	7	25
	No. of Pending		10	1	101

1) Our deposit amounts
2) Excluding win-win fund
3) R&D cost is the combination of KOLON Industries' R&D expenses and the government's subsidies.
4) R&D costs in 2017 and 2018 are modified from the report last year due to the suspension of some projects of KOLON MATERIALS (an affiliate of the group).

Non-financial Performance

Environmental Performance[1][2]

Classifcation	Unit	2017	2018	2019
Production Quantity		725,166	748,249	713,290
Raw Material Consumption[3]	Ton	1,224,850	1,233,672	1,123,155
Recycled Material Consumption		57,176	58,376	44,619
Waste Water Output				
Output	Ton	3,515,876	3,704,560	3,535,682
Recycled Volume		2,285,649	1,960,800	1,872,773

1) Data for the amount of energy and greenhouse gas emitted is based on the figures of the GHG bill of statement (including domestic Industry manufacturing and FnC organization).
2) Decimal places are excluded (omitting below four places of decimals for figures in the tens)
3) This report corrects the wrong figures for the amount of Raw Materials used from 2017 to 2018 of the previous report

Classification	Unit	2017	2018	2019
Waste Output				
General Waste		27,089	26,590	28,860
Hazard Waste	Ton	22,444	25,692	25,689
Construction Waste		1,904	1,282	409
Recycled Volume		39,074	41,027	45,337
Water Consumption				
Underground Water		412,947	294,784	215,495
Industrial Water		3,321,602	3,540,285[4]	3,641,562
Municipal Water		316,736	320,544	335,632
Surface Water	Ton	469,492	585,170	667,432
Rainwater Intake or Storage		-	680	-
Total Water Consumption		**4,520,777**	**4,741,463**	**4,860,121**
Reclaimed Wastewater		2,323,483	2,060,594	1,940,156
Water Pollutant				
Chemical Oxygen Demand (COD)		120	141	110
Biological Oxygen Demand (BOD)		51.81	47.26	56.75
Suspended Solid (SS)	Ton	57.40	57.86	44.99
Total Phosphorous (T-P)		2.39	1.95	5.59
Total Nitrogen (T-N)		35.78	36.58[5]	33.16
Air Pollutant				
NOx		111.57	131.57	65.87
SOx	Ton	31.49	27.22[6]	28.66
PM		17.43	21.23	30.21
Hazardous Chemicals				
Toxic Chemicals Consumption	Ton	230,902	243,136	240,559
No. of Chemical Leakage Cases	-	0	0	0
Leaked Amount of Chemical Substance	Ton	0	0	0
Energy Consumption				
Fuel		2,416	2,373	2,115
Electricity	TJ	7,297	7,508	7,164
Steam		2,701.32	2,808.72	2,791.23
Total Energy Consumption	TJ(MWh)	**12,407(3,446,391)**	**12,681(3,522,502)**	**12,063(3,350,836)**
Non-renewable Energy Sales	TJ	30.00	22.80	21.80
GHG Emissions				
Scope 1		149,280	141,629	131,110
Scope 2		510,907	526,802	503,532
Total GHG emissions (Scope 1+2)	tCO₂eq	**660,183**	**668,423**	**634,635**
Total GHG Emissions (Scope 3)[7]		-	-	4,014

4) This report corrects the wrong figures for the amount of industrial water used in 2018 of the previous report
5) This report corrects the wrong figures for the amount of Total Nitrogen (T-N) used in 2018 of the previous report
6) This report corrects the wrong figures for the amount of SOx used in 2018 of the previous report
7) Data from 2017 and 2018 is not applied, and it is only applied to two categories of employee commuting

Classification	Unit	2017	2018	**2019**
Violation of Environmental Regulations				
No. of Violations	-	0	0	2
Amount of Penalty	KRW	0	0	0
Investment on Environment	KRW 1,000	3,707,658	3,000,253	4,609,543
Environmental Risk Assessment[8]				
No. of Business Sites Assessed	-	7	7	7
No. of Business Sites in total		10	10	10
Ratio	%	70	70	70
ISO 14001				
No. of Certified Business Sites	Business site	12	13	13
No. of Total Business Sites		16	17	17
Certified Ratio	%	75.00	76.47	76.47
ISO 45001/OHSAS 18001				
No. of Certified Business Sites	Business site	7	7	8
No. of Total Business Sites		16	17	17
Certified Ratio	%	43.75	41.18	47.06

8) It is the same as an external impact assessment. It is limited to domestic workplaces, of which the Daesan plant is not subject to assessment and is therefore excluded.

Environmental KPI[1][2]

Classification	Unit	2017	2018	**2019**	Goal
Total Energy Consumption	TJ(MWh)	12,407(3,446,391)	12,681(3,522,302)	12,063(3,350,836)	2,345,585 MWh by 2030
GHG Emissions (Scope 1)		149,280	141,629	131,110	-
GHG Emissions (Scope 2)	tCO$_2$eq	510,907	526,802	503,532	-
Total GHG Emissions (Scope 1+2)		660,183	668,423	634,635	444,244 tCO$_2$eq by 2030
Total Water Consumption		4,520,777	4,741,463	4,860,121	3,402,084 tons by 2030
Total Hazard Waste	Ton	22,444	25,692	25,689	17,982 tons by 2030
Total General Waste		27,089	26,590	28,860	20,202 tons by 2030
Emergency Drill	Time	112	117	120	132 times by 2030
Chemical Substance Leakage Case	Case	0	0	0	0 cases by 2030
ISO 14001 Certification — No. of Certified Business Sites	-	12	13	13	-
No. of Total Business Sites		16	17	17	-
Certified Ratio	%	75.00	76.47	76.47	100% by 2030
Investment on Environment	KRW 1,000	3,707,658	3,000,253	4,609,543	KRW 5,070,498,000 by 2030
Ratio of Employees Completing Environmental Education	%	99.54	96.42	99.85	100% by 2030

1) 1GJ = 0.2778MWh (CDP Guideline in 2020)

2) Decimal places are excluded (omitting below four places of decimals for figures in the tens)

Labor and Human Rights Performance

Classification		Unit	2017	2018	**2019**
Employee Status[1]					
Region[2]	Korea		2,631	2,717	2,812
	Asia		3,253	3,722	4,174
	China		1,923	1,824	1,818
	Others[3]		1,330	1,898	2,356
	America/Europe		350	301	628
	Total		**6,234**	**6,740**	**7,614**
Korea_ Regular Employee[4]	Male	Person	2,328	2,409	2,504
	Female		268	270	277
	Total		**2,596**	**2,679**	**2,781**
Korea_ Contract Employee[4]	Male		22	19	17
	Female		18	19	14
	Total		**40**	**38**	**31**
Korea_Manager	Male		592	621	678
	Female		64	83	95
	Total		**656**	**704**	**773**
Korea_Ratio of Female Managers		%	9.76	11.79	12.29
Overseas	Male		1,668	2,100	2,610
	Female		1,942	1,923	2,192
	Total		**3,610**	**4,023**	**4,802**
Disabled Person	Korea	Perosn	36	38	37
	Overseas		45	50	41
	Total		**81**	**88**	**78**
Veteran[5]	Korea		44	43	44
	Total		**44**	**43**	**44**
New Recruitment Status[6]					
Korea	Male		163	168	175
	Female		41	18	21
	Total	Person	**204**	**186**	**196**
Overseas	Male		1,023	1,617	2,176
	Female		947	1,149	1,912
	Total		**1,970**	**2,766**	**4,088**
Ratio of Female Talents		%	20.1	9.7	10.7
Ratio of Regional Talents			35.3	48.9	70.0

1) Manufacturing organizations excluding FnC organization

2) For data on employee status by region, and contract employees are included in domestic business sites whereas they are excluded in overseas sites
   Data on employee status by region includes all employees and resident workers in on-site branches.

3) Asian countries excluding China

4) Revised disclosure standards for the report have been applied from this report

5) Standards approved by Office of Patriots and Veterans Affairs have been applied from this report

6) regional talent: a talent graduated from local universities aside from Seoul, Gyeonggi, and Incheon based on the final academic background
   Female talents and regional talents are counted only in domestic business sites

Classification		Unit	2017	2018	**2019**
New Recruitment Status by Age					
Workers in their 10s[1]	Korea		3	0	0
	Overseas		61	83	316
Workers in their 20s	Korea		126	148	126
	Overseas		1,016	1,302	1,958
Workers in their 30s	Korea		63	27	63
	Overseas	Person	872	1,123	1,257
Workers in their 40s	Korea		10	5	6
	Overseas		276	479	462
Workers in their 50s	Korea		2	5	0
	Overseas		71	55	91
Workers in their 60s	Korea		0	1	1
	Overseas		6	7	4
Remuneration for Employee[2]					
Total Yearly Remuneration	Male		162,681,028	172,276,856	188,973,110
	Female		13,516,969	14,792,530	16,307,850
	Total		**176,197,997**	**187,069,386**	**205,280,960**
Average Wage Per Person	Male		69,285	71,992	76,199
	Female		47,763	53,403	58,873
	Total		**66,969**	**70,327**	**135,072**
Welfare Benefits	Male	KRW 1,000	13,881,050	18,665,268	16,559,336
	Female		1,134,146	1,575,670	1,849,571
	Total		**15,015,196**	**20,240,938**	**18,408,907**
Retirement Wage	Male		8,029,369	8,804,614	26,143,255
	Female		480,163	543,847	439,725
	Total		**8,509,532**	**9,348,461**	**26,582,980**
Ratio of Wage for New Employee to Legal Minimum Wage		%	229.4	203.2	184.8
Gender Equality in Wage[3]					
Managing Position[4]		%	81.0	83.8	85.9
Non-managing Position			89.5	97.6	96.2
Maternity Leave and Parental Leave Status[5]					
No. of Maternity Leave Users	Male		74	96	82
	Female		22	20	17
No. of Parental Leave Users	Male	Person	5	2	8
	Female		22	22	11
Ratio of Return After Parental Leave	Male		100	100	100
	Female		77.2	100	100
Ratio of Employees Working More than 12 Months After Return	Male	%	80.0	100	87.5
	Female		94.1	90.9	90.9

1) There are no employees under 18 years of age. It is only for employees aged 19 or above.   2) The wage for new employee refers to the average wage of all new employees

3) Wages for managing and non-managing position are the ratio of female average basic pay to male average basic pay

4) Scope of managing position is determined based on the criteria of KOLON Industries   5) limited to domestic sites

Classification		Unit	2017	2018	**2019**
Flexible Work System Status					
Flexible Work Hour System	Male		-	207	228
	Female	Person	-	9	11
Selective Work Hour System	Male		-	18	5
	Female		-	1	3
Investment Status on Education[6]					
Education Hour Per Person		Hour	58.0	51.0	40.0
Invested Amount for Employee Education		KRW 1miilon	1,847	1,921	1,971
Ratio of Employees Receiving Environmental Education[7]	Korea		99.5	96.4	99.9
	Overseas		25.3	25.2	35.8
Ratio of Employees Receiving Job Training	Korea		42.7	41.1	40.1
	Overseas		27.8	37.1	38.2
Ratio of Employees Receiving Ethics Education	Korea		49.6	49.2	9.1
	Overseas	%	26.5	18.1	35.0
Ratio of Employees Receiving Human Rights Education	Korea		100.0	100.0	100.0
	Overseas		17.6	11.3	28.6
Ratio of Employees Receiving Sustainable Supply Chain Management[8]	Korea		100	100	100
	Overseas		0.0	0.0	9.0
Regular Personnel Evaluation					
Ratio of Employees Getting Regular Personnel Evaluation	Korea	%	86.8	88.3	89.2
	Overseas		98.8	99.2	99.4
Occupational Safety and Health					
Total Work Hours	Head Office	Hour	1,182,963	1,278,315	1,319,680
Employees Receiving Health/Safety Education	No. of People Completing Education	Person	2,680	3,289	3,368
	No. of People to Complete		2,680	3,289	3,368
	Ratio	%	100	100	100
Staff of Resident Suppliers Completing Health/Safety Education	No. of People Completing Education	Person	1,641	1,736	1,660
	No. of People to Complete		1,641	1,736	1,660
	Ratio	%	100	100	100
Employees Completing Environmental Education	No. of People Completing Education	Person	1,965	1,912	2,024
	No. of People to Complete		1,974	1,983	2,027
	Ratio	%	99.54	96.42	99.85
Safety Education Hours Per Person		Hour	28.37	26.43	25.62
No. of Emergency Response Drill Conducted		Time	112	117	120

6) Overseas ratio regarding education in 2017 and 2018 excludes KNC data as it was not collectible

7) No. of site employee excluding Head Office

8) limited to people in charge of suppliers or procurement

Classification		Unit	2017	2018	**2019**
Occupational Safety and Health					
Lost Time Injury Frequency Rate[1]	No. of Work Loss Cases in Total	Case	4	10	4
	Total Work Hour	Hour	3,886,608	5,262,781	11,194,148
	LTIFR[1]	%	1.03	1.90	0.36
Lost Time Injury Severity Rate[2]	Work Loss Days Due to Injury	Day	393	1,528	726
	Total Work Hours	Hour	3,886,608	5,262,781	11,194,148
	LTISR[2]	%	0.10	0.29	0.06
No. of Occupational Diseases Occurred		Case	0	0	0
Social Contribution Status					
Volunteering Hours Per Employee		Hour	4.18	3.82	4.53
Total Volunteering Hours of Employees			5,393	8,146	9,813

Activities of KOLON Social Volunteer Group[3]

Site		Total No. of Activities	Total No. of Volunteers	Total Volunteering Performance (Time*Persons)
2017	Head Office	20	210	821
	Gumi	54	478	2,144
	Gyeongsan	10	97	484
	Gimcheon1,2	21	107	418
	Ulsan	11	91	310
	Incheon	6	43	399
	Yeosu	6	54	90
	Daesan	10	79	139
	Central R&D Center (Yongin)	7	63	217
	Central R&D Center (Gumi)	10	69	371
	Total	**155**	**1,291**	**5,393**
2018	Head Office	31	362	1,285
	Gumi	95	886	3,853
	Gyeongsan	8	117	487
	Gimcheon1,2	59	201	677
	Ulsan	10	99	405
	Incheon	3	32	216
	Yeosu	9	57	108
	Daesan	8	144	245
	Central R&D Center (Yongin)	6	59	207
	Central R&D Center (Gumi)	12	178	663
	Total	**241**	**2,135**	**8,146**

1) Lost Time Injury Frequency Rate = (No. of Work Loss Cases in Total) * 1,000,000 / Total Work Hours

2) Lost Time Injury Severity Rate = (Work Loss Days Due to Injury) * 1,000 / Total Work Hours

3) FnC organization is not included

Site		Total No. of Activities	Total No. of Volunteers	Total Volunteering Performance (Time*Persons)
Activities of KOLON Social Volunteer Group[3]				
2019	Head Office	30	481	1,223
	Gumi	100	826	3,428
	Gyeongsan	9	87	388
	Gimcheon1,2	36	266	753
	Ulsan	10	82	341
	Incheon	1	6	54
	Yeosu	4	11	22
	Daesan	6	43	98
	Central R&D Center (Yongin)	13	305	615
	Central R&D Center (Gumi)	100	61	237
	Total	**309**	**2,168**	**7,159**

Collective Agreement Status

Classification	Unit	2017	2018	**2019**
No. of Labor Union Members	Person	677	706	740
Ratio of Employees Belonging to Union Membership[4] Korea	%	54.1	53.5	54.7
Ratio of Employees Eligible for Collective Agreement[4]	%	56.8	55.0	56.4
Ratio of Employees Representing Occupational Safety and Health Committee		100	100	100
Employee Satisfaction				
Employee Satisfaction Level	point	-	3.53	3.9
Ratio of Employee Satisfaction Survey Participants[5]	%		68	43
Health Welfare				
Ratio of Employees Taking Health Check-up	%	98	98	97

3) FnC organization is not included

4) Membership rate = No. of members / No. of employees eligible for union membership

5) No. of employees participated / No. of employees eligible for the employee satisfaction survey

Labor and Human Rights KPI

Classfication		Unit	2017	2018	**2019**	**Goal**
Education Hours per Employee		Hour	58	51	40	Keeping 50 hours at all times
No. of Workers Aged 18 or Below	Domestic Business Sites	Person	0	0	0	Keeping 0 people at all times
	Overseas Business Sites		0	0	0	Keeping 0 people at all times
	Total		0	0	0	Keeping 0 people at all times
Ratio of Total Female Workers (Korea)		%	35.7	32.8	32.6	35% by 2030
Ratio of Female Managers (Korea)			9.76	11.79	12.29	15% by 2030
Ratio of Female Executives (Korea)[1]			4.6	4.8	2.4	10% by 2030
Ratio of Disabled Workers (Korea)			1.5	1.4	1.4	Keeping 1.4% at all times

1) Board of Directors is excluded

Classsfication		Unit	2017	2018	**2019**	Goal
Ratio of Business Sites Receiving Human Rights Impact Assessment	Domestic Business Sites	%	0	100	100	Keeping 100% at all times
	Overseas Business Sites		0	0	0	90% by 2030
	Total		0	52.6	57.8	90% by 2030
Occupational Safety and Health						
Lost Time Injury Frequency Rate[2]		-	1.03	1.90	0.36	0.25 by 2030
Lost Time Injury Severity Rate[3]			0.10	0.29	0.06	0.04 by 2030
Employees Receiving Health/Safety Education	No. of People to Complete	Person	2,680	3,289	3,368	-
	No. of People Completing Education		2,680	3,289	3,368	-
	Ratio	%	100	100	100	100% by 2030
ISO 45001/ OHSAS 18001 Certification	No. of Certified Business Sites	Site	7	7	8	-
	No. of Business Sites in Total		16	17	17	-
	Certified Rate	%	43.75	41.18	47.06	100% by 2030

2) Lost Time Injury Frequency Rate = (No. of Work Loss Cases in Total) * 1,000,000 / Total Work Hours
3) Lost Time Injury Severity Rate = (Work Loss Days Due to Injury) * 1,000 / Total Work Hours

Ethics Performance

Classification		Unit	2017	2018	**2019**
Board of Directors Status					
No. of Board of Directors Meeting Convened		Case	17	13	13
No. of Agendas Deliberated			22	18	22
Rate of Attendance at Board Meetings	Outside Directors	%	90.6	92.3	89.3
	Inside Directors		72.1	61.5	97.1
Internal Audit and Risk Assessment Regarding Corporate Ethics					
Ratio of Business Sites Undergoing Internal Audit Regarding Corporate Ethics	Korea	%	100	100	100
	Overseas		38	38	50
Anti-corruption Management System					
ISO 37001[1]	No. of Certified Business Sites	Site	-	-	-
	No. of Business Sites in Total		12	12	12
	Ratio	%	-	-	-
Response to Corruption and Violation by Stakeholders					
Customer	Report	Case	0	0	0
	Consultation		0	0	0
	Complaint		0	0	0
	Disciplinary Action		0	0	0

1) Achieved 11% as of 2020

Classsfication		Unit	2017	2018	**2019**
Response to Corruption and Violation by Stakeholders					
Supplier	Report	Case	0	0	1
	Consultation		0	0	0
	Complaint		1	0	0
	Disciplinary Action		0	0	0
Employee	Report		0	3	2
	Consultation		0	0	0
	Complaint		0	0	0
	Disciplinary Action		0	0	1
Employees' Pledging for Compliance with Code of Ethics					
Ratio of Employees Pledging for Compliance with Code of Ethics[1]	Korea	%	100	100	100
	Overseas		75.2	52.5	95
Disciplinary Action on Violation of Ethics Management					
Bribery-taking/ Embezzlement/ Malfeasance	No. of Investigations Conducted	Case	0	1	1
	No. of Disciplinary Actions Taken		0	1	1
Violation of Approval Regulation	No. of Investigations Conducted		2	2	0
	No. of Disciplinary Actions Taken		2	2	0
Violation of Environment/Safety Accident Rules	No. of Investigations Conducted		4	1	3
	No. of Disciplinary Actions Taken		4	1	3
Hindrance to Harmony including Sexual Harassment/ Office Bullying	No. of Investigations Conducted		1	4	0
	No. of Disciplinary Actions Taken		1	4	0
Others	No. of Investigations Conducted		0	0	6
	No. of Disciplinary Actions Taken		0	0	6
Information Security Education Status					
Corporate-wide Security Education	No. of People to Complete	Person	1,802	1,863	1,835
	No. of People Completing Education		1,472	1,502	1,536
	Ratio[2]	%	81.68	80.62	83.71
New and Experienced Worker Education	No. of People to Complete	Person	75	64	91
	No. of People Completing Education		75	64	91
	Ratio	%	100	100	100

1) New Employees are subject to pledging
2) omitted below two places of decimals

Ethics KPI

Classification		Unit	2017	2018	**2019**	Goal
Ratio of People Completing Ethics Education	No. of People Completing Education	Person	1,305	1,335	322	-
	No. of Total Employees		2,631	2,717	2,812	-
	Ratio	%	49.6	49.1	11.5	80% by 2030
No. of Internal Reports	Bribery-taking/Embezzlement/Malfeasance	Case	0	1	1	0 case by 2030
	Violation of Approval Regulation		2	2	0	
	Violation of Environment/Safety Accident Rules		4	1	3	
	Hindrance to Harmony including Sexual Harassment/Office Bullying		1	4	0	
	Others		0	0	6	
No. of Actions Taken to Internal Reports	Bribery-taking/Embezzlement/Malfeasance		0	1	1	0 case by 2030
	Violation of Approval Regulation		2	2	0	
	Violation of Environment/Safety Accident Rules		4	1	3	
	Hindrance to Harmony including Sexual Harassment/Office Bullying		1	4	0	
	Others		0	0	6	
No. of Confirmed Cases and Legal Actions Taken	Bribery-taking/Embezzlement/Malfeasance		0	0	0	0 case by 2030
	Violation of Approval Regulation		0	0	0	
	Violation of Environment/Safety Accident Rules		0	0	0	
	Hindrance to Harmony including Sexual Harassment/Office Bullying		0	0	0	
	Others		0	0	0	

Business Sites Undergoing Internal Audit/Risk Assessment[1]

Business Sites Undergoing Internal Audit/Risk Assessment on Corporate Ethics Issue	No. of Business Sites Assessed	Site	9	10	12	-
	No. of Total Business Sites		16	16	16	-
	Ratio	%	56	63	75	100% by 2022

1) FnC organization and overseas business sites are included.

Sustainable Procurement Performance

Classification	Unit	2017	2018	**2019**
Win-win Management[1]				
Mutual Growth Evaluation	Grade	Satisfactory	Satisfactory	Satisfactory
Ratio of Suppliers Receiving Advance Payment[2]	%	3.25	3.74	2.77

1) limited to domestic suppliers
2) ratio of the number of suppliers receiving advance payment to all suppliers

Classification		Unit	2017	2018	**2019**
Economic Performance Sharing					
Amount of Purchasing Items from Suppliers (Raw Materials)		KRW 100 million	8,987	10,326	8,922
Suppliers' Human Rights & Ethics Coverage					
No. of Major Suppliers[3]		-	-	61	69
No. of Major Supplier Pledge for Code of Conduct[4]			-	-	40
Ratio of Major Supplier Pledge for Code of Conduct		%	-	-	57.97
Supplier CSR Audit Coverage[1]					
Total No. of Suppliers			386	392	374
No. of Suppliers Newly Registered to 1st-tier Suppliers		-	47	57	25
Ratio of Suppliers Gone through CSR Audit to All Suppliers[5]		%	-	1.3	7.5
No. of Suppliers Advised to Improve through CSR Audit			-	2	8
No. of Suppliers Suspended for Trade through CSR Audit		-	0	0	0
No. of Suppliers Temporarily or Permanently Suspended for Trade			38	36	52
Ratio of Suppliers Getting On-site Inspection for CSR Assessment to Total Major Suppliers	Assessed suppliers	Suppliers		2	7
	Total			61	69
	Ratio	%		3.3	10.1
Purchase Rate[1]					
Ratio of Purchasing Recycled Material for Packaging		%	5.9	5.6	6.5
Rate of Purchasing Green Products or Eco-friendly Products			25.1	26.7	13.1

3) limited to the domestic suppliers with annual transaction more than KRW1 billion.
4) There is no 2017 and 2018 data as we established the Code of Conduct in 2019.
5) CSR Audit started in 2018

Sustainable Procurement KPI

Classification		Unit	2017	2018	**2019**	Goal
Ratio of Suppliers Pledging for Code of Conduct to Total Major Suppliers[1]		%	-	-	58	100% by 2030
Ratio of main suppliers making contracts including provisions on the environment and human rights[2]		%	-	-	-	35% by 2021
Ratio of Suppliers Getting CSR Assessment (Checklist, Survey) to Total Major Suppliers	Assessed suppliers	Suppliers	-	2	8	-
	Total		-	61	69	-
	Ratio	%	-	3.3	11.6	100% by 2030
Ratio of Persons in Charge of Procurement Receiving Sustainable Procurement Education	No. of People Completing Education	Person	16	16	16	-
	No. of People to Complete		16	16	16	-
	Ratio	%	100	100	100	100% by 2030
Sustainable Material						
Amount of Purchasing Sustainable Material		Ton	-	-	6,938	15,000 tons by 2030

1) There is no 2017 and 2018 data as we established the Code of Conduct in 2019.
2) It has been implemented since 2020 and contract rate is 25%.

Appendix

Risk Management

KOLON Industries has made great efforts to efficiently identify potential risk factors in the business environment and prevent them through systematic risk management. Our risk management regulations define the scope and form of internal and external issues as well as evaluation criteria along with detailed process so that we can apply them in overall risk management activities. In particular, the extended risk definition covering non-financial areas ensures the prevention of environmental factors posing threat to sustainable management in advance. The scope of risk management can be briefly divided into business and financial risk, environment, safety and health, and ethics. On the foundation of risk management regulations, we continue to respond to each area systematically. Recently, unprecedented risks like COVID-19 have been striking corporate management. In the face of such sudden risks, we have been consistently improving risk management in order to properly react to risks, responding to corporate-wide management strategies against present risks.

Business and Financial Risk

KOLON Industries has detected and responded to risks posing threats to our business in the early stage. We have set strategic directions and made decisions by forecasting the needs and demands of clients and customer companies, while closely monitoring changes in technology and industrial environments. In addition, we have established management strategies in line with changes in regulations and policies related to our major businesses including industrial and chemical materials, film/electronic materials, fashion, and clothing materials. Financial risks such as credit risk, liquidity risk, and foreign-exchange risk are also monitored to establish appropriate control measures after analyzing the risks we are confronting. By doing so, we are making and operating financial management policies. The audit committee oversees the management to check if it properly manages risk policies or complies with procedures and supervises if the system is well organized or not.

Foreign-exchange Risk	In the event of an external economic crisis, the KRW-USD exchange rate is highly volatile. To reducing fluctuations of management performances due to foreign exchange rate, KOLON Industries has established and implemented a management policy by specified position including sales, finance, and investment. Besides, we have controlled foreign currency assets and the amount of liabilities by the characteristics of risk exposure and the business of KOLON Industries and investor companies. We have also minimized the occurrence of foreign exchange position by matching the currency of deposit and expenditure.
Credit Risk	A credit risk refers to the risk of default on a contract regarding a financial product that may arise from a counterparty, causing financial harm to a company. For the purpose of swiftly responding to credit risks and minimizing relevant loss, we have integrated and managed the collection of receivables and debt disposal work. We have made it mandatory for external suppliers to buy credit insurance in order to increase transaction security, and evaluation grade is given to loans exceeding the credit insurance limit in consideration of the internal indicators.
Liquidity Risk	Liquidity risk refers to the possible case that a company cannot fulfill its financial debt obligations. KOLON Industries has managed cash flows in daily/weekly/monthly/yearly unit so that we do not face any problems with cash flows in sales/finance/investment due to outside variables. We are actively pursuing to bring asset efficiency and cost reduction and reinforcing volatility management through expanding insurance and collateral.
Internal Accounting Management System	KOLON Industries has operated an internal accounting management system with an objective of making our accounting more transparent and corporate governance more advanced. We have offered an integrated financial information management system to shareholders and the management, realizing the internal control of active finance reporting. We also continued to expand risk management capabilities in regard of finance reporting through the advancement of an internal accounting management system.

Non-financial Risk

Environmental Risk

In preparation of environmental risks, we have continuously provided education programs for employees regarding the risk of environmental accidents and how to prevent them while monitoring daily workplace. With an effort to minimize risks, we have conducted simulation training with specific scenarios such as water or wastewater leakage situation and wastewater leakage due to malfunctioning wastewater processing facility. Also, we have established detailed management methods, responsibilities and authorities, and a work procedure for environmental risk assessment. Through internal and external verification including the internal assessment on the environmental management system of head office for a year as well as the update of ISO 14001, we have detected items to improve and properly responded to them.

Environmental Risk Assessment toward Business Sites

Classification	Unit	2017	2018	2019
No. of Business Sites Assessed	Site	7	7	7
No. of Total Business Sites		10	10	10
Ratio	%	70	70	70

*It is the same as an external impact assessment. It is limited to domestic workplaces, of which the Daesan plant is not subject to evaluation and is therefore excluded.

Safety and Health Risk

For safety and health risk management, KOLON Industries has provided safety education including emergency response training, operated a chemical substance management system, and established a system through related regulations. We have conducted fire evacuation drill every year at the head office and each business site while building an emergency response system so that we can quickly react to the situation in the face of accidents such as natural disasters, fire, and safety accidents. In compliance with Act on Registration and Evaluation, etc. of Chemical Substances (K-REACH) and Chemicals Control Act, we have operated KCMS (Kolon Chemical Management System) based on Information Technology. To preparing ourselves for safety and health risks, we have also formulated Regulation for Management of Environment Safety Law, Risk Assessment Regulation, Emergency Management Regulation and many more. Through these foundations, we have set up a response system against safety and health risk.

Risk Assessment Regulation on Safety and Health

Key Contents	Drawing up countermeasures by systematically analyzing the type and scale of potential risks of new and existing facilities
	Designating a person responsible for risk assessment and stipulating the qualification requirements (safety, machinery, process, etc.)
	Preserving risk assessment in the form of report form and putting details of cause and effect in the report
	Providing checklists according to facility type, safety and health accident type, work impact factors, and environment

Ethics Risk

KOLON Industries has made various efforts for bringing out company-wide interest in ethical management and responded to risks through the CEO's declaration of voluntary compliance with fair trade, ethics training, and compliance newsletters. Since the introduction of Compliance Program (CP) in 2012, we have been holding CP Day and CP Manager Interview Day to encourage the company-wide compliance awareness and practice while striving to identifying related risks. We have also sent the CEO's letter of ethics management on major holidays to employees and our suppliers for preventing corruption and bribery risks and building a fair and transparent trade culture. On top of that, our ethics management system includes the distribution of compliance guidance, the operation of Mutual Growth Secretariat, and the establishment of support system regarding anti-corruption, fair trade, and trade secret protection. We also plan to introduce an anti-corruption management system to further advance our

ethics management. While promoting the ethics management system, we are discovering areas of improvement through overall internal and external inspections on ethical issues. As of 2019, a total of 12 business sites went through internal audits and risk assessments on corporate ethics issue, and they accounts for 75% of entire business sites.

Major Regulations on Ethics

Classification	Key Contents
Regulations on the prohibition of making illicit requests or accepting bribe	The purpose is to comply with the Improper Solicitation and Graft Act and to make all employees pursue the philosophy of ethics management. It contains the standards and scope of illicit request and bribery, responsible person, and reporting system.
Regulations on fair-trade compliance program operation, praise and punishment, and reward and protection	It stipulates the standards and procedure to comply with laws in regard of fair trade. It also contains details of fair trade compliance including responsible people like compliance manager, the role of secretariat, monitoring process, and education.
Regulation and guidelines on contacting competitors	It defines and gives guidance in regard to laws on monopoly regulations and fair trade along with ethical behavior for employees when contacting competitors. Target of application, action guidance, monitoring process, reporting system, and information handling procedures are included.
Four practices for fair trade	Four actions suggested by the Fair Trade Commission proposes the action items in terms of fair selection and registration of suppliers, contract signing, issuance and preservation of written documents, and the establishment and operation of the internal review committee. In line with this, KOLON Industries applies it after revisions to our regulations in regard to the business with contractors including a standard form of contract, responding to relevant risks.

Sustainable Procurement Risk

KOLON Industries has managed a supply chain in consideration of sustainability in all processes of selecting, operating, and evaluating suppliers. Particularly when we register and assess suppliers, we take into consideration not only the conventional standards such as quality, price, and management performance but also the environment, safety, compliance, human rights, and labor elements. We also let suppliers pledge themselves to compliance with the Code of Conduct for Suppliers and sign integrity agreements and receive written forms so as to build a sustainable management system. Besides, we are preparing for sustainable management risks derived from suppliers through newsletters and training, thereby ultimately expanding the application of compliance and ethics management system to suppliers.

CSR Assessment on Suppliers

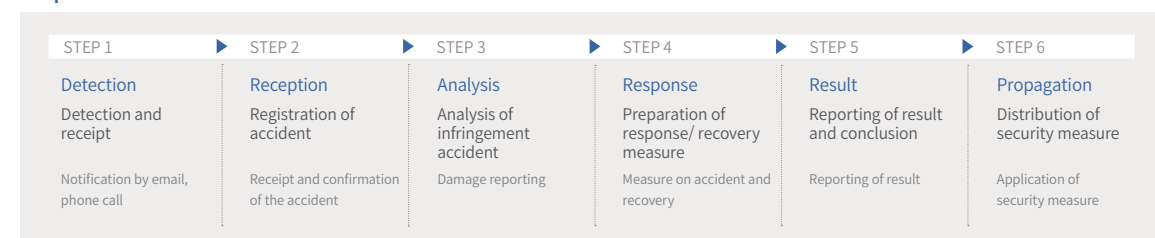|	
Key Contents	Environmental management certifications such as ISO 14001
	Violations against environmental laws or environmental accidents
	Risk assessment regarding the compliance with working hours and workers' treatment
	Internal compliance regulations on bribery-taking, corruption, or embezzlement
	Process of handling requests and complaints from customers

Information Security Risk

KOLON Industries has established and applied a systematic information security management system to protect all business-related trade secrets, our core technologies, research and development information, customer information, and personal information. In terms of responding to external infringement, we are operating security management system at all times by expanding the protection scope from office area to processing facilities. In addition, in order to respond to external hacking attacks real time, we have regularly conducted simulation training toward employees and simulated hacking as well as carried out inspections to identify vulnerable areas. As a result, the security level and response capabilities are being continuously improved.

Raising Awareness of Security   We have provided both online and offline information security education for employees at least once a year aiming to continuously raise the level of awareness among employees on security. Regular inspections for finding out security vulnerabilities and simulation training on handling malicious e-mails have also been conducted to continuously improving the security competence and response capabilities for handling external hacking attacks real time. In the aspect of information leakage prevention, we have taken protective measures on PC, e-mail, and IT devices while analyzing and auditing information flow at any time so that our system of detecting abnormal signs of information leakage function better.

In addition, security audits have been conducted at production sites, and the security system has been reinforced by removing anticipated problems with process facilities. As such, we are making tremendous efforts to create a culture in which all employees working with us are well aware of security by making them open their eyes to essential security compliance matters.

Information Security Regulations and Risk Response Measures

Regulations	- Security management regulations - Guidance on the response to infringe accidents
Risk response measures	- Document security system: using a system that is easy for security management by identifying document grade and document preservation period - AEO (Authorized Economic Operator) safety management - Information leakage and threat monitoring system: monitoring information leakage and threats through scenario detection and identifying trends by category through comprehensive situation judgment - Access control: controlling access from network to information system through network firewall, cloud security group setting, and access port control - Encryption: applying SSL communication section encryption for communication, applying SHA256 one-way encryption for password, applying AES256 two-way encryption for unique identification information and financial information - Access record management: identifying abnormal activities by monitoring information system access and the records of use on a monthly basis - PC security: making it mandatory for all employees to implement AD and install media control, and allowing IT development personnel who can access the system DB to access whit the internet network blocked through logical network separation. - Account authority management: Granting the information system through account application and approval, and suspending unnecessary account authority every month - Vulnerability check: Diagnosing weaknesses of information system through annual risk assessment and formulating improvement plans - Simulated hacking: improving technical shortcomings of the system or homepage through annual simulated hacking - Others: applying session-timeout when the system is not in use, managing back up in case of failure, and managing distribution forms

Response to Information Protection Risks

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
Detection	Reception	Analysis	Response	Result	Propagation
Detection and receipt	Registration of accident	Analysis of infringement accident	Preparation of response/ recovery measure	Reporting of result and conclusion	Distribution of security measure
Notification by email, phone call	Receipt and confirmation of the accident	Damage reporting	Measure on accident and recovery	Reporting of result	Application of security measure

Sustainable Management Index

Responsible Care Global Chart

Responsible Care is a comprehensive international initiative for the global chemical industry to enhance the environment, safety, and health throughout the entire product life cycle from development, manufacturing, sales, distribution, use, and disposal of chemical products. As a member of Responsible Care, KOLON Industries will continue to practice sustainability management in accordance with the basic policy below and strive to create social value.

Responsible Care® Good Chemistry at Work	1	Designating Responsible Care as one of our management goals, and ensuring all members of the company to participate in the action program
	2	Safeguarding the environment, safety, and health first and making efforts to minimize risks that can possibly arise in the process from production, transport, usage, and disposal
	3	Actively communicating with and responding to interests in regard to the environment, safety, and health of company members, customers, local communities, and related organizations
	4	Inducing safe use, transport, and disposal by thoroughly consulting and providing appropriate information on risks of chemical products for customers
	5	Cooperating with government agencies or experts for research and development or trouble shooting in relation to the environment, safety, and health
	6	Actively exchanging information on the environment, safety, and health with the international chemical industry while joining necessary global actions
	7	Establishing collaborative companies for sharing knowledge and experiences regarding the environment, safety, and health with for the purpose of facilitating Responsible Care activities

The Ten Principles UN Global Compact

Since joining the UN Global Compact in 2018, KOLON Industries has actively reflected the 10 principles of it in the four areas; human rights, labor, environment, and anti-corruption across our overall management. Going forward, we will faithfully apply the ten principles in the course of our sustainable management to deliver global sustainability management.

THE GLOBAL COMPACT	Human Rights	Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.
		Principle 2	Make sure that they are not complicit in human rights abuses.
	Labor	Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
		Principle 4	The elimination of all forms of forced and compulsory labor.
		Principle 5	The effective abolition of child labor.
		Principle 6	The elimination of discrimination in respect of employment and occupation.
	Environment	Principle 7	Businesses should support a precautionary approach to environmental challenges.
		Principle 8	Undertake initiatives to promote greater environmental responsibility.
		Principle 9	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.

LIFESTYLE INNOVATOR | Appendix

Risk Management   **Sustainable Management Index**   Third-Party Verification Statement   Affiliated Organizations and Principles

Activities in Line with UN SDGs

Introduction of UN SDGs

In September 2015, the United Nations announced the UN Sustainable Development Goals (UN SDGs) as a solution to the challenges that the international community is wrestling with in pursuit of realizing sustainable development of mankind. UN SDGs are comprised of 17 goals and 169 targets in total, and these are essential for us to live in a sustainable society in the future.

UN SDGs and KOLON Industries

KOLON Industries is making various efforts to achieve UN SDGs' 17 goals and 169 targets. We particularly put our focus on eradication of poverty, good health and well-being, decent work and economic growth, responsible consumption and production, climate action, life below water as well as life on land.

Goal		Key Activities
	Goal 1. No poverty	· Supporting children outside of school who come from poor household circumstances through 'SUE COMMA YOU' campaign · Helping international refugees by delivering a number of items to overseas refugee camps and holding cultural events · Giving Support Packages containing hygiene products and psychotherapeutic items with donations from employees to children in vulnerable class
	Goal 3. Good health and well-being	· Donating entire proceed from the sales of signature products in Archivépke to young patients who cannot afford to get treatment or surgery due to poverty · Producing filters, the core material of masks, and supplying them to mask manufacturers for free in order to prevent the spread of COVID-19 · Conducting a blood donation campaign at the company level as the need for blood was on the increase due to COVID-19 · Providing clothes worth about KRW 0.2 billion for public health doctors dispatched to Daegu, the area hit hard by the COVID-19 · Delivering masks to customers in Europe so as to alleviate the damage from the virus and prevent infection
	Goal.8 Decent work and economic growth	· Hiring single moms as upcycling workshop instructors to help them stand on their own through the brand, RECODE · Giving out Onnuri gift certificates instead of annual presents to employees on the foundation day in order to lend support to local communities and small business owners suffering from COVID-19
	Goal 12. Responsible consump-tion and production	· Pursuing sustainable consumption and production through CSR assessment on suppliers, distributing Responsible Business Alliance, and managing conflict minerals
	Goal 13. Climate action	· Creating RECODE, the first upcycling brand in the industry and operating 'weDO', the platform for sustainability-seeking brands · Establishing and managing a mid- and long term roadmap for mitigating greenhouse gases to 37% of BAU in accordance with the government's goal by 2030 · Achieving 76.47% in terms of the ratio of domestic and overseas business sites obtaining ISO 14001 certification for environmental management · Developing materials to contribute to the era of eco-friendly hygiene economy and electric vehicles while continuously working on restructuring business for zero carbon · Selling COURONNE eco-bags 100% made of yarn extracted from plastic PET bottles · Gradually transforming KOLON Sports stores to eco-friendly ones by making hangers with corn starch extract and reusing mannequins colored with eco-friendly paints
	Goal 14. Life below water Goal 15. Life on land	· Protecting endangered animals and plants in Korea through 'Noah Project.' Carrying out campaigns for protecting honeybees and eagles in 2016, Halla Edelweiss in 2017, seahorses in 2018, and butterflies in 2019 · Launching graphic t-shirts inspired by endangered marine life marking the Sea Day on May 31st through the brand, 'epigram'

SASB (Sustainability Accounting Standard Board)

As a non-profit organization to revise non-financial reporting standards, the Sustainability Accounting Standard Board or SASB has developed and operated sustainability accounting standards. SASB presents sustainability risk themes highly related to each industry and recommends corporations to consistently report regarding themes to communicate with investors and stakeholders. KOLON Industries decided that chemicals industry is the most relevant as we focus on industrial materials, chemicals, and film/electric material businesses, thereby we report data on the basis of the industry standard.

Topic	Code		Page and note
Greenhouse Gas Emissions	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	P.18-19
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOX (excluding N2O)	(1) 66 ton
		Air emissions of the following pollutants: (2) SOX	(2) 29 ton
Energy Management	RT-CH-130a.1	(1) Total energy consumed	(1) 12,063 TJ
		2) percentage renewable	(2) 0.006%
		(3) total self-generated energy	(3) 231 MWh
Water Management	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	0 case
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	P.21
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	P.69

Topic	Code		Page and note
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	In order to fulfill our responsibilities for the local community where we operate, KOLON Industries stipulates the process of collecting and responding to feedbacks from local stakeholders in our 'Communication Management Regulations'. We receive grievances from stakeholders through the means of document, phone call, or visit, then responding to them by explaining, persuading, or taking corrective actions depending on the case. In the case of grave issues, we integrate and manage them into our environmental safety and health goals so that we can integrate the opportunities and risks in regard of local community interests into our company management goals and manage them properly.
Workforce Health & Safety	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	P.34-37, 82
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern	(1) P.22-23
		(2) develop alternatives with reduced human and/or environmental impact	(2) P.12-13
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	With an objective of actively complying with environmental and social governmental regulations, we always check the establishment or revisions of relevant domestic and foreign laws and regulations as well as international agreements following our 'Regulation for Management of Environment Safety Law' and promptly reflect them in the internal policies. In addition, we are actively participating in and cooperating with newly proposed policies. For instance, we have been participating in the GHG emission trading system since 2015 when it was first implemented in Korea and sharing our opinions including areas of improvement through public hearings, government forums, and seminars. We have signed business agreements with public institutions that lead the emission trading system, including the Korea Environment Corporation, and are actively cooperating with them for business advancement such as the work of improving emission calculation errors and reducing the review period.

GRI Content Index

Classfication	GRI Standard	Disclosure Indicators	Page
GRI 102: General Public Disclosures	102-1	Name of the organization	4
	102-2	Activities, brands, products, and services	6-11
	102-3	Location of headquarters	4
	102-4	Location of operations	4-5
	102-5	Ownership and legal form	4-5
	102-6	Markets served	4-5, 6-11
	102-7	Scale of the organization	4-5
	102-8	Information on employees and other workers	4, 71-76
	102-9	Supply network	50-51, 78-79
	102-10	Significant changes to organizations during the reporting period and major changes in the supply network	About This Report
	102-11	Specify precautionary policy and principle	81-84
	102-12	Membership in external associations	95
	102-13	Associations (industrial association), domestic or international sponsors	95
	102-14	Statement of the highest decision maker	2-3
	102-17	Value, principle, code of conduct, and norm of organization	4, 26-27, 40
	102-18	Governance structure	42-45
	102-23	Whether the chairman of the highest governance organization is holding a concurrent position	43
	102-34	Characteristics of important matters reported to the highest governance structure and the number of reports submitted	44
	102-40	List of stakeholders	15
	102-41	Ratio of workers to which the collective agreement is applied	29
	102-42	Stakeholder identification and selection criteria	15
	102-43	How stakeholders participate	15
	102-44	Key topics and concerns raised	15
	102-45	All companies included in the organization's consolidated financialstatement	About This Report
	102-46	Defining report content and topic Boundaries	14
	102-47	List of material topics	14
	102-48	Modification of information on the previous report	68-69, 71
	102-49	Changes in reporting	About This Report
	102-50	Reporting period	About This Report
	102-51	Recent report issue date	About This Report
	102-52	Reporting cycle	About This Report
	102-53	Contact information for the inquiry of report	About This Report
	102-54	GRI standard options	About This Report
	102-55	GRI index	89-92
	102-56	External assurance	93-94
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	6-13
	103-2	The management approach and its components	6-13
	103-3	Evaluation of the management approach	6-13

LIFESTYLE INNOVATOR | Appendix

Risk Management **Sustainable Management Index** Third-Party Verification Statement Affiliated Organizations and Principles

Classfication	GRI Standard	Disclosure Indicators	Page
GRI 201: Economic Outcome	201-1	Creation and distribution of economic value	67-68
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	38-39
	103-2	The management approach and its components	38-39
	103-3	Evaluation of the management approach	38-39
	205-1	Operations assessed for risks related to corruption	78
GRI 205: Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	40-42, 77
	205-3	Confirmed incidents of corruption and actions taken	78
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	48-49
	103-2	The management approach and its components	48-49
	103-3	Evaluation of the management approach	48-49
GRI 301: Materialsc	301-3	Reclaimed products and their packaging materials	79
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	16-17
	103-2	The management approach and its components	16-17
	103-3	Evaluation of the management approach	16-17
GRI 302: Energy	302-1	Energy consumption within the organization	68-69
	302-4	Reduction of energy consumption	19-20
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	16-17
	103-2	The management approach and its components	16-17
	103-3	Evaluation of the management approach	16-17
GRI 303: Water	303-1	Interactions with water as a shared resource	68-69
	303-3	Water recycled and reused	68-69
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	16-17
	103-2	The management approach and its components	16-17
	103-3	Evaluation of the management approach	16-17
GRI 305: Emission	305-1	Direct greenhouse gas emissions	69
	305-2	Indirect greenhouse gas emissions	69
	305-5	Reduction of GHG emissions	19-20, 69
	305-7	Emission of other major air contaminants such as Nox and Sox	20-21, 69
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	16-17
	103-2	The management approach and its components	16-17
	103-3	Evaluation of the management approach	16-17
GRI 306: Effluents and Waste	306-2	Waste by type and disposal method	21, 68-69
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	16-17
	103-2	The management approach and its components	16-17
	103-3	Evaluation of the management approach	16-17
GRI 307: Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	70

Classfication	GRI Standard	Disclosure Indicators	Page
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	48-49
	103-2	The management approach and its components	48-49
	103-3	Evaluation of the management approach	48-49
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	50, 79
	308-2	Negative environmental impacts in the supply chain and actions taken	50, 79
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 401: Employment	401-1	New employee hires and employee turnover	71-72
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	31
	401-3	Parental leave	72
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	32-33
	103-2	The management approach and its components	32-33
	103-3	Evaluation of the management approach	32-33
GRI 403: Employment	403-1	Workers representation in formal joint management–worker health and safety committees	75
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	74
	403-4	Worker participation, consultation, and communication on occupational health and safety	35-36
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 404: Training and Education	404-1	Worker participation, consultation, and communication on occupational health and safety	30, 73
	404-2	Programs for upgrading employee skills and transition assistance programs	30-31
	404-3	Percentage of employees receiving regular performance and career development reviews	30, 73
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	71
	405-2	Ratio of basic salary and remuneration of women to men	28, 72
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 406: Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	28, 77
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 407: Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	29

LIFESTYLE INNOVATOR | Appendix

Risk Management   Sustainable Management   **Third-Party Verification**   Affiliated Organizations
                   Index   **Statement**   and Principles

Classfication	GRI Standard	Disclosure Indicators	Page
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 408: Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	26
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 409: Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	26
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	24-25
	103-2	The management approach and its components	24-25
	103-3	Evaluation of the management approach	24-25
GRI 412: Human Rights Assessment	412-1	Operations that have been subject to human rights reviews or impact assessments	76
	412-2	Employee training on human rights policies or procedures	28, 73
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	50, 79
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	52-53
	103-2	The management approach and its components	52-53
	103-3	Evaluation of the management approach	52-53
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	61-65
	413-2	Operations with significant actual and potential negative impacts on local communities	27
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	48-49
	103-2	The management approach and its components	48-49
	103-3	Evaluation of the management approach	48-49
GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	50, 79
	414-2	Negative social impacts in the supply chain and actions taken	50-51
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	32-33
	103-2	The management approach and its components	32-33
	103-3	Evaluation of the management approach	32-33
GRI 416: Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	34-35
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	38-39
	103-2	The management approach and its components	38-39
	103-3	Evaluation of the management approach	38-39
GRI 418: Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	45-47
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	38-39
	103-2	The management approach and its components	38-39
	103-3	Evaluation of the management approach	38-39
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	41-42, 77

Third-Party Verification Statement

To the Readers of KOLON INDUSTRIES SUSTAINABILITY Report 2019

Foreword

Korea Management Registrar Inc. (hereinafter "KMR") has been requested by of KOLON INDUSTRIES Inc. to verify the contents of its KOLON INDUSTRIES SUSTAINABILITY REPORT 2019 (Hereby referred to as "the Report"). Kolon Industries is responsible for the collection and presentation of information included in the Report. KMR's responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

Verification Methodology

Kolon Industries describes its efforts and achievements of the corporate social responsibility activities in the Report. KMR conducted based on SRV1000 from KMR Global Sustainability Committee and SRV1000 from KMR Global Sustainability Committee as assurance standards. The assurer's assurance team (hereinafter "the assurance team") evaluated the adherence to Principles of Materiality, Understandability, Reliability and the reliability of specified sustainability performance information. In addition, the assurance team checked whether the Report satisfied the 'Core Option' requirements of GRI Standards Guidelines.

Scope and Standard

The team checked whether the Report has been prepared in accordance with the 'Core Option' of GRI Standards which covers the followings.

■ GRI Standards Reporting Principles
■ Universal Standards
■ Topic Specific Standards

- Management approach of Topic Specific Standards
- Economic Performance : 201-1
- Anti-Corruption : 205-1, 205-2, 205-3
- Materials : 301-3
- Energy : 302-1, 302-4
- Water : 303-1, 303-3
- Emissions : 305-1, 305-2, 305-5, 305-7
- Effluents and Waste : 306-2
- Environmental Compliance : 307-1
- Supplier Environmental Assessment : 308-1, 308-2
- Employment : 401-1, 401-2, 401-3
- Occupational Health and Safety : 403-1, 403-2, 403-4

- Training and Education : 404-1, 404-2, 404-3
- Diversity and Equal Opportunity : 405-1, 405-2
- Non-Discrimination : 406-1
- Freedom of Association and Collective Bargaining : 407-1
- Child Labor : 408-1
- Forced or Compulsory Labor : 409-1
- Human Rights Assessment : 412-1, 412-2, 412-3
- Local Communities : 413-1, 413-2
- Supplier Social Assessment : 414-1, 414-2
- Customer Health and Safety : 416-1
- Customer Privacy : 418-1
- Socioeconomic Compliance : 419-1

This Report excludes data and information of joint corporate, contractor etc. which is outside of the organization, i.e. Kolon Industries, among report boundaries.

LIFESTYLE INNOVATOR | Appendix

Risk Management   Sustainable Management   Third-Party Verification   **Affiliated Organizations**
                  Index   Statement   **and Principles**

Affiliated Organizations and Principles

Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows:

- Reviewed overall report
- Reviewed materiality test process and methodology
- Reviewed sustainability management strategies and targets
- Reviewed stakeholder engagement activities
- Interviewed people in charge of preparing the Report

Our conclusion

- Materiality

  - The Report includes all important reporting boundaries under Kolon Industries operation and presents specific and long-term CSR strategy and targets. Kolon Industries is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues nor any critical stakeholder group left out in this process.

- Understandability

  - Being prepared in sustainability context, the Report specifies the targets on sustainability issues which are identified through the materiality evaluation process, and presents the backgrounds of selection of the critical issues and the management approach. And the Report explains the performance indicators in more detail and comparable way.

- Reliability

  - The assurance team identified errors in some data and information, and Kolon Industries completed the modification before finishing the final version of the Report. We judge the data and information in the Report to be correct and reliable, and the assurance team could not find any evidence that Kolon Industries counter measures to critical stakeholder issues were inappropriately recorded in the Report.

Recommendation for improvement

We hope the Report is actively used as a communication tool for stakeholders and we recommend the following for improvements.

- Kolon Industries organized and ran sustainability campaigns such as weDO and RECODE and provided a detailed report on innovations for future growth. It also corrected flawed performance data by business covered in the previous sustainability report, enhancing reliability, while presenting detailed metrics considering the ESG trend. We recommend that Kolon Industries separate quantitative indicators and KPIs for reliability and report the economic value distribution for different stakeholders for accuracy.

KMR **SRV** SRV1000
Sustainability Committee Assurance

Dec, 22th, 2020 Eun Ju Hwang   *E. J Hwang*

Name of Association	Communication Channel	Join Year
Korea Employers' Federation	Management and Planning Team	1990.01
Association of Economic Organizations	Management and Planning Team	1990.01
Anyang Chamber of Commerce	Personnel Team	1997.07
IMI International Management Institute	Personnel Team	1990.01
ASIA BUSINESS COUNCIL	Personnel Team	1990.01
Federation of Korean Industries	Management and Planning Team	1990.01
Korea Economic Research Institute	Management and Planning Team	1990.01
Korean Trade Association	Personnel Team	1990.01
Korea Packing Association	Business and Planning III	1993.01
Korea Industrial Technology Association	Technology Division	1993.01
Korea AEO Association	Management and Planning Team	2011.05
Emergency Planning Division	Emergency Planning Division	1989.05
Gwacheon Veteran's Association	Materiality Division	1997.06
Polymer Society of Korea (CPI)	CPI	2012.01
Korea Chemicals Management Association	Technology and Planning	1997.03
GPRA Meeting (Global Phenolic Resins Association)	HIRENOL	2007.11
Korea Foundry Society	HIRENOL	2013.01
Korea Petrochemical Industry Association	Personnel Team	1977.04
Korea Management Association Registrations & Assessments inc.	Organization Development Team	2007.04
Korea Productivity Center	Organization Development Team	2007.04
Korea Business Archery Association	Archery Team	2012.01
Korean Geosynthetics Society	SPB Team	2009.01
Fair Competition Federation	Legal Team	2013.07
National Museum of Korea	Personnel Team	2016.08
Korea Exchange	Technology Division	2016.01
Korea P.E.T. Film Industry Council	Business and Planning III	2013.01
Korean society for Quality Management	Technology DivisionGDI	2017.04
Korea Personal Improvement Association	WICAN DO	2013.01
Korea Printed Circuit Association (KPCA)		2013.01

KOLON INDUSTRIES