Road to Sustainability

2023 Sustainability Report

HYUNDAI

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Interactive PDF

This report has been published as an interactive PDF, allowing readers to move quickly and easily to pages in the report, and including shortcuts to the related web pages.

ESG Magazine

What moves us:
The 2023 Hyundai Motor Company ESG Magazine illustrates Hyundai's "Progress for Humanity". For the irreplaceable Earth and for a sustainable future for which generations to come will be grateful, the progress continues. And what enables our innovation is "humanity.

CEO Message

In its pursuit of progress for humanity, Hyundai Motor Company will continue embracing boundless challenges and spearheading innovation.

On behalf of Hyundai Motor Company, I would like to express my heartfelt gratitude to all our customers, employees and business partners who have contributed so invaluably to the growth and progress of our enterprise.

In 2022, our company achieved a record 143 trillion won in sales and 9.8 trillion won in operating profits — a historic milestone for Hyundai Motor Company. This proud achievement is a testament to our hard-won efforts to expand sales, particularly of our high-value-added models, notwithstanding a supply shortage of major components such as semiconductors and heighted market competition stemming from an economic slowdown.

Our sales in Europe saw a notable 6.5 percent year-on-year increase, reflecting our growing market share in the European Union's electric vehicle (EV) segment. In the United States, we significantly increased our market shares across major regions, with our flagship luxury brand Genesis setting historic sales records for two years running. Furthermore, Hyundai's EV brand IONIQ won the prestigious World Car of the Year award for the IONIQ 5 (in 2022) and the IONIQ 6 (in 2023) due to their world-class quality and safety standards.

In terms of sustainable management, Hyundai Motor Company has made comprehensive efforts to strengthen its Environmental, Social and Governance (ESG) initiatives. On the environmental side, we have worked to steadily expand our sales of EVs, achieving an 8 percent year-on-year increase in EV sales and selling 200,000 units. This has brought our company one step closer to achieving our carbon neutrality target for 2045. On the social front, we have thoroughly evaluated diverse ESG-related risks in our supply partners' operations and supported them to upgrade their ESG management capabilities, with a view to creating a more responsible and sustainable value-chain ecosystem. As for governance, we have made serious efforts to implement frameworks for enhancing our governance structure, including instituting outside evaluations of our board of directors' operations as well as compliance systems.

On the back of these efforts, Hyundai Motor Company came out on top in the ESG evaluation (the Dow Jones Sustainability Indices) of the automotive industry by S&P Global last year. In addition, we have made it onto the Dow Jones Sustainability World Index for two consecutive years.

In an era of growing demands for and regulation of ESG activity around the globe, establishing an ESG-centered approach to management has become a vital requirement in the corporate world. Going forward, this trend is only likely to intensify as sustainable economic growth gains importance. Not only are major corporations disclosing their ESG information publicly, but the oversight and management of ESG initiatives throughout their supply chains are also becoming regularized. As such, ESG management is the new norm — it has a direct bearing on legal compliance risks as well as reputation and financial risks and thus lays the groundwork for sustainable growth.

As a leader in ESG efforts, Hyundai Motor Company has set out to fundamentally transform its system of operations, implementing a long-term strategy of sustainable growth, continuous innovation and proactive engagement with various stakeholders. In order to live up to the rigorous standards expected of us, we will significantly bolster our company-wide ESG-related capabilities throughout the entire company as well as our supply chains and make substantive progress within our organization.

Dear friends, partners and supporters,
Hyundai Motor Company will usher in the future by ceaselessly taking on challenges and innovating in response to rising economic uncertainties and risks. We will fulfill our corporate social responsibilities with a spirit of fairness, integrity and collaboration. And we will build bridges of solidarity, mutual trust and unconstrained communication with all our stakeholders.

Just as small droplets come to form a vast ocean, Hyundai Motor Company will make good on its promises and fulfill its potential for the benefit of humanity and Earth itself. I would like to cordially ask for your continued support and encouragement in this meaningful endeavor.

Thank you.

Jaehoon Chang
President and CEO, Hyundai Motor Company

Company Overview

Hyundai Motor Company has been providing customers with the best products and services possible ever since its establishment in 1967. We will continue to strengthen our business capabilities with the goal of growing into a “smart mobility solution provider” based on sustainability management. Moreover, we build customer trust through “quality” and based on that, we will provide “SMART”, sustainable mobility experiences as our differentiators, and thus realize our brand vision of connecting people with quality time.

Overview of Hyundai Motor Company

Company Name	Hyundai Motor Company
Date of Establishment	Dec. 29, 1967
Date of IPO	Jun. 28, 1974
Headquarters	12, Heolleung-ro, Seocho-gu, Seoul, 06797, Korea
CEOs	Euisun Chung, Jaehoon Chang, Dong Seock Lee
Key Business Area	Automobile manufacturing
Stock Exchange	Korea Exchange (KRX) stock market

* As of the end of 2022; Based on K-IFRS consolidated financial statements

Credit Ratings

DOMESTIC	
Korea Ratings	AA+
NICE Investors Service	AA+
Korea Investors Service	AA+

OVERSEAS	
Moody’s	Baa1
S&P	BBB+

* As of the end of 2022

Key Financial Figures

SALES REVENUE (Unit: KRW billion)

2020	103,997.6
2021	117,610.6
2022	142,527.5

KRW 142,527.5 billion

OPERATING PROFIT (Unit: KRW billion)

2020	2,394.7
2021	6,678.9
2022	9,819.8

KRW 9,819.8 billion

NET PROFIT (Unit: KRW billion)

2020	1,924.6
2021	5,693.1
2022	7,983.6

KRW 7,983.6 billion

TOTAL ASSETS (Unit: KRW billion)

2020	209,344.2
2021	233,946.4
2022	255,742.5

KRW 255,742.5 billion

TOTAL EQUITY (Unit: KRW billion)

2020	76,341.0
2021	82,615.8
2022	90,896.5

KRW 90,896.5 billion

Global Best-selling Models

(Unit: Vehicles)

Tucson
570,058

Elantra (AVANTE)
367,209

Santa Fe
218,688

Sonata
134,752

Accent
133,847

* As of the end of 2022

Global Network

Hyundai operates production plants, technology research institutes, and design centers in major overseas markets. We sell vehicles across the globe, with around 6,200 sales networks in approximately 184 countries.

Asia & Pacific

1 Hyundai Motor Group (China) Ltd.
2 Beijing Hyundai Motor Company
3 Hyundai Motor Technology And Engineering Center (China), Ltd.
4 Hyundai Truck & Bus (China)
5 Beijing Zingxian motor Safeguard Service Co
6 Hyundai Top Selection Used Car Co., Ltd.
7 Hyundai Motor Global Tooling in China CO., Ltd.
8 Genesis Motor China
9 Hyundai Motor Japan R&D Center
10 Hyundai Motor Japan
11 Hyundai Motor India Headquarters
12 Hyundai Motor India Engineering Center
13 Hyundai Thanh Cong Commercial Vehicle Joint Stock Company
14 Hyundai Motor ASEAN Headquarters
15 Hyundai Motor Manufacturing Indonesia
16 Hyundai Motor Manufacturing Indonesia
17 HLI Greenpower
18 Hyundai Thanh Cong Manufacturing Vietnam
19 Hyundai Motor Oceania Headquarters
20 Hyundai Motor Group Innovation Center in Singapore
21 HTWO Guangzhou
22 Hyundai Thanh Cong Vietnam Joint Stock Company
23 Advanced & Digital R&D Center China
24 China Commercial Vehicle R&D Center
25 Hyundai Motor Thailand, Inc.
26 Hyundai Motor Philippines, Inc.

Middle East & Africa

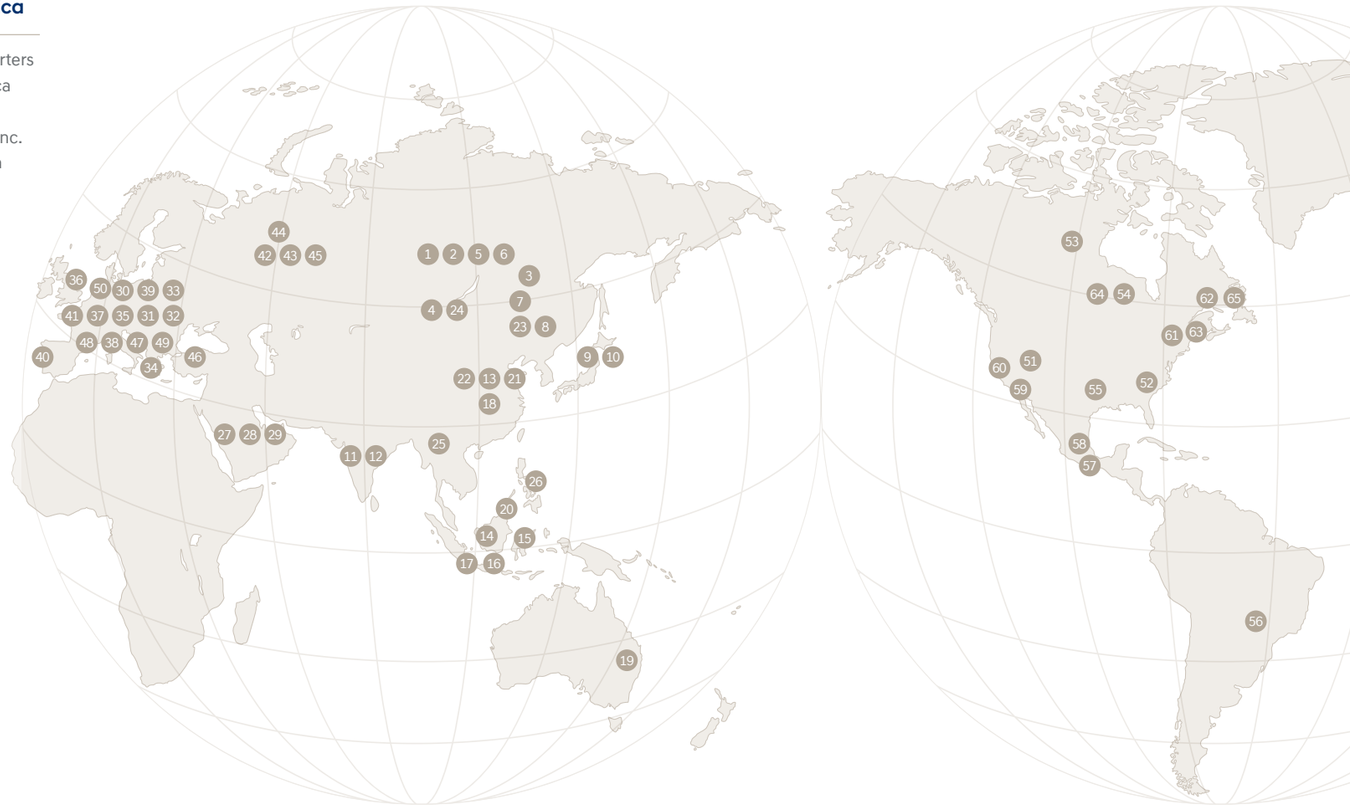
27 Hyundai Motor M.East & Africa Headquarters
28 Africa & Middle East Quality Center
29 Genesis Middle East & Africa

Europe

30 Hyundai Motor Europe Headquarters
31 Hyundai Motor Manufacturing Czech
32 Hyundai Motor Czech
33 Hyundai Motorsport Gmbh
34 Hyundai Motor Company Italy
35 Hyundai Motor Deutschland Gmbh
36 Hyundai Motor United Kingdom
37 Hyundai Motor France
38 Hyundai Motor Europe Technical Center
39 Hyundai Motor Poland
40 Hyundai Motor Espana
41 Hyundai Motor Netherlands B.V.
42 Hyundai Motor Russia & CIS Headquarters
43 Hyundai Motor Commonwealth Of Independent States
44 Hyundai Motor Manufacturing Russia
45 Hyundai Truck & Bus Russia
46 Hyundai Assan Otomotiv Sanayi Ve Ticaret A.S.
47 Genesis Motor Europe
48 Hyundai Hydrogen Mobility
49 Europe Quality Center
50 Hyundai Motor Company Brussels Office

North America, Central & South America

51 Hyundai Motor North America Headquarters
52 Hyundai Motor Group Metaplant America
53 yundai Auto Canada Corp.
54 Hyundai·Kia America Technical Center, Inc.
55 Hyundai Motor Manufacturing Alabama
56 Hyundai Motor Central & South America Headquarters
57 Hyundai Motor de Mexico
58 Hyundai de Mexico
59 Hyundai Translead
60 Hyundai Motor America
61 Hyundai Motor Company Washington Office
62 Motional
63 Supernal
64 North America Quality Center
65 Boston Dynamics



* As of April 2023

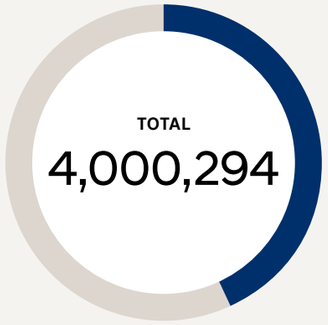
Business Performance

Hyundai sells vehicles through directly-operated branches across Korea as well as dealerships. To increase sales, we implement customer top priority management, marketing aimed at enhancing brand value, and on-site-tailored sales promotions. We implement innovative activities to respond to consumer needs in the contactless era by making continuous effort to discover new mobility-oriented businesses in line with changes in domestic consumer trends. In overseas markets, we are implementing distinctive sales strategies that reflect the market environment by base through overseas subsidiaries. Despite the COVID-19 pandemic and semiconductor supply setbacks, we are focusing on enhancing brand power by digitalizing the sales process based on future retail strategies, strengthening brand image through brand campaigns, expanding the sales network centered on high-quality dealers, and strengthening online marketing and CSV activities.

Production and Sales

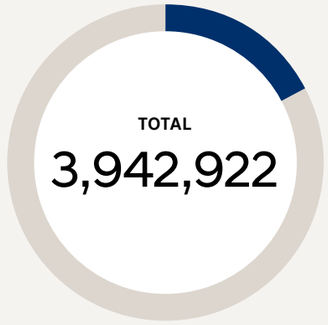
(Unit: Vehicles)

PRODUCTION



● Domestic **1,732,639** ● Overseas **2,267,655**

SALES

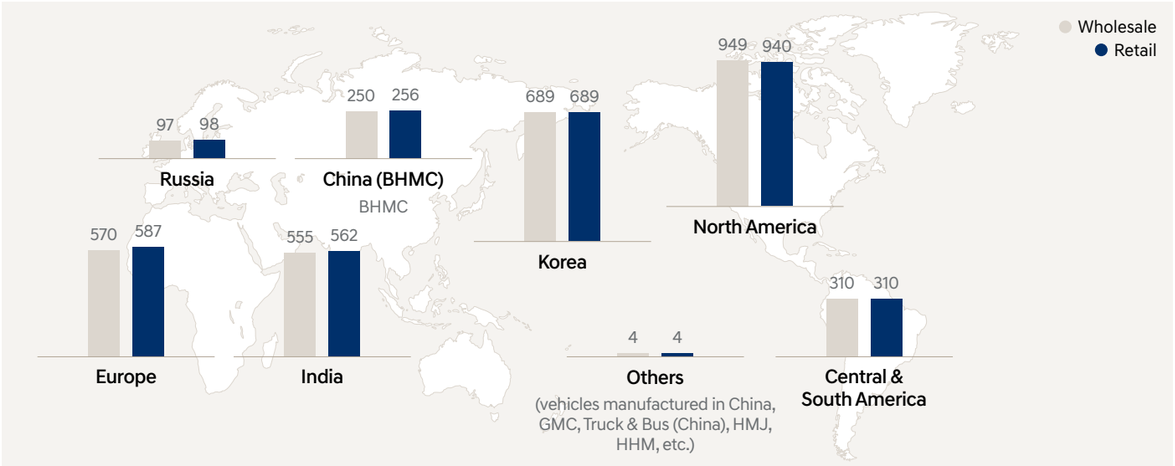


● Domestic **688,884** ● Overseas **3,254,038**

* Based on wholesale

Sales by Major Market

(Unit: 1,000 vehicles)



* As of 2022

Sales of Eco-friendly Cars

TOTAL SALES VOLUME (Unit: Vehicles)

EV, HEV, PHEV, FCEV
506,793

GLOBAL SALES (Unit: Vehicles)

Domestic
139,432

Overseas
367,361

SALES BY MODEL (Unit: Vehicles)

EV
210,352

FCEV
11,217

HEV, PHEV
285,224

* As of 2022; and wholesale basis

Business Performance

Business Review in Major Markets

Korean Market

Market Condition

In 2020, the Korean market recorded new vehicle sales of 1.89 million units, a 5.7% increase over 2019, on the back of an individual consumption tax reduction policy and increased launch of new vehicles despite COVID-19 impact. In 2021, however, new vehicle sales decreased 8.4% from 2020 to record 1.73 million, mainly attributable to supply issues of semiconductors for vehicles as a result of global supply chain setbacks. Supply chain instability continued in 2022, resulting in new vehicle sales of 1.69 million, a year-on-year decrease of 2.3%.

Business Review

In 2022, Hyundai sold 690,000 units, a year-on-year decrease of 5.2%, as a result of production setbacks caused by global supply chain instability. Our market share decreased 1.3% year-on-year to record 40.7% but we strived to improve sales profitability by increasing the proportion of high value-added model sales, including the Genesis and SUVs, and by increasing sales of the new Grandeur that was launched at the end of the year. In addition, to respond to customer needs, we became the first in Korea to adopt a Direct to Consumer (D2C) online sales method, while strengthening the Genesis brand lineup to lead the luxury car market in Korea. In 2023, we will successfully launch the planned new model lineup and focus on increasing our market share.

Market share

40.7%

Total sales

688,884 units

Sales of eco-friendly cars

139,432 units

US Market

Market Condition

Overall sales decreased in the US market in 2020 as a result of production and sales setbacks due to COVID-19 and worsened consumer sentiments. However, the upper middle class used low interest rates to purchase high-priced SUVs and pickup trucks, leading to upward alternative consumption. Sales grew in the first half of 2021 as the market became free of the COVID-19 pandemic shock, but sales remained low in the second half of the year due to semiconductor supply shortage. In 2022, inventory shortage issues continued as a result of global semiconductor shortage led to a 7.8% decrease from 2021 to record sales of 13.899 million units.

Business Review

In 2022, Hyundai sold 781,000 units in the US market, recording a year-on-year decrease of 0.9%, with a market share of 5.6%. Market share rose 0.4%p year-on-year on the back of strong sales of SUV models, including Tucson and Santa Fe, as well as Genesis models such as the GV70. In 2022, the G90 was named as Car of the Year by MotorTrend, and Hyundai was named Best SUV Brand by U.S. News & World Report. Hyundai is thus proving product excellence by winning various awards.

Market share

5.6%

Total sales

780,675 units

Sales of eco-friendly cars

98,443 units

* Retail basis

Asian Market

Market Condition

In China, a total of 21.056 million units of cars were sold in 2022. In major manufacturing regions, including Changchun and Shanghai, manufacturing was suspended after March to prevent the spread of COVID-19, leading to a significant decrease (-17.5%) in sales from March to May. However, on the back of consumption policies, including a purchase tax reduction in June and expansion of new energy vehicle license plates, 2022 annual sales recorded a year-on-year increase of 5.9%. In India, sales rose 22.9% over 2021 to record 3.82 million units owing to base effects from standby demand caused by COVID-19 and semiconductor supply setbacks. This is a record-high annual sales performance that exceeds 3.37 million units recorded in 2018.

Business Review

In China, Hyundai sold 250,000 units in 2022, a 28.5% decrease from 2021, and recorded a market share of 1.2%. In 2021 and 2020, Hyundai sold 350,000 and 440,000 units, respectively, and recorded a market share of 1.8% and 2.3%. In India, sales of most vehicles, including major SUV models such as Venue and Creta, rose in 2022, on the back of which Hyundai sold 553,000 units, a year-on-year rise of 9.4%, with a market share of 14.5%. We are making active efforts to continue balanced growth of sales, services, and brands from a long-term perspective in India.

Market share

CHINA 1.2%

INDIA 14.5%

Total sales

CHINA 250,423 units

INDIA 552,512 units

* Wholesale basis

European Market

Market Condition

Total sales in Europe were 11.961 million units in 2020, mainly attributable to production and sales setbacks as well as worsened consumer sentiments due to COVID-19. In 2021, a total of 11.775 million units were sold, a year-on-year decrease of 1.5%. In 2022, supply setbacks triggered by semiconductor supply shortages and the spread of COVID-19 variants impacted sales, leading to a year-on-year reduction of 4.1% in sales to record 11.287 million units. Overall demand declined as a result of semiconductor supply shortages, but BEV sales rose 28.0% and accounted for 12.1% of overall vehicle demand.

Business Review

Hyundai's sales volume in Europe was 505,000 units in 2021, recording a market share of 4.3%. In 2022, we sold 538,000 units (based on Western Europe), a year-on-year increase of 4.0%, on the back of continued strong sales of the IONIQ 5 and Tucson PHEV. We are reinforcing our position in the European market based on technological prowess and design excellence. As a leading example, the Genesis GV60 was named German Premium Car Of The Year 2023. In addition, the IONIQ 5 was named 2022 German Car Of The Year in the "new energy category" and UK Car of the Year, thus proving Hyundai's quality competitiveness.

Market share

4.2%

Total sales

586,680 units

Sales of eco-friendly cars

214,719 units

* Retail basis

ESG Direction of Hyundai Motor Group

Guided by Hyundai Motor Group's social responsibility message "The Right Move for the Right Future" which includes the Group's ESG management commitment and mid- to long-term direction, we share a story of a sustainable future for humanity, the environment, and society. A sustainable future is an obligation we should pursue for the next generation, a basic right that everyone on Earth should be able to enjoy, and a desirable future that everyone dreams of. The Group's social responsibility message incorporates the Group's commitment to lead the right "move" through the "right" action to this end. For this commitment to lead to actual change, there is a need to clearly set internal and external ESG requirements and key management indexes per major agenda item. To this end, Hyundai Motor Group clearly presents a direction for change through three major mid- to long-term directions – "Move for Our Planet, People, Community" – and 15 key management areas. Starting in 2023, we have developed and applied the HMG ESG Index, the Group's common management index, based on 15 key management areas. Going forward, we will continue to build a culture of sustainability in our organization and improve ESG performance.

Sustainability in Hyundai Motor Group

The Right Move
for the Right Future

Move for
Our Planet

Global Environment

The Right Move for Our Planet

- Carbon Neutrality & Energy Transition
- Circularity
- Clean Tech Products & Services
- Operational Eco-efficiency
- Natural Capital Conservation

Move for
Our People

Internal Stakeholders

The Right Way for Our Growth

- Diversity & Inclusion
- Human Right
- Corporate Culture Innovation
- Talent Growth Experiences
- Occupational Health & Safety

Move for
Our Community

External Stakeholders

The Right Change for Our Society

- Social Impact
- Customer Experience Innovation
- Product Quality & Safety
- Sustainable Supply Chain
- Job Creation for the Future

Move

Hyundai Motor Group has been helping people to "move" and creating the world's "movement" since its founding. "Move" is therefore a heritage of the Group and it also services as a pivot that connects the past, present, and future into one.

Right

Hyundai Motor Group thinks and acts in a "right" way in the pursuit of progress for sustainable environment and humanity. "Right" therefore symbolizes the Group's sustainable philosophy.

ESG Governance

Hyundai is strengthening management activities to preemptively identify and remove risk factors related to ESG, and explores new business opportunities and strives to secure a new competitive edge by strategically using various ESG factors. Based on ESG governance, we discuss pending issues at the Sustainability Management Committee under the BOD, the highest decision-making body, and the ESG Committee. In addition, we encourage each organization to autonomously strive for ESG improvement by establishing a performance goal for each working-level division and reflecting the performance in KPIs, thereby building a culture of ESG.

Sustainability-Centered Decision-Making and Communication

Establishment of ESG Governance

In line with the ESG paradigm, where ESG management has become a prerequisite for sustainable growth, Hyundai established ESG governance for strengthened ESG-centered decision-making and cooperative relations, and operates the Sustainability Management Committee and the ESG Committee, a small meeting group within the Hyundai Business Strategy Meeting that is participated in by top management. We also operate the ESG Council, in which business divisions related to major pending ESG issues participate to discuss improvement measures and share information on improvement performance to manage ESG risks and performance.

Sustainability Management Committee

The Sustainability Management Committee consists of a total of eight directors - seven independent directors, one internal director. It discusses diverse policies concerning practicing sustainability management and maintaining insider trading transparency; implementing business ethics and making ESG performance improvements; and protecting shareholder rights and interests. It also deliberates and decides on strategy, activity, performance, and target plans from a professional perspective. In addition, the Committee discusses major plans concerning safety and health, which are steadily gaining importance, and examination of plan execution. An independent director (Chi-Won Yoon) who is in charge of protecting shareholder rights and interests in the Sustainability Management Committee attends investor meetings in Korea and non-deal roadshows (NDRs) for overseas investors to promote communication between the BOD and shareholders. Investor demands and suggestions concerning ESG are reflected in the company-wide ESG policy and strategy-establishing process.

ESG Committee

Hyundai has established the ESG Committee within the Hyundai Business Strategy Meeting that is participated by the CEO and top management. Top management in each area discuss implementation directions and action plans on ESG tasks and issues, and review the implementation status and major performance. The ESG Committee manages risks by such ESG area as carbon neutrality, resource circulation, protection of human rights, spread of ESG across the supply chain, and social contribution, while also managing and supervising performance improvement activities.

In regards to matters identified as matters that require deliberation/approval from the top decision-making body after the review or management/supervision by the ESG Committee, we set them as agenda of the Sustainability Management Committee. Those matters include major pressing risk factors and matters that require improvements because they are aligned with mid- to long-term business strategies.

ESG Council

Hyundai has formed the ESG Council, consisting of working-level employees per division concerning environmental (E), social (S), and governance (G), including climate change, quality and safety, talent development, social contribution, and ethical management. The ESG Council discusses the ESG implementation direction and plan per division, carries out risk reduction and performance improvement activities, and shares information on pending matters and performance. In principle, the ESG Council is held regularly for the purpose of sharing information on the implementation status and performance of each division. It is also run frequently for ESG information disclosure, response to external evaluations, and response to pending issues concerning business.

Sustainability Management Team

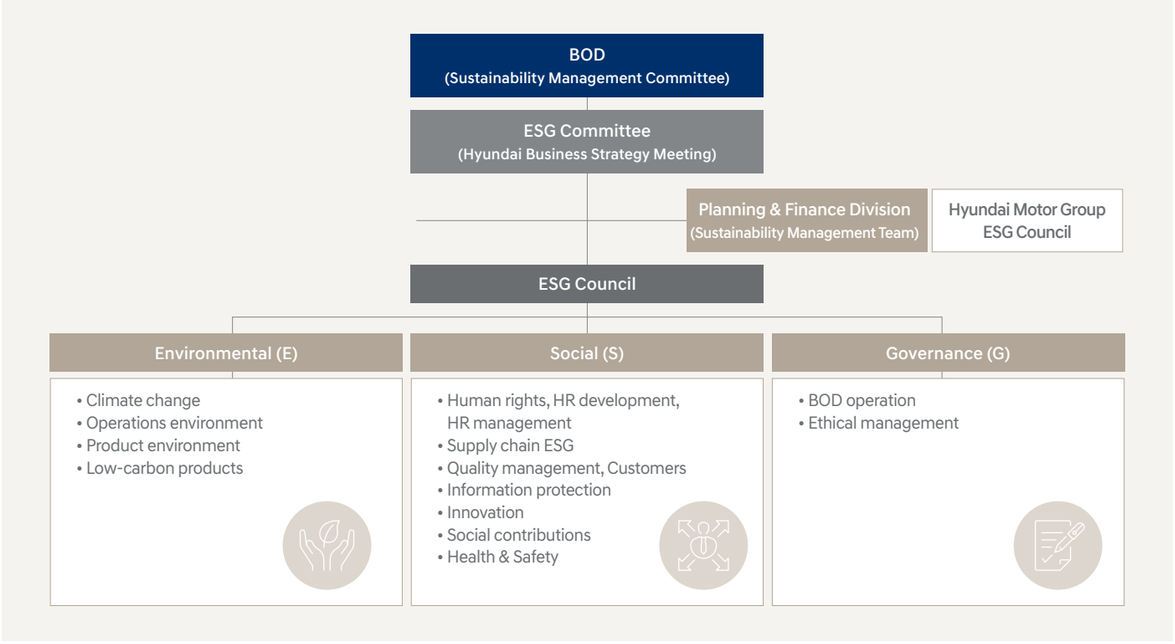
The Sustainability Management Team, under the Planning & Finance Division, handles company-wide planning, management, and cooperation of ESG management. Its tasks include establishment of an ESG management system, organizational internalization, establishment of a cooperation system, and external disclosure and communication. To advance the ESG management system, the Team is establishing ESG management indexes and a data platform, and helps each division design ESG KPIs. In addition, it identifies matters that require performance improvements and handles collaboration/mediation so that working-level employees can make improvements. It is also in charge of stakeholder communication, including sustainability report publication ad external ESG assessment.

ESG Performance Management

Hyundai is adopting an ESG performance management system aimed building a culture of ESG to generate business effectiveness and positive social influence through ESG management. We set KPI per strategic ESG task and regularly (on a quarterly, semiannually, annually basis) examine performance. The execution status of strategic ESG tasks and achieved performance are handled as important factors in the process of evaluating the performance of top management and employees.

We plan to identify and adopt KPIs that identify ESG risks that may arise from entering new markets, developing new business, and conducting projects and that preemptively prevent/manage ESG risks that have a high possibility of occurrence or high business impact.

BOD Composition



Key ESG Activities and Achievements

Hyundai identifies and improves ESG issues that are important for Hyundai's sustainable growth and fulfillment of social responsibilities. We also focus on managing ESG issues that have a high impact on our business operations and stakeholder lives. In 2022, we sold 506,793 eco-friendly vehicles and conducted a life cycle assessment (LCA) on 16 models in line with zero-carbon product goal, and as part of our RE100 implementation, Hyundai Motor Manufacturing Czech (HMMC) achieved 100% transition to renewable energy. We declared our Diversity & Inclusion Policy and confirmed an increase in the percentage of female executives, managers, and technical staff as a result. To manage supply chain ESG risks, we conducted a document-based assessment on 1,704 suppliers and an onsite due diligence on 38 suppliers. To establish sound, transparent governance, we carried out a third-party evaluation on BOD composition and operation, appointed additional female and foreign nationality directors, and established an Audit Committee approval process for non-audit service contracts with external auditors.

Journey Towards Sustainability

Overall ESG

- **Announced Hyundai Motor Group's social responsibility message**
  - Set 3 major mid- to long-term directions - Move for Our Planet, Move for our People, Move for our Community - and 15 key management areas
- **Developed HMG ESG Index and Conducted a pilot assessment**
  - Established a key performance index to improve the ESG level of the Group affiliates and for systematic internalization
- **Established an ESG platform (in-house ESG information management system)**
  - Established the "integrated ESG platform" by putting together global disclosure standards and ESG evaluation indexes for systematic company-wide ESG data management
- **Conducted an ESG NDR**
  - Held an ESG-specialized NDR for global investors concerning our ESG management performance and future plans (for 28 institutional investors for 10 days)

Environmental

- **Recorded 506,793 units of eco-friendly vehicle sales in 2022**
  - Recorded global annual sales of 210,352 EVs and 11,217 FCEVs in 2022
- **Increased the number of models subject to LCA**
  - Conducted the 2022 LCA on a total of 16 models, including all Genesis models, IONIQ 6, and NEXO
- **HMMC achieved RE100**
  - HMMC completed the transition from electric energy used in the manufacturing process to 100% renewable energy
- **Water reuse indicated a year-on-year increase of 5%**
  - 2,284,154 tons of water were reused in 2022 with a reuse ratio of 21% (2,179,600 tons in 2021)

Social

- **Disclosed the Hyundai Diversity & Inclusion Policy and the Non-Discrimination & Anti-Harassment Policy**
  - Established principles aimed at realizing the values of employee diversity & inclusion and preventing issues/incidents related to workplace human rights
- **Genesis ranked No. 1 in US Initial Quality Study (IQS)·US Vehicle Dependability Study (VDS)**
  - Ranked No. 1 in 2022 in IQS and VDS premium brand, thus proving top-level quality and safety technologies
- **Recorded continuous increase in female executives, managers, engineers**
  - The ratio of female executives, managers, and engineers continued to increase as a result of efforts to expand employee diversity and to build an inclusive organizational culture

    * Total female executive ratio (5.38% in 2020 → 5.62% in 2021 → 6.37% in 2022)
- **Strengthened supply chain ESG management**
  - Conducted a document-based assessment on a total 1,704 tier-1 suppliers and core tier-2 suppliers and an on-site due diligence of 38 high-risk suppliers

Governance

- **Third-party assessment of the BOD**
  - Conducted a third-party assessment for an objective assessment of adequacy of BOD composition and operational effectiveness
- **Assessed the effectiveness of compliance control standards**
  - Conducted an annual effectiveness assessment through an external expert to examine whether the compliance control system is operated effectively
- **Enhanced BOD diversity**
  - Appointed an additional female independent director with expertise (labor-management, law) and an additional director with a foreign nationality (global business)

  * 2 female directors, 2 directors with a foreign nationality
- **Established a process for non-audit services by external auditors**
  - Established a process to receive the Audit Committee's approval beforehand to sign a non-audit service contract with an external auditor to strengthen independence of external auditors

Key ESG Activities and Achievements

Hyundai actively responds to ESG ratings of domestic and overseas capital markets, including the S&P(DJSI), MSCI, Sustainalytics ESG Risk Ratings, Korea Institute of Corporate Governance and Sustainability (KCGS), CDP Climate Change & Water Security. We also increasingly disclose information about our ESG performance based on the SASB Standards, TCFD Recommendation, and WEF Stakeholder Capitalism Metrics for external communication of our ESG management level. In addition, through on/offline communication with regulatory agencies, institutional investors, and non-profit organizations in Korea and abroad, we confirm major stakeholders' ESG management demands or expectations towards Hyundai. We use the results of collecting stakeholder opinions to better implement ESG management.

ESG Assessment and Initiatives

DJSI World Index

Hyundai received recognition for its outstanding ESG management in Corporate Sustainability Assessment (CSA) by S&P Global and was included for two consecutive years in the DJSI World Index as of 2022. In particular, we generated outcomes in such indices as environmental efficiency improvements, including water consumption, strategic HR management, and sustainable brand, and received the No. 1 ranking in the industry. Our inclusion in the DJSI World Index is the result of active ESG performance generation activities in accordance with our mid- to long-term sustainability management direction. We will continue to establish measures to improve our ESG management level and communicate with various stakeholders.

CDP Climate Change & Water Security

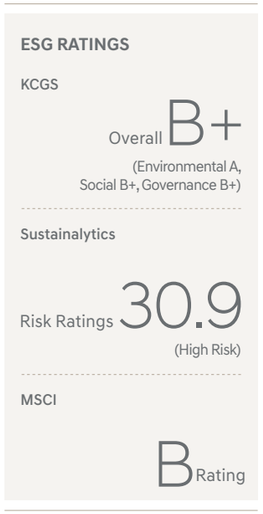
Hyundai has been implementing 2045 carbon neutrality strategy, continually expanding the electrified vehicle lineup, switching to renewable energy at our operations, operating low-carbon/eco-friendly manufacturing processes, and advancing water treatment facilities at our domestic and overseas operations. In recognition for such environmental management practiced from a mid- to long-term perspective, we earned the Leadership A, the highest rating, in Water Security from Carbon Disclosure Project (CDP) in 2022. We also received the Leadership A- score in Climate Change. Accordingly, we received the Grand Prize in the water resources management and Sector Honors in the carbon management at the 2022 CDP Korea Awards. We will continue to make active efforts to reduce GHG emissions and protect water resources throughout the entire process that ranges from acquisition of raw materials to end-of-life treatment.

Hydrogen Council

The Hydrogen Council is the first global CEO council which was formed to emphasize the role of hydrogen technology in the energy transition across the globe. Launched during the World Economic Forum (Davos Forum), it consists of around 150 global companies, including Hyundai Motor Company, Toyota, BMW, and Air Liquide, and discusses activities aimed at successfully implementing the goals of the Paris Agreement that was adopted at the UN Climate Change Conference in 2015 (COP21). In particular, Euisun Chung Executive Chairman of Hyundai Motor Group served as the co-chair in 2019 and 2020, taking active part in supporting national and private-level cooperation around the world to realize a hydrogen economy. We are now still playing an active role as a member company.

Korea H_2 Business Summit – Corporate Council on Hydrogen

Hyundai is participating in the Korea H_2 Business Summit, the largest private-sector hydrogen council in Korea, as a key member. The vision of the Korea H_2 Business Summit is to hasten Korea's transition to a hydrogen society, with Korea's leading companies performing central roles, and to lead the global hydrogen economy. In particular, it is providing support to facilitate balanced development of the overall hydrogen economy ecosystem by removing investment uncertainties, ranging from hydrogen production to use, through close cooperation among companies. In addition, it is striving to advance the Korean economy's transition to a hydrogen economy by enabling timely execution of business and investment opportunities that require considerable capital.



ESG Communication

CEO Investor Day

In June 2023, we held the CEO Investor Day and presented our new strategy, the "Hyundai Motor Way." The Hyundai Motor Way includes our financial, electrification, and future business strategies to take leadership in the EV market by achieving innovation based on Hyundai's unique heritage. We have set a goal to achieve 2 million units of EV sales and 10%+a of EV profitability, as well as mid- to long-term investment plan totaling KRW 109.4 trillion for ten years (2023-2032), including KRW 35.8 trillion in electrification. We seek to gain top-tier EV leadership by adopting a modular architecture, implementing an electric vehicle manufacturing method that uses existing plants and builds new EV-dedicated plants, and establishing a value chain and strengthening design capabilities in all areas of battery. We will build a hydrogen ecosystem through a Hyundai affiliate-level hydrogen toolbox and carry out continued research and investments in future businesses, including autonomous driving, SDV, robotics, and AAM, to solidify our status as a "smart mobility solution provider." We will achieve our brand vision, "Progress for Humanity," through people-centered innovation by developing our technological prowess that has continued from the past.

ESG Non-Deal Roadshow

In August 2022, we held an ESG roadshow for global investors to explain about the ESG implementation status and future plans and to listen to opinions, including requirements for Hyundai. In addition to sharing information on the execution status of our 2045 carbon neutrality strategy, including RE100, and electrification strategy, including expansion of electric vehicle sales, we explained about our activities to reuse water in regions with high water resource risks. In addition, we transparently shared information on prior inspections and training to strengthen product quality and safety, measures to manage human rights risks of operations, and supplier ESG risk diagnosis and due diligence plans. In consideration of the capital market's interest in ESG and influence, we will continue to regularly hold events where our ESG status and performance are shared, including NDRs.

Hyundai x FIFA World Cup 2022™

Hyundai's sustainability vision is to create a sustainable world more efficiently through solidarity. During FIFA World Cup 2022™, we ran the Goal of the Century campaign in which soccer fans participate and practice sustainable actions under the slogan of a "United World for Sustainability". In particular, through the Hyundai Goal of the Century Program, participants made a pledge to practice an eco-friendly activity if a country in the World Cup Finals that he/she roots for makes a score. Many soccer fans across the globe took part in the program as a way to create a sustainable future. In addition, we provided official vehicles to each country's national team players, VIPs, and officials, and more than half of the provided vehicles (some 230 units) were eco-friendly vehicles, including the IONIQ 5, Tucson HEV, Kona HEV, and ELEC CITY, helping develop FIFA World Cup 2022™ into a sustainable festival.

ESG Non-Deal Roadshow

Hyundai x FIFA World Cup 2022™

Stakeholder Engagement

Hyundai categorizes its stakeholder groups into seven – customers/dealers, employees, suppliers, local communities, government, shareholders/investors – in consideration of automotive industry characteristics and pending issues, and operates various communication channels by comprehensively considering each stakeholder group's major matters of interest and anticipations towards Hyundai. We encourage active stakeholder participation and communication, and reflect major stakeholder opinions in our management decision-making process, including business plans, thereby strengthening management transparency and credibility. We will continue to build mutually sound relations, such as by facilitating stakeholder exchange and transparently providing important information.

Stakeholder Participation and Communication Channel Optimization

Stakeholder Participation Process Hyundai has set in place various channels to facilitate stakeholders' participation and collect their opinions. Among opinions received through different channels, pending matters concerning our mid- to long-term business strategies and business activities, and issues with high social/environmental impact are reported to the ESG Committee (Hyundai Business Strategy Meeting) and Sustainability Management Committee (under the BOD). Matters that are determined as being important as a result of an internal review and deliberation are applied to the business operation process or are addressed through improvement activities. We conduct monitoring on a regular basis to figure out whether the matters are applied to the business operation process and improvement activities are implemented. If deemed necessary to inform stakeholders of the implementation status and progress, we faithfully deliver the information.

Establishment of plan	→	Collection of opinions	→	Internal report	→	Improvement activities	→	Monitoring
Optimize channels and methods by stakeholder		Explain activities and agenda, collect stakeholder opinions		Report issues with high business impact to ESG governance		Apply to the business operation process, derive improvement tasks		Check implementation and execution of improvement tasks

	Customers	Dealers	Employees	Suppliers	Local Communities	Government	Shareholders/Investors
Group Definition	• They purchase and enjoy Hyundai's products and services. We optimize customers' purchase/experience channels and provide top-level products and services.	• They are contact points that directly face customers and deliver Hyundai's products/services and brand value/experiences. They have partnership relations with Hyundai.	• Employees at Hyundai get involved in product development, production, sales, and support activities. Their competencies mean the company's competencies. They are internal stakeholders who also fulfill Hyundai's social responsibilities toward external stakeholders.	• They supply parts or materials to Hyundai, enabling the company to produce quality products. Their quality competitiveness impacts Hyundai's quality.	• Local communities refer to residents and civic groups and local governments in areas located close to our operations and global citizens who are influenced by our activities. Hyundai strives for their sustainable development.	• The government enacts laws and regulations that are related to the automobile industry or decides on regulation levels on corporations' business operation, so that it can influence our business activities.	• They provide finance and capital to the company, so that Hyundai can maintain sustainable growth engines while implementing diverse future business strategies or running our business.
Main Channels	• Offline base (sales/service) • Car club, influencer • Customer promotions (Motor show, exhibition, test driving) • Online (social media) • Customer satisfaction survey • Official website, app • Sports sponsorship • H-ear (Open customer communication channel)	• Online dealer portal • Dealer meetings and invitation events • Regular dealer council • Regular dealer visits by Hyundai employee in charge of regional management	• Labor-Management Council • Organizational culture diagnosis and employee satisfaction survey • On/offline grievance receipt channels • Occupational Safety and Health Committee • Meetings, events, etc. • Musculoskeletal Disorder Prevention Management Committee • Education and training related to work and safety	• Win-win growth portal site[1] • Transparent Purchase Practice Center website[2] • Win-Win Cooperation Practice Center website[3] • Global Win-Win Cooperation Center (GPC Portal)[4] • HMG Partner System[5] • Seminars and training	• Social contribution programs (volunteering participated in by residents, etc.) • Family inviting events (factory visits by employee families, etc.) • Communication with local communities nearby the company's operations (council consisting of local residents) • Recruitment program (publicize recruitment to local talent) • Events held for unity, including local cultural, sports, and art events	• Public hearings • Policy-making discussions and briefings	• Company briefing and securities firm conference • Annual Shareholders Meeting • Non-Deal Roadshow • IR meetings • Sustainability Management Committee • IR website
Major Issues	• Technology investment and development to improve product and price competitiveness • Strengthen product safety/quality management • Lead the future mobility, autonomous driving, and electrification market • Customer satisfaction • Brand image	• Expand the vehicle lineup • Dealer margin and compensation system • Technology investment and development to improve product and price competitiveness • Brand image	• Employee competency building • Employee human rights and diversity • Organizational culture and evaluation/compensation • Labor-management relations • Health and safety in the workplace	• Supply chain ESG management (assessment and improvement) • Support for supplier safety and security management • Support for supplier implementation of carbon neutrality and win-win growth	• Job creation and retention • Local community-tailored social contributions • Enhance operations environmental efficiency • Assess and protect biodiversity related to business activities • Support the local community infrastructure, including tourism promotion and facility installation	• Disseminate eco-friendly vehicles and strengthen vehicle safety • Support electrification of small- to mid-sized suppliers • Provide support for global supply chain and trade issues • Support commercialization of new businesses, including robot and AAM	• Strengthen roles of ESG governance • Mid- to long-term future business strategies • Protect shareholder rights and interests • Enhance global corporate value and improve fundamentals • BOD expertise and efficient operation • Manage climate change-related financial impact • Supply chain ESG management • Enhance employee diversity • Health and safety in the workplace

[1] Win-win growth portal site: Portal site that provides information on our win-win growth activities and support programs (notices for tier-1 suppliers, win-win growth news, notices on training and supplier recruitment information, etc.)
[2] Transparent Purchase Practice Center website: To practice transparent management and promote mutual development when trading with suppliers, we run a center for making institutional improvement suggestions and reporting matters related to transparent and ethical conduct
[3] Win-Win Cooperation Practice Center website: This website is dedicated to communication with our tier-2·tier-3 suppliers (Information on major management support and win-win cooperation programs that we provide. We also listen to suggestions and provide feedback.)
[4] Global Win-Win Cooperation Center (GPC Portal): Facilities to support suppliers' strengthening of future competitiveness (providing training support to Hyundai Motor Group and tier-1·tier-2 suppliers, providing venues for seminars and new technology exhibitions, providing training facilities and lecturers for suppliers' in-house training, etc.)
[5] HMG Partner System: Supply chain management system aimed at building a collaborative system between Hyundai Motor Group and suppliers (information-sharing, support for collaboration in the areas of production, quality, R&D, purchasing, etc.)

Stakeholder Engagement

BUSINESS CASE

Shareholder/Investor Dialogue and Engagement

Encouraging shareholder/investor engagement and exchanging feedbacks

Investors provide financial capital for the company to pursue diverse future business strategies or to maintain sustainable growth drivers in doing business. We therefore communicate with both domestic and overseas institutional investors to exchange feedbacks from the market perspective. and based on the trust with investors, we are building a foundation for sustainable future businesses. As a global automobile manufacturer and ultimately a smart mobility solution provider, we need to meet investors' investment standard in diverse categories, including carbon neutrality, supply chain management, human rights, and governance, and this makes active communication important.

Role of the BOD and top management

In Hyundai Motor Company's journey toa smart mobility solution provider and a global leading electric vehicle brand, active discussions with investors are important index and source that provide us colors of the capital market. The board and top management at Hyundai Motor Company, therefore, communicate with institutional investors on a regular basis to discuss our performance concerning business and overall ESG management.

Through Sustainability Management Committee under the BOD, directors regularly discuss ESG-related risks, status, and improvements. An independent director in charge of protecting shareholder rights participates in ESG and governance NDRs to directly talk to investors then delivers the voice of the capital market to the board. Top management is in charge of conversing the company's future business strategy and ESG management targets with investors.

Facilitating shareholder/investor communication

The Hyundai Investor Relations (IR) Team communicates Hyundai's ESG management performance and progress through NDRs, corporate briefing sessions, securities firm conferences, and investor meetings. It also listens to opinions on the ESG implementation direction that the capital market demands from Hyundai in line with the global ESG trend.

Enhancing shareholder/investor communication

Hyundai Motor Company Investor Relations (IR) Team communicates Hyundai's ESG management performance and progress to investor community through NDRs, conferences, and investor meetings. Furthermore, IR Team gets feedbacks from investors on global ESG trend that the market expects us to adhere to.

Global ESG NDR	In 2022, Hyundai Motor Company held global ESG NDR first among Korean listed companies. ESG NDR targets to discuss any ESG- related topics, which is different from quarterly NDRs in which the company covers financial performance and business results. Through this global ESG NDR, we discussed with investors our ESG improvements and mid- to long-term goals.
ESG Meetings	There is rising interest and demand for our ESG management and future strategies along with the market adding more values to ESG. In addition to engagement with domestic and overseas institutional investors, we are actively expanding scope of IR meetings with various stakeholders, including ESG rating agencies and credit rating agencies.
IR Website	Hyundai Motor Company discloses information that investors need, such as quarterly earnings materials and sales performance on the IR website.

Meeting expectations of shareholders/investors

ESG management at Hyundai Motor Company stands for a sustainable future. Investors, one of the key stakeholders, have a high level of interest on ESG enhancement, short/mid/long-term plans, and how these plans turn into actual progress. Thus, it is our utmost responsibility to present best performance aligned with the market expectation and standards.

"2045 Net Zero" announced in 2021 and "RE100" are the milestones that Hyundai Motor Company must follow. Based on our progress on these targets, investors can make investment decisions through which the investors can maintain a trust with their stakeholders. ESG investments, including those into carbon neutrality, renewable energy, adoption of eco-friendly technologies, are inevitable for a sustainable future. Through continued engagement relating to the above, we aim to sustain a trustworthy relationship.

Furthermore, Hyundai Motor Company updates ESG enhancement on a regular basis by engaging with global ESG rating agencies. Through this effort, we believe we can further enhance reputational values in addition to directly engaging with the investors and shareholders.

Monitoring Credit Rating Agencies	Hyundai Motor Company receives credit rating results from global and Korean credit rating agencies., These ratings may affect business investment decisions, including investment decisions and bond issuance. our credit rating serves as an important index in business activities. Therefore, it is important to consistently monitor and follow up with any risks regarding the ratings. Credit rating agencies focused mainly on financial performance in the past but are introducing unique evaluation indexes in line with the recent global ESG trend. This movement signifies that a company's ESG credit rating, in addition to its financial credit rating, is becoming a significant investment index to investors and other stakeholders.

Strengthening shareholder/investor trust (Risk Management)

As a global company, Hyundai Motor Company has business sites and sales networks in various countries. We must meet environmental regulations of different countries and also effectively manage the global supply chain. This regional diversity is an opportunity but also signifies that we could be exposed to risk factors. To minimize risks, we have established a corporate management system for various issues that may arise in the supply chain and are continuing to advance the system. To satisfy the environmental regulations of each country, we are actively monitoring the progress of fulfilling regulations.

We can sustain a solid relationship with investors, shareholders, and other stakeholders through an appropriate risk management. It is therefore very important to take appropriate and effective measures when a risk arises and to also establish measures to prevent recurrence. When a risk becomes an issue, we are not hesitant to share the mitigation progress and results on our IR website or through a shareholder letter in order to assure confidence and trust to investors. Hyundai Motor Company will continue to be transparent, and preemptive regarding disclosure so that the trust with investors is maintained.

Going Forward

Based on the vision, "Progress for Humanity," Hyundai Motor Company is leading the progress into a sustainable future through means such as innovative mobility experience. Through stakeholder engagement including investors, we aim to share ESG enhancement progress and future strategies both regularly and consistently. Ultimately, we will actively communicate with investors to highlight our genuine endeavor and investment into a sustainable future.

Materiality Analysis

Hyundai conducted the 2023 materiality analysis to identify material issues – leading the transition to eco-friendly/electric vehicles, efforts to reduce GHG emissions, enhancement of global corporate value, diffusion of human rights management, and strategic management of supply chain ESG. They have continuity with the material issues in the last report. “Leading the transition to eco-friendly/electric vehicles” was chosen as the most important issue this year, reflecting anticipations toward the eco-friendly and electrification transition strategies of Hyundai as the leader of the future mobility industry amid a global trend of switching to EVs. In addition, “diffusion of human rights management” and “strategic management of supply chain ESG” were chosen as top issues against the backdrop of an increasing need to manage global supply chain human rights risks and expanding normative demand concerning human rights assessments.

Selecting Material Issues Based on Double Materiality

STEP 01.

Forming a pool of ESG issues

To identify material issues that are material in business/financial aspects and also have a high level of influence on stakeholders, we analyzed global economic, social, and environmental topics as well as international standards. As a result, we derived a sustainability issue pool of 45 issues.

Financial Materiality

Benchmarking	Analyze material issues of sustainability reports by companies in the same industry
Agenda reported to C-level	Analyze agenda items reported to Hyundai’s top management
Five-year material issues	Analyze material issues of sustainability reports disclosed in the last five years
Employee survey	Analyze issues with financial materiality to Hyundai

STEP 02.

Assessing the materiality of ESG issues

We used various assessment methodologies to determine priority from the double materiality perspective for the pool of 45 issues, and quantified each result of analysis.

Impact Materiality

International standard index	Analyze domestic and overseas standards, including GRI and SASB
Internal/External expert survey	Analyze issue influence from a third-party perspective
Media research	Analyze 35,776 major media articles that were published in 2022
External stakeholder survey	Analyze issues with impact materiality

STEP 03.

Measuring the impact of ESG issues

To identify issues with financial materiality and issues that have potential/actual/negative/positive impact on external stakeholders, we conducted a stakeholder survey that reflected the double materiality concept. In particular, to determine impact materiality, we expanded the external stakeholder survey target and advanced survey questions from the previous year. We quantified the likelihood, scale, and scope indexes of issues based on global guidelines, including GRI 2021 and draft ESRS, and reflected them in issues’ impact scores.

Overview of stakeholder survey

Period	March 29 – April 14, 2023 (around 2 weeks)
Method	Online survey
Target	External stakeholders and Hyundai employees
Details	Assess ESG issues that have a high level of importance and influence on Hyundai and stakeholders

Composition of stakeholder survey respondents

Internal employees	75 persons
Outside stakeholders[1)]	107 persons
Internal/external experts	22 persons
Total	204 persons

[1)] Collected opinions from domestic and overseas investment institutions, local communities/NGOs, government-related agencies and evaluation organizations, suppliers and Hyundai affiliates, customers, and general consumers

STEP 04.

Selecting material issues

We determined each issue’s priority through a materiality analysis. For material issues derived through the process, we disclosed each issue’s management direction, key performance, and mid- to long-term plan through our sustainability report.

STEP 05.

Review by the top decision-making body

2023 materiality analysis results will be reported to responsible governance (C-level executives). Regarding the management plan, key performance, and mid- to long-term plan for sustainability (ESG) issues, we will go through a process of making a report to the Sustainability Management Committee and receiving approval.

Approach to Apply Double Materiality

ESG Issue Research

External ESG evaluation index
- Conduct research on domestic and overseas ESG risk and performance evaluation agency’s requirements and evaluation criteria
  - DJSI, MSCI, Sustainalytics, etc.

ESG disclosure index
- Conduct research on principles, standards, and guidelines aimed at facilitating ESG information disclosure in domestic and overseas
  - GRI, SASB, TCFD, etc.

Financial & Impact Materiality

Financial materiality
- Issues that must be managed by Hyundai with importance to generate financial performance
  - Hyundai’s material issues in the last five years
  - Benchmarking of information disclosure in the same industry
  - ESG agenda reported to C-level
  - Employee survey

Impact materiality
- Issues that must be managed by Hyundai with importance to manage external impact
  - Domestic/overseas evaluation and disclosure index
  - Status of media exposure, including the press
  - Internal/external expert interviews
  - External stakeholder survey

Impact Measure

Impact on Hyundai
- Consider the possibility of impact on Hyundai’s financial and business performance
- Identify business areas that cause social and environmental impact

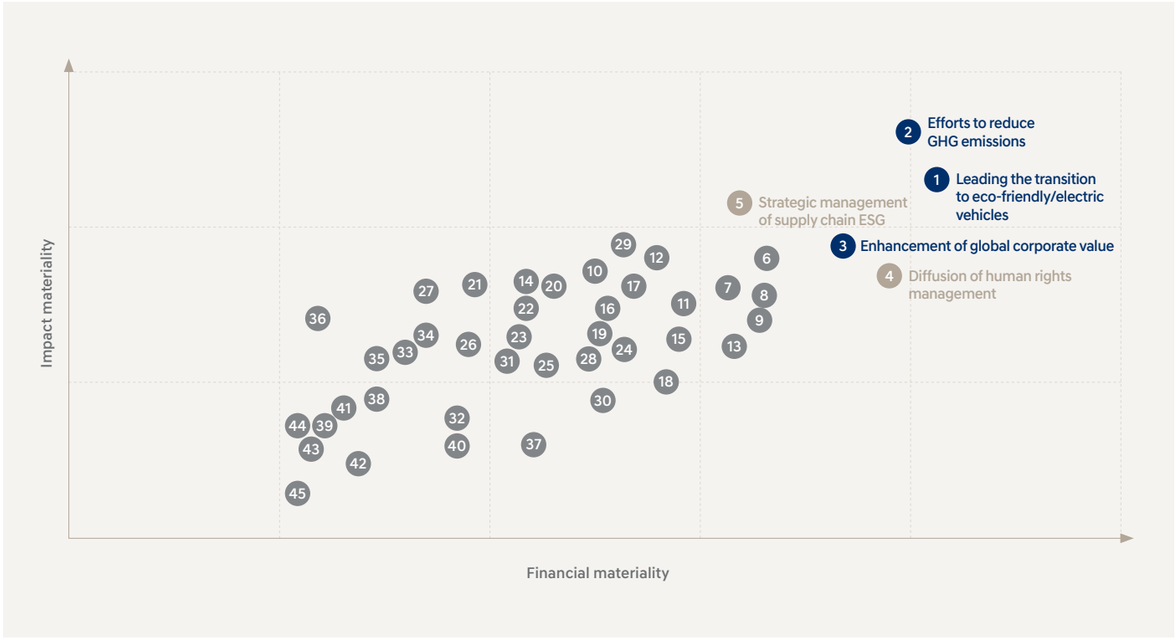
Impact on stakeholders
- Measure the likelihood of impact that material issues have on external stakeholders (likelihood)
- Measure the size of impact that material issues have on external stakeholders (scale)
- Identify key external stakeholders who will highly likely be impacted by material issues

Double Materiality Analysis Results

Top 5 material issues

Materiality Analysis

Materiality Analysis Results



Results of selecting 2023 material issues

No.	Issues
1	**Leading the transition to eco-friendly/electric vehicles**
2	**Efforts to reduce GHG emissions**
3	**Enhancement of global corporate value**
4	**Diffusion of human rights management**
5	**Strategic management of supply chain ESG**
6	Sound labor-management relations
7	Risk management system
8	Establishing an environmental management system
9	Strengthening production and product quality
10	Strengthening ESG governance
11	Establishing a climate change response system
12	Industrial health and safety
13	Fair BOD composition
14	Organizational culture and compensation
15	Strengthening ethics and compliance management

No.	Issues
16	Strengthening shared growth and win-win cooperation
17	Strategic workforce plan
18	Collecting and recycling end-of-life vehicles/ second life EV batteries
19	Customer experience innovation
20	After-sales service management
21	Strategic social contributions
22	Employee competency building
23	Enhancement of employee diversity
24	Brand ESG strategies
25	IT/cyber security systems
26	Product Life Cycle Assessment (LCA)
27	Improving resource efficiency at business operations
28	Responsible minerals (conflict minerals) monitoring
29	Open innovation
30	Efforts for eco-friendly purchase

No.	Issues
31	Climate change risk management (physical/transition)
32	Protection of shareholder rights
33	Efficient BOD operation
34	Biodiversity assessment and protection
35	Personal information protection system
36	Participating in global ESG initiatives
37	Expanding eco-friendly material input
38	Water management
39	Response to global fuel economy regulations
40	Air/water pollutant management
41	Financial impact of climate change
42	Environmental management system certification
43	Reduction of hazardous chemicals
44	BOD and management compensation
45	Establishing committees within the BOD

Results of selecting 2022 material issues

No.	Issues
1	**Carbon neutrality & Expansion of renewable energy**
2	**Supply chain ESG risk management**
3	**Technological innovation**

No.	Issues
4	**Strengthening product safety and quality management**
5	**Expanding the EV lineup**

Aligning material issues with management compensation

	Target	KPIs	Relevant Goals
Leading the transition to eco-friendly/electric vehicles	C-Level executives responsible for related divisions, including CEO and CFO	• Expand eco-friendly product sales • Promote eco-friendly product-related activities	• Eco-friendly product sales ratio of 17%* or more by 2023 *Based on managerial accounting • Increase the number of models subject to LCA
		• Increase EV sales volume and sales ratio	• Sell 2 million units of electric vehicles by 2030
Efforts to reduce GHG emissions		• Establish a system for carbon neutrality implementation and increase renewable energy use	• Realize carbon neutrality in the overall value chain by 2045 • Achieve 100% renewable energy transition for electricity consumed at all global business sites by 2045
Enhancement of global corporate value		• Financial profit and loss, profit margin, market share, and brand power achievement level	• Strengthen profitability and enhance brand value
		• Strengthen the hydrogen energy business' value chain growth foundation • Reorganize global factories to optimize EV production	• Achieve 34% of global EV production in 2030 through global factory reorganization • Establish Hyundai Motor Group's mid- to long-term hydrogen business strategies and phased roadmap

Materiality Analysis

Management of Material Issues

Material issues	Background of issue selection	Major activity and impact metric	Cause of the impact			External stakeholders / Impact areas evaluated				Issue management and performance	Mid- to long-term goal and plan	Page
			Business site	Supply chain	Product & service	Environment	Local community	Consumer	Supplier			
Leading the transition to eco-friendly/ electric vehicles[1]	• Accelerating transition to eco-friendly, electrified vehicles, attributable to major country's strengthening of fleet's average CO_2 emission standards for automotive companies or fuel economy regulations as well as policies that prohibit ICEV sales • Increased consumer expectation towards reduction of CO_2 emissions during the vehicle operation	• Electrified vehicles' CO_2 and air pollutant reduction effects compared to ICEVs: 58.1% reduction (KRW 19.8 billion reduction effect) * Based on internal research conducted in 2018 Reducing social costs with eco-friendly vehicles	●	●	●	●	●	●	●	• Hyundai established a mid- to long-term roadmap to transition from the previous internal combustion engine-centered portfolio to an electrification portfolio, and is expediting development of technologies and launch of vehicles. In case of commercial vehicles, such as buses and large trucks with high carbon emissions, we will build an electrification lineup for all models by 2028. Beginning with the transition to 100% EVs in Europe by 2035, we will expand the region, while also strengthening FCEV lineup after 2023. – Sold 506,793 electrified vehicles in 2022 – Sold 210,352 EVs (98,583 units of IONIQ 5) in 2022 – Sold 11,217 FCEVs in 2022	• 100% Electrification in main markets by 2040 • 100% Electrification in European market by 2035 • 100% Electrification of Genesis by 2030 • Sell 2 million EVs in 2030	P. 28-31
Efforts to reduce GHG emissions[1]	• Increased importance of reducing GHG emissions in line with the global carbon neutrality trend • Adoption of strong trade regulations, including Europe's Carbon Border Adjustment Mechanism (CBAM) • Increased demand for companies to fulfill social responsibilities concerning reducing GHG emissions to minimize natural disasters caused by climate change	• Costs of responding to the emissions trading scheme regulations: approximately KRW 1.15 billion * Financial loss due to exceeding the GHG emissions allowance (around 1.46 million tons) in 2022	●	●	●	●			●	• In September 2021, we announced our plan to achieve carbon neutrality by 2045, primarily through electrification and establishment of the hydrogen society, smart cities and circular economy ecosystems. Hyundai's carbon neutrality plan includes not only the reduction of GHG emissions across our entire value chain, including the purchase and procurement of raw materials and subsidiary materials, design, production, and sales of vehicles, but also activity plans to reduce or offset GHG emissions from the incidental activities necessary for business operations outside its value chain. – Joined the RE100 initiative and set the roadmap – Established Hyundai's carbon neutrality roadmap and supplier carbon neutrality guidelines – Achieved transition to 100% renewable energy at HMMC in 2022 and HMMI in 2023	• Achieve carbon neutrality across the entire value chain by 2045 – Focusing on electrification, RE100 at business sites, and encouraging supply chain achieve carbon neutrality • Transition of all electricity consumed at all business sites around the world to renewable energy by 2045 – Aiming to achieve RE90 at all business sites by 2040	P. 25-27
Enhancement of global corporate value	• Needs for corporate value enhancement by gaining global brand competitiveness and increasing global sales • Needs for R&D investment aimed at expanding business areas to future mobility	• Support for R&D efforts for technological improvement to enhance corporate value • R&D investment in mobility software • Investments to improve product quality for consumer safety	●	●	●			●	●	• In 2022, Hyundai ranked third in global sales by strengthening its brand and improving quality. Among the global top 6 companies, we were the only company to record growth in sales volume. In addition, we increased the ratio of sales of high value-added models, including the Genesis and SUVs, improving profitability. The G90 was chosen as MotorTrend's 2022 Car of the Year, receiving global market recognition for competitiveness. – IONIQ 5 ranked first in a comparative evaluation of electric vehicles by the German automobile magazine Auto Motor und Sport (AMS) – 3 models were chosen for the 2023 IIHS safety evaluation TSP and TSP+ – R&D investment in 2022: approximately KRW 3,340.5 billion – Investment in startups through open innovation from 2017 to the first quarter of 2023: approximately KRW 1,328.5 billion – ICT investment in 2022: approximately KRW 240 billion	• Plan to invest KRW 12 trillion by 2030 in software, including connected car and autonomous driving (KRW 4.3 trillion for new business-related technology development, KRW 2.9 trillion for establishment of a big data center, KRW 4.8 trillion for open innovation, etc.)	P. 6-7

[1] According to the external stakeholder survey, 70% and more of the respondents said that the issues have "positive" or "very positive" impacts.

Materiality Analysis

Material Topic Management

Material issues	Background of issue selection	Major activity and impact metric	Cause of the impact			External stakeholders / Impact areas evaluated				Issue management and performance	Mid- to long-term goal and plan	Page
			Business site	Supply chain	Product & service	Environ-ment	Local commu-nity	Consumer	Supplier			
Diffusion of human rights management	• Increased importance of preventing human rights violations and mitigating human rights risks at business sites and supply chain • Increased stakeholder demand for companies to fulfill social responsibilities by practicing human rights management	• Establishment of a human rights risk management system to measure human rights risks that can arise during business operations • Establishment of human rights risk evaluation index based on Human Rights Policy to conduct written/on-site assessment	●	●			●		●	• Hyundai established the Human Rights Policy to prevent human rights violations and mitigate human rights risks, and demand employees, domestic and overseas manufacturing plants and sales companies, subsidiaries and sub-subsidiaries, and joint ventures to comply with the Human Rights Policy. – Ran 23 human rights training programs for employees in 2022 – Ratio of evaluation of a human rights risk among business sites was 90.4% in 2022 * Number of employees at business sites where human rights risk assessment was conducted / Total number of employees	• Advance diagnosis and due diligence index to respond to human rights risks • Hold a prior briefing session on the human rights risk diagnosis and due diligence process and index • Provide training on diagnosis and due diligence and response capacity building	P. 50-52
Strategic management of supply chain ESG	• Strengthened need to manage ESG risks that may occur in the value chain through preemptive supply chain ESG management • Increased duties to manage supply chain ESG due to international laws and regulations, including the EU Sustainability Due-Diligence	• Establishment of a supply chain ESG diagnosis and due diligence system to measure ESG risks that may occur at suppliers, including environmental pollution and serious accidents • Document-based/on-site diagnosis using supply chain ESG evaluation indexes that are based on the Supplier Code of Conduct and other initiatives		●		●	●		●	• Hyundai stipulates a code of conduct in the areas of ethics, environment, labor and human rights, health & safety, and management systems that must be observed by all suppliers that signed a contract with Hyundai. In addition, we provided training programs aimed at improving ESG awareness and relevant competencies to suppliers to prevent ESG risks in the overall supply chain and enhance the ESG management level of suppliers. We also established and operate a supply chain ESG diagnosis and due diligence system, thereby strategically managing supply chain ESG risks. – Conducted a document-based diagnosis on ESG risks for 1,680 tier-1 suppliers – Provided ESG consulting to 30 suppliers for which risks were identified in 2022 – Provided on/offline training to around 360 tier-1 suppliers in Korea to enhance their carbon neutrality response capabilities	• Complete a document-based diagnosis for all tier-1 suppliers in 2024 and expand on-site due diligence • Support the establishment of safety devices in 2024 to prevent supplier safety accidents	P. 60-62

Main Opinions of External Stakeholders

Suppliers/Group Affiliates

We hope to see the consulting aimed at helping suppliers improve their ESG management continue. In addition, we would like for Hyundai to disclose, in detail, its vision, goals, and strategies to achieve sustainable growth together with suppliers as well as supplier support measures.

We believe supply chain management is extremely important for Hyundai to achieve net zero by 2045. It is important to achieve the goal as soon as possible, but we hope to see Hyundai allocate sufficient time in accordance with the level that suppliers are currently at to establish an environment that enables smooth participation by all parties.

Customers

We hope that Hyundai will further strengthen its chemicals management system for parts and safety evaluation for customer safety. We also would like the manufacturing of many eco-friendly vehicles that can adequately respond to global environmental and carbon neutrality issues.

Government Agencies

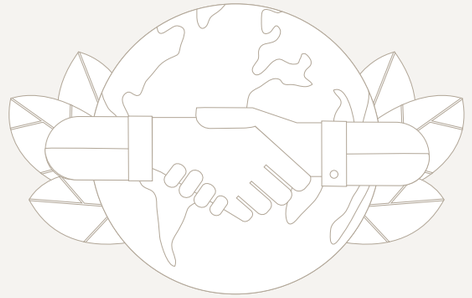
We hope to see Hyundai present customers and suppliers with balanced social rules by taking the lead in responding to environmental issues, such as global warming, and establishing sound labor-management relations. We also ask Hyundai to become a corporate role model that pursues futuristic technologies and values.

Overseas Institutional Investors

We are impressed by Hyundai's efforts to reflect the opinions of external stakeholders in the process of creating the sustainability report. We anticipate confirming the results of global supply chain management that includes all major ESG issues, such as the environment, human rights, and labor, in the form of quantitative data.

External Experts

There is a need to continually discover and review new risks, other than issues that have already become legal risks, such as human rights and supply chain ESG.



Environmental

The Earth is not only the home of mankind but also our responsibility to future generations. Hyundai has a clear understanding of its role and responsibility in reducing GHG emissions, thereby taking active parts in contributing to the global trend of achieving carbon neutrality. In particular, we are doing our best to protect the blue light of Earth with distinctive approach to climate change based on our own eco-friendly technology.

Environmental Management

Hyundai has established environmental management governance in which its highest decision-making body(C-suite) participates. We also have an environmental management system in place for sustainable business operations, including management and supervision of environmental management at the company level based on the environmental rule and policy. Environmental management enables us to respect nature capital and fulfill our corporate social responsibilities, thereby achieving sustainable growth through continued communication with stakeholders. Each business site operates an environmental management system based on international standards, and strives to manage it systematically and effectively by receiving outside certification and conducting internal audits. In particular, we establish a mid- to long-term environmental management plan to respond to climate change, expand resource circulation, and reduce pollutants. A performance evaluation system based on environmental management goals is also set in place with an aim to raise environmental management awareness and internalize it at the company level.

Composition of Environmental Management Policy

1. Overview	2. Basic principles	3. Execution system
A. Purpose of establishment	A. Raw and subsidiary materials	A. Governance
B. Application scope	B. Energy	B. Training and dissemination
C. Implementation measure	C. Water	C. Stakeholders communication
	D. Greenhouse gas	D. Performance management
	E. Waste	
	F. Waste product	
	G. Pollutants and hazardous materials	
	H. Local community	

Hyundai Motor Company Environmental Management Policy

Environmental Management System

ENVIRONMENTAL MANAGEMENT GOVERNANCE

Roles of the BOD The BOD and its subcommittee (Sustainability Management Committee) receive reports on environmental management performance as well as major risk factors and improvement activities on a permanent basis, and provide supervision. They also review and approve agenda items that are essential for business strategy execution and management activities, such as establishing mid- to long-term environmental management strategies that include carbon neutrality and making environmental investments.

Roles of the Management The Hyundai Business Strategy Meeting (or ESG Committee), in which the C-level executives participate, examine major company-wide environmental management plans and implementation status, including strategies for electric vehicle (EV) expansion and carbon neutrality, review improvement performance, discuss countermeasures for major risks, and manage other matters required to spread and disseminate environmental management. Environment-related issues that are expected to have a major impact on execution of business strategies, from among matters that are reported to the management, including the Hyundai Business Strategy Meeting, are reported to the BOD and subcommittee (Sustainability Management Committee).

Roles of the Dedicated Environmental Organization Hyundai has a company-wide supervising organization under the CEO and CSO's responsibility and an operating organization by business site in order to implement environmental management, and have two-way discussion on a regular basis for more efficient environmental management.

Company-Wide Supervising Organization The supervising organization at the head office is in charge of company-wide environmental management governance to implement sustainable environmental management in Korea and abroad. It performs diverse tasks, such as establishing a system to respond to environmental accident risks; planning and operating environmental management KPIs; responding to environmental regulation improvements; and planning and managing the supervision of environmental investment/culture/technology/training, through which it plays a central role in establishing an environmental management system, thereby achieving our environmental vision and goals.

Business Site Management Organization The environmental management organization at each business site is in charge of such roles as establishing and operating an environmental management system; enhancing business site environmental efficiency; and operating facilities to manage and reduce pollutants that occurs in the business operation process. It also implements environmental policy; identifies and addresses environmental risks; spreads and disseminates environmental management; and receives and handles environment-related grievance reports.

R&D Organization With our R&D Center performs a central role, the R&D organization is in charge of conducting R&D on environmental technology, developing eco-friendly products such as EVs, and carrying out other environmental improvement activities. Theses include reducing vehicles' carbon and tailpipe emissions by developing EVs; developing eco-friendly design which takes recycling into account; conducting life cycle assessment (LCA); developing eco-friendly materials; replacing harmful substances, and developing decarbonization technologies such as carbon capture, utilization and storage (CCUS) technology.

IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT

Environmental Management Principles We established the environmental management rule to actively practice environmental management based on recognition of the environment as a key corporate element. We periodically amend it by reflecting environmental regulations and the latest issues in Korea and abroad (recent amendment in 2022). Consisting of seven items, it includes items that we must focus on managing while implementing eco-friendly management. Key management items include responding to climate change, reducing pollutants, protecting biodiversity, preserving natural capital, and supporting environmental management of suppliers. Through this rule, Hyundai declares active efforts toward corresponding activities.

Environmental Management Policy Hyundai and all its subsidiaries and business units continually improve environmental performance according to the environmental policy and strive to minimize negative environmental impact of business activities and the overall value chain. In addition, we encourage our supply chain, including all suppliers and contract partners, to implement environmental management by recommending them to comply with our environmental management policy and providing necessary support. We place priority on compliance with environment-related laws and regulations in each country where we do business over our environmental management policy. We implement environmental management according to this policy in cases where the respective country's laws and regulations do not cover matters or do not have special clauses. We are periodically improving our environmental management policy by reflecting the establishment and amendment of laws and regulations and changes in the external market environment and corporate circumstances.

Environmental Management Execution Our environmental management is implemented based on the plan-do-check-action process that includes 1) Comply with laws and regulations; 2) Declare the environmental management policy; 3) Establish an environmental management system and adopt internal management standards; 4) Monitor and analyze environmental performance and data; 5) Identify risks and implement improvement activities; and 6) Continually improve environmental performance.

Establishment of an Environmental Management System Hyundai's all business sites in Korea and overseas plants had established an environmental management system (EMS) that meets international standards, including ISO 14001 and are obtaining certification from a third-party organization to secure the environmental management system's credibility and public confidence. Business sites that obtained ISO 14001 certification regularly receive an audit from a certification agency every year and implement improvement measures based on the audit. They also receive a renewal audit every three years. In addition, internal auditors inspect whether the environmental management system is working properly. In addition, an audit and verification are received on the environmental management system from external environmental experts, such as TÜV NORD. The supervising organization at the head office implements internal audit and performance assessment on domestic and overseas sites' environmental management.

System for Responding to Business Site Environmental Accidents and Regulations Hyundai has set in place an emergency response system to take immediate measures in the event of an environmental accident, such as air/water/waste and chemical substance leakage, based on international safety, health & environment (SH&E) standards. The head office and each business site have an emergency response organization and emergency contact system, and also have an emergency response manual that includes the status of disaster prevention facilities and equipment aimed at responding to environmental accidents and have all employees familiarize themselves with the manual. In addition, we create an alternative scenario for environmental accidents and continually conduct an emergency response drill at each department. In particular, we estimate environmental accident cases that may occur at business sites, based on which departments disseminate and provide training on actually applicable response measures. With regards to responding to regulations, a Hyundai/Kia environmental council is held every quarter through which employees in charge at each business site systematically discuss environmental regulations and response measures and respond to the regulations as part of business site environmental management.

Status of ISO 14001 Certification

Site	Term of validity
Domestic sites	2020-2023
Hyundai Motor Manufacturing Alabama (HMMA)	2021-2024
Beijing Hyundai Motor Company (BHMC)	2021-2024
Hyundai Motor India (HMI)	2020-2023
Hyundai Motor Manufacturing Russia (HMMR)	2022-2025
Hyundai Motor Brasil (HMB)	2021-2024
Hyundai Motor Manufacturing Czech (HMMC)	2021-2024
Hyundai Assan Otomotive Sanayi (HAOS)	2021-2024
Hyundai Motor Manufacturing Indonesia (HMMI)	2022-2025
Hyundai Truck & Bus China (HTBC)	2020-2023

Environmental Management

MANAGEMENT OF ENVIRONMENTAL PERFORMANCE

Management of Environmental Goals Through our environmental management implementation system, we set mid- to long-term performance goals for environmental factors that have a considerable environmental impact due to business operations, such as carbon emissions. Mid- to long-term performance goals are set in consideration of business as usual (BAU) as well as external economic circumstances, government policy direction, and internal business strategies.

To respond to climate change, we set the goal to achieve carbon neutrality by 2045 throughout the entire life cycle that ranges from raw material collection to parts procurement, production, and operation. To achieve the goal, we are implementing such strategic tasks as a strategy to transition to EVs, achieving RE100 at business sites, and reduction of supply chain carbon emissions. For quantitative improvements to environmental indexes, excluding carbon, we set improvement goals for water and wastes based on the direction of suppressing increases in water consumption and waste generation that are on the rise in connection with production that is increasing after COVID-19. In addition, we strive to reduce pollutant emissions (air: dust, NOx, SOx, THC / water quality: TOC, TP, BOD, SS) at our business sites by setting higher pollutant emissions standards than those required by law.

Evaluation of Environmental Management Performance To improve business site environmental performance, we are reflecting and managing operational efficiency improvements, energy reduction activities, adoption of renewable energy, other GHG reduction performance, and internal goals on environmental pollutants in business site KPIs. In case of business site environmental pollutants, we examine monthly emission indicators. For business sites in excess, we analyze the cause and implement improvement measures. In the area of products, we set and manage our fleet average fuel economy or CO_2 emissions, electric vehicle sales goal achievement rate, and others as KPIs.

Environmental Investment Plan and Execution Hyundai established a plan to invest a total of KRW 109.4 trillion (KRW 47.4 trillion in R&D, KRW 47.1 trillion in facility investment, KRW 14.9 trillion in strategic investment) by 2032 to achieve its mid-to long-term electrification strategy. In addition, we established a mid- to long-term investment plan that additionally invests KRW 24 trillion by 2030 to strengthen the upstream and downstream EV industry ecosystem, such as building EV-dedicated production facilities in Korea and expanding EV charging infrastructure, at the Group level. Hyundai's environmental investment budget in 2022 was KRW 667.6 billion, of which KRW 506.1 billion was executed. A total of KRW 21.5 billion was executed in 2022 as environmental facility investments to reduce the emission of environmental pollutants at domestic sites.

ENVIRONMENTAL MANAGEMENT COMMUNICATION

Training to Raise Environmental Management Awareness Hyundai operates an environmental management training course that addresses requirements specified in environment-related laws and regulations, company-wide environmental management goals and plans, outstanding cases of environmental management activities, matters required to perform major duties, and results of benchmarking relevant companies. Various opportunities are provided to employees in charge of the environment so as to enable global ESG responses, including participation in overseas forums and seminars. In addition, environmental expert ISO auditor training is provided to improve practical environment-related job competencies and to systematically manage statutory environmental training. In 2022, a total of 48,837 employees completed environmental training, and total operation hours of the programs stood at 95,372.

In addition to our employees, we provide environment-related training programs to suppliers. Through an online platform's ESG training course, we are communicating the need for environmental management and suppliers' roles. In addition, a group course and seminars are provided to offer in-depth environmental training.

Stakeholder Engagement and Consultation Hyundai conducts a stakeholder survey every year to identify sustainability issues, including environmental issues. By regularly holding an ESG Non-Deal Roadshow (NDR) for domestic and overseas investors, we are strengthening investor communication on ESG issues, including environmental issues. Furthermore, on the basis of consultation and communication with industry associations (Korea Automobile Manufacturers Association, European Automobile Manufacturers Association, etc.), environmental groups and government organizations (Healthy Seas, Korea Forest Service, etc.), we present opinions and conduct eco-friendly activities in areas related to our business.

Grievance Handling Channel We operate a channel for receiving environment-related grievance from various stakeholders, including employees. Once received, the grievance reports are handled and notified according to set procedures and standards. In particular, the ESG Committee discusses countermeasures for grievances that have a high possibility of violating laws and regulations and may cause a considerable setback in business operations or expect to have a negative impact on the local environment. Environment-related grievances can be reported to an organization exclusively in charge of the environment at each business site and key grievance-handling channel (ESG@hyundai.com).

Environmental Management Goals and Implementation Status

Classification	Mid- to long-term goal	Performance in 2022
Transition to electric vehicles	Plan to sell 940,000 EVs by 2026, 2 million EVs by 2030 Achieve 100% electrification of Genesis by 2030 Sell only EVs in Europe by 2035 Sell only EVs in main markets by 2040	• Sold a total of 506,793 units of electrified vehicles • Sold a total of 210,352 units of EVs • Sold 15,594 units of Genesis EV models
Hydrogen business synergy	Expand hydrogen mobility sales	• Sold 11,217 units of FCEVs
	Produce and supply green hydrogen	• Collaborated with H_2Pro to develop high-efficiency hydrogen production technology • Collaborated with NextHydrogen to develop a green hydrogen water electrolysis system
Carbon neutrality in our factories	Achieve RE100 by 2045	• Renewable energy accounted for 7.7% of total electricity consumption in 2022 (HMMC 100%, HAOS 51.7%, HMI 42.1%)
Carbon neutrality in our supply chain	Encourage to achieve carbon neutrality by 2045	• Conducted investigation of GHG emissions by tier-1 suppliers, and reviewed major companies' reduction plans • Distributed carbon neutrality guidelines to tier-1 suppliers • Provided training to around 360 tier-1 suppliers to strengthen their carbon neutrality capabilities

Stakeholder Engagement and Consultation

Stakeholder group	Engagement
Government Agencies	• Hyundai shares its environmental management performance with government agencies and proactively responds to changes in the direction of their policies. Overseas, the company systematically monitors and complies with each country's environmental laws and regulations.
Shareholders and Investors	• Hyundai will achieve environmental performance that meets the requirements of its shareholders and investors, thereby building long-lasting, trusting relationship and expanding investment aimed at improving its corporate value.
Supply Chain	• Hyundai shares its know-how and experience in environmental management across entire supply chain, while operating communication channels to enable continuous consultation with its suppliers aimed at creating environmental values throughout value chain.
Customers	• Hyundai provides environmental information on its products and services while reflecting opinions gathered through customer contact channels in the process of developing eco-friendly products and services.
Local Communities	• To mitigate the environmental impacts of its business operations, Hyundai collects opinions from local organizations and public-private consultative bodies, while also striving to identify and resolve grievances raised by local communities.
Employees	• Hyundai shares its environmental management principles and policies with its employees and raises their awareness of environmental management through environmental education. The company also reflects its employees' proposals to improve environmental performance.

Response to Climate Change

Hyundai responds to climate change at a company level by identifying, evaluating, and managing related risks and opportunities on a constant basis. We also have set major climate strategies through our climate change governance to analyze the potential impact of climate change on our business and respond to macroscopic changes in the business environment due to changes in laws and regulations. We identify various climate risk and opportunity factors, and preemptively respond to changing market demands through the development of eco-friendly mobility and various mobility solution technologies.

Climate Change Risk Management

CLIMATE CHANGE GOVERNANCE

Roles of BOD and Management Hyundai preemptively identifies its risks related to ESG and strengthens its management activities, while strategically utilizing various ESG factors to explore new business opportunities and develop competitive advantages. Major ESG issues, including climate change, are discussed semiannually by the Sustainability Management Committee and the ESG Committee under the Board of Directors. The ESG Committee, a subcommittee within the Hyundai Business Strategy Meeting, shares and discusses information on the company's ESG status and issues among its executive members. Important agenda items selected by the ESG Committee are presented to the Sustainability Management Committee, which reports directly to the BOD and makes decisions on important ESG issues reported to management.

Greenhouse Gas Council In order to respond to climate change and achieve its mid- to long-term goals of carbon neutrality, Hyundai has formed company-wide GHG response organizations and does its best to improve energy efficiency, expand the use of renewable energy, and improve the working environment at its business sites.

ROLES OF DEDICATED TEAMS

Company-wide Planning Team In 2021, Hyundai established the Carbon Neutrality Execution Team, a dedicated organization within the Planning & Finance Division at the head office respond to climate change more actively. The team works with relevant organizations to establish implementation strategies in various areas such as product, business site, and supply chain.

R&D Organization Hyundai also makes efforts at the R&D organization level to respond to climate change and achieve its goal of carbon neutrality. As part of these efforts, in March 2022, Hyundai entered into a joint research agreement with Aramco and KAUST on ultra-lean combustion engines and eco-friendly synthetic fuels and embarked on joint development to reduce GHG.

CLIMATE RISK AND OPPORTUNITY MANAGEMENT

Climate Risk and Opportunity Management Process Hyundai identifies, assesses, and manages risk and opportunity factors to respond to climate change issues at the company level. The climate change issues identified by each region/organization are submitted to the head office's Planning & Finance Division, which then figures out risk and opportunity factors for each issue, assesses the strategic and financial impacts of each factor on the company, and determines companywide response strategies.

Identification Stage In the identification stage, we figure out issues by region and team regarding risks and opportunities that may affect the company due to climate change at the Product Committee and the Hyundai Business Strategy Meeting.

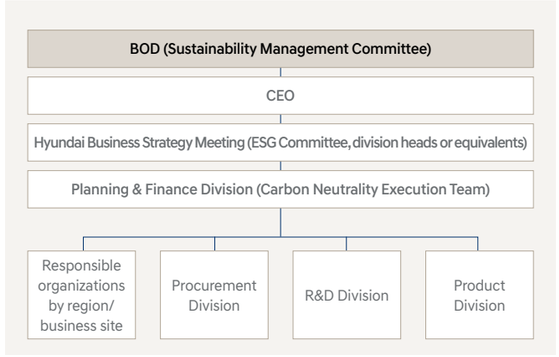
Assessment and Reporting Stage The Planning and Finance Division at the head office figures out the strategic and financial impact that factors and issues identified in the identification stage may have on the company, and depending on their materiality, reports them to the CEO or the BOD through the ESG Committee for decision-making.

Management Stage The decided climate change issues are proactively reflected in the KPIs of each working-level division of the relevant region or organization. The Carbon Neutrality Execution Team and related organizations join forces to systematically manage climate change factors in various areas.

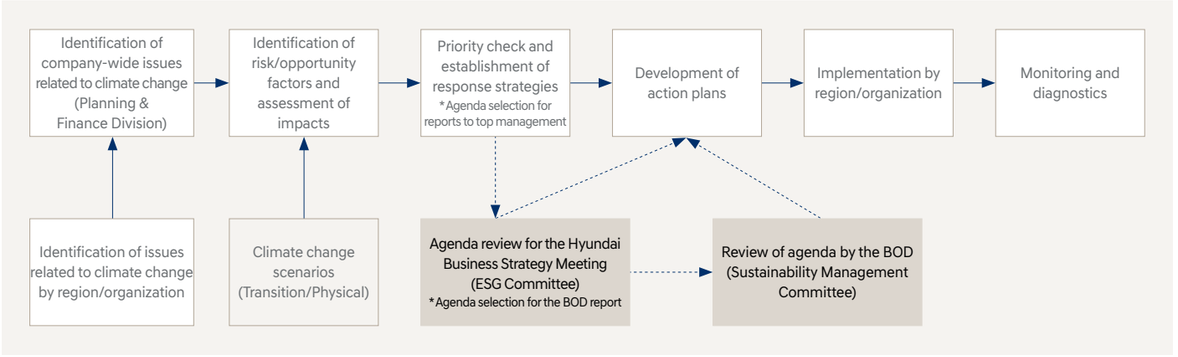
Incentives for Climate Change Management Hyundai includes climate change-related items in the KPIs of the CEO, plant managers (heads of manufacturing subsidiaries), and employees (related teams), with the results of the performance evaluation aligned with the incentive and annual salary system. The CEO performance evaluation items includes the implementation rate against carbon neutrality target and the level of establishment of carbon neutrality implementation system, while the performance evaluation items for plant managers include GHG emissions, emissions per vehicle, and RE100 target achievement rate. In addition, we have set goals related to GHG emissions reduction for employees at related teams and use them for their performance evaluation.

Target	Incentive	KPIs	KPI Details
CEO	Financial rewards (Included in bonus)	Carbon neutrality & Energy transition	1) Accomplishment rate to carbon neutrality goal 2) Level of carbon neutrality implementation system
Plant managers (Heads of manufacturing subsidiaries)		GHG emissions reduction	1) Total emissions 2) Emissions per vehicle 3) RE100 target achievement rate
Employees (Related teams)			Set goals related to GHG emissions reduction for staff at related teams and use them for performance evaluation

Climate Change Governance



Identification, Assessment, and Management Process of Climate Risk/Opportunity



Response to Climate Change

RISK ANALYSIS OF CLIMATE CHANGE SCENARIO

Scenario Analysis Methods Hyundai systematically addresses potential climate risks and opportunities through transition and physical scenario analysis. We carefully set various timeframes – short-term (1-3 years), mid-term (3-10 years), long-term (10-25 years) – which allows us to identify potential impacts on value chain stages, including domestic and overseas business sites, as well as upstream and downstream operations. We conduct annual analyses of these scenarios, utilizing the findings to develop proactive response plans.

In regard to the transition scenario, we have established our own "2045 Carbon Neutrality Plan" with the goal of electrification, hydrogen society, smart city, and circular economy ecosystem in line with the level required by IEA NZE 2050. For the physical scenario, we have evaluated the impact on our business by using RCP 8.5 (non-reduction scenario), the most conservative of the RCP (Representative Concentration Pathway) scenarios based on the concentration of CO_2 in the atmosphere. Based on the evaluation results, we set response priorities for each major issue and manage them preemptively.

Methodology for Deriving Climate Risk/Opportunity Factors

Climate scenarios in use	Scenario analysis	Application timelines	Application scope
☑ Transition ☑ Physical	☑ Quantitative ☑ Qualitative	☑ Short term (0-3 years) ☑ Medium term (3-10 years) ☑ Long term (10-25 years)	☑ Business sites ☑ Upstream ☑ Downstream
• **Transition** IEA B2DS, IEA STEPS, NZE 2050, NDC • **Physical** RCP 8.5 (baseline scenario), RCP 2.6 (below 2°C scenario), RCP 1.9 (1.5°C scenario)			• **Business sites** All global operations (including new ones, expected facility life-cycle considered) • **Upstream activities** Purchased goods and services, employee commuting, business travel, etc. • **Downstream activities** Transportation, use (customers), end-of-life treatment and recycling, etc.

Overview of Transition Risk Scenario Analysis As the damage caused by abnormal climate has increased rapidly, a number of major countries including Korea have declared their commitment to carbon neutrality. In order for them to achieve the goal of carbon neutrality, however, it is essential to reduce GHG emissions in the transportation sector. In its efforts to take active part in the eco-friendly industry, Hyundai has conducted an analysis that takes into account the requirements for carbon neutrality by 2050 and an annual average reduction rate of more than 4.2% on the basis of the IEA NZE 2050 scenario.

To meet the level required by IEA NZE 2050, we analyzed our energy consumption status and trends, based on which we derived business as usual (BAU) scenario using growth rate and regression analysis. We then calculated the amount of our GHG reduction compared to BAU and reviewed various measures to achieve the goal. First, we sought ways to directly reduce GHG emissions and estimated the reduction potential based on applicable reduction technologies. We established the RE100 roadmap, which aims to use 100% renewable energy in our global production plants by 2045. We plan to promote carbon neutrality at our business sites by improving energy efficiency for major manufacturing processes and switching to hydrogen and other eco-friendly fuels. Lastly, for areas where direct reduction is difficult, we have sought ways to offset GHG emissions and achieve the net zero goal through carbon capture utilization & storage (CCUS), a technology that captures and treats CO_2 in the atmosphere; the Hyundai Green Zone Project, a global ecological restoration project; and the marine ecosystem restoration and upcycling project.

Estimating the Damage Caused by Transition Risk Under the Paris Agreement, governments around the world are setting targets to reduce GHG emissions by 2030. Europe announced "Fit-for-55," which aims to reduce carbon emissions by 55% compared to 1990 by 2030. To comply with vehicle CO_2 emission standards, Hyundai will adopt the internationally recognized Worldwide Harmonized Light Vehicle Test Procedure (WLTP) as the standard for light vehicles. Failure to meet this standard poses the risk of lawsuits and penalties for non-compliance. CO_2 emission standards vary by type of vehicle, but if the standard is not satisfied, a penalty of "number of cars sold x amount of CO_2 exceeding the standard (1g/km)" will be incurred, which may cause significant financial damage to the company.

Overview of Physical Risk Scenario Analysis Electricity accounts for around 70% of Hyundai's Scope 1 & 2 GHG emissions. Electricity has therefore a significant impact on Hyundai's operating costs, and since electricity consumption has a direct impact on global temperature rise, physical scenarios were analyzed based on RCP 8.5, which predicted a 3-4°C increase in global temperature in the future. First, based on the World Resources Institute (WRI) scenario and the physical scenario analyzed by the Korea Meteorological Administration, we have analyzed risks posed by RCP scenarios for all our business sites in Korea, the U.S., China, India, Turkey, the Czech Republic, Russia, and Brazil.

RCP 8.5 scenario analysis shows that the failure to actively respond to physical scenarios will directly lead to an increase in operating costs, which will have a significant impact on consumer burden and our product sales due to higher production costs. Hyundai therefore recognized climate change as a critical issue and has set Net Zero and RE100 targets by 2045. We plan to actively participate in setting and implementing these goals to contribute to lowering the global GHG concentrations and minimize the risk of operating cost risks.

Estimating the Damage Caused by Physical Risks Analysis of the effects of climate change disclosed by the WRI and the Korea Meteorological Administration confirms that the global temperature is continuously rising, which means that the impact on Hyundai varies depending on the extent of the temperature rise. In the case of RCP 8.5, we have compared the operating costs in 2100 to the present, assuming a 3°C increase by 2100 compared to 2021 and a 1.5-fold increase in electricity consumption for every 0.5°C increase in global temperature. The result shows that if we do not take active part in responding to climate change, we will incur about 8.4 times more electricity costs than present.

Moreover, as climate and environmental charges have been reflected in the unit price of electricity in Korea since 2021, the rise in global temperature will act as a factor in increasing the electricity unit price, which will also increase operating costs. Assuming that the unit price of electricity increases KRW 0.3/kWh when the earth's temperature rises by 1°C, Hyundai will be affected very seriously for electricity takes large portion of its energy consumption.

Response to Climate Change

MAJOR CLIMATE RISKS AND COUNTERMEASURES

Regulatory Risk
Hyundai responds to climate change by designating and managing the laws and regulations of various countries and regions where it operates as regulatory risk. We faithfully comply with laws and regulations, preemptively respond to expected regulations according to climate change scenarios, and minimize the impact and damage.

Transition Risk
Hyundai is making various efforts to analyze the trends in the rapidly changing vehicle market and satisfy consumer preferences. Hyundai has taken the lead in expanding hybrid/plug-in hybrid EVs (HEVs/PHEVs), EVs, and fuel cell EVs (FCEVs) markets, as well as bolstering its related technology development capabilities.

Physical Risks
Due to climate change, the frequency and intensity of extreme weather events are increasing. Hyundai is equipped with a system to identify business sites that are exposed to short-term physical risks (typhoons, floods, heat waves, etc.) and long-term physical risks (changes in precipitation, sea levels rise, etc.) to take preemptive countermeasures to physical risks.

GHG Emissions Trading System

RISK FACTORS
Subject to the allocation of emission rights in accordance with the Act on the Allocation and Trading of Greenhouse Gas Emission Permits, Hyundai participates in the Korea Emissions Trading Scheme (K-ETS). Accordingly, if we emit more GHGs than allocated by the law, we must purchase rights for the shortfall or, in the event of failure to do so, pay a fine equivalent to three times the average price of allowance units. We bought allowance units in 2022 because we produced more emissions than our allowance for the year, which was about 1.46 million tCO_2-eq.

COUNTERMEASURES
In order to avoid financial losses due to excess carbon emissions, Hyundai has set a more stringent reduction target than allowed by the government while continuing to invest in GHG emissions reduction and energy conservation programs. Furthermore, when purchasing emission permits, we strive to minimize the purchase cost by selecting the most optimized option based on an analysis of transaction prices and volumes.

Accelerating the Electrification

RISK FACTORS
The EU countries gave final approval to a landmark law to end sales of new CO_2-emitting cars by 2035. The EU law will require all new cars sold to have zero CO_2 emissions from 2035, and 55% lower CO_2 emissions from 2030 versus 2021 levels. The targets are designed to drive the rapid decarbonization of new car fleets in Europe. Among the EU member countries, France will ban the sale of ICEVs from 2030 while nations around the world are tightening regulations on electrification.

COUNTERMEASURES
Hyundai has established a mid- to long-term roadmap for the transition from ICEVs to EVs and has been accelerating the relevant technology development and EV launching. Starting with Europe by 2035, we will complete the transition to 100% electrification in other regions as well, while continuing to expand our FCEV lineup. On the back of such efforts, we will achieve the goal of 100% electrification of all vehicles sold in the European market by 2035 and other major markets by 2040.

Damage to Facilities Due to Abnormal Climate Events

RISK FACTORS
Hyundai operates a facility in Alabama, located in the southeastern region of the U.S., which is susceptible to tornadoes. There is a projected substantial increase of GHG emissions by 2030 compared to 2010, which can contribute to heightened occurrences of severe climate events like hurricanes and tornadoes. These events pose a potential impact on the company's operations in the U.S.

COUNTERMEASURES
Hyundai Motor Manufacturing Alabama (HMMA) strives to minimize tornadoes damage by expanding shelter for employees, strengthening bridge superstructures, developing emergency response manual, purchasing disaster insurance, and making other various efforts.

Fleet-wide CO_2 Emission Standards and Taxation

RISK FACTORS
As part of each government's efforts to reduce GHG emissions in the transport sector in accordance with the Paris Agreement, regulations on CO_2 emission standards for vehicles sold are being strengthened along with those on corporate average fuel economy. The European Union adopted a target to reduce CO_2 emissions to 0g/km by 2035, which means that from 2035 the sale of new vehicles with internal combustion engines (ICEVs) will be banned in the EU market. If Hyundai fails to meet its CO_2 emissions target, it may incur significant additional costs in proportion to its sales volume, which will lead to higher manufacturing costs and product prices.

COUNTERMEASURES
Hyundai is focusing on improving the fuel efficiency of ICEVs of its Genesis brand and mid-to-large SUVs in response to the tightening of CO_2 emission standards and the corporate average fuel economy regulations in major markets, including EU, as well as changes in market demand due to the spread of CO_2 emission-based automobile taxation. Furthermore, to reduce the carbon emissions of all products produced by Hyundai, we are striving to improve the fuel efficiency of existing internal combustion engines in the short term while developing and distributing eco-friendly vehicles in the long term.

Promoting Eco-friendly Consumption

RISK FACTORS
According to the International Energy Agency (IEA), global sales of eco-friendly vehicles, such as EVs, exceeded 10 million units for the first time in 2022 while the trend of eco-friendly consumption by automobile consumers is strengthening as well. Demand for EV batteries are growing and is expected to rise to a maximum of 4,028 GWh by 2030.

COUNTERMEASURES
As part of our efforts to secure the highest quality batteries, we have signed an investment agreement with LG Energy Solutions to build battery cell plants together. We are also developing technology for the solid-state battery, a next-generation battery, to improve stability, mileage, and charging time of our EVs.

Water Shortage due to Reduced Precipitation

RISK FACTORS
In the long term, climate change may cause a decrease in average precipitation, which can have a significant impact on water supply shortages and rising water costs, posing risks to business operations.

COUNTERMEASURES
Hyundai has conducted a water depletion risk assessment for its major business sites in Korea and overseas, and five business sites are rated as high-risk. Accordingly, we are striving to establish a zero-wastewater discharge system in stages for the relevant business sites. The Asan Plant has taken measures such as securing sufficient water usage, reducing wastewater generation through wastewater reuse facilities, and resupplying all its reprocessed wastewater as industrial water.

Response to Climate Change

Climate Risks and Opportunities

Type		Issues	Risks	Opportunities	Response Directions	Financial Impact
Technologies		• Acceleration in competition for technology development for eco-friendly vehicles	• Strengthening fuel economy regulations worldwide • Declining market share upon failure to lead technological change	• Proving the EV technological prowess by winning global automotive awards, aimed at increasing market share	• Expanding R&D investment in FCEVs, etc. • Establishing a goal of 100% electrification for vehicles sold in major markets by 2040 • Launching brands based on E-GMP, an EV-dedicated platform	High ↑
Markets		• Increased sales of EVs and FCEVs in line with the expansion of EV markets	• Increase in procurement costs of raw materials (lithium, cobalt, nickel) due to limited supply following rising demand for EV batteries • Decrease in sales if not achieving sufficient FCEV profitability	• Achieving large potential EV/the second life EV battery customers, including car rental/car sharing/ESS[1] companies • New industrial fuel cell (ship/AAM[2]) business expansion • Increased sales of EV/FCEV models	• Diversifying supplier diversification • Conducting real-time monitoring of raw material prices • Recycling waste battery and developing the solid-state batteries • Scaling up FCEV/fuel cells	High ↑
Reputations		• Increase in demand from investors and other stakeholders to respond to climate change	• Failure to disclose climate change information and lack of response to climate change leading to a decline in brand image, withdrawal of investment and customer attrition	• Raising brand image and securing investment through active climate change information disclosure and response	• Disclosing climate data transparently • Participating in international initiatives such as CDP • Joining RE100 and promoting carbon neutrality goal by 2045 • Encouraging the Group affiliates and suppliers to participate in climate change response	Mid-high ↗
Legal		• Tightening fuel economy regulations for ICEVs	• Increased response costs due to fines imposed on non-compliance with regulations • Degradation of brand image, withdrawal of investment and customer attrition due to fuel economy-related lawsuits	• Reduced regulatory response costs through fuel economy innovations	• Monitoring peer litigation cases • Conducting research on fuel efficiency improvement and joint development of new energy parts with suppliers • Promoting fuel efficiency improvement by vehicle unit	High ↑
Regulation	Current	• Emissions Trading Scheme	• Penalties due to emission in excess of emission allowances	• Generating revenue through the sale of spare credits	• Increasing use of renewable energy • Establishing a management system for the entire process including emission forecast and reduction	Mid →
	Emerging	• Strengthening of CBAM[3] of EU	• Rise in costs and shifts to customers due to tax increases	• Securing price competitiveness by increasing the portion of local purchase overseas	• Conducting life cycle assessment (LCA) by vehicle model • Conducting continuous monitoring of the inclusion of automotive items • Implementing practical ways to reduce carbon emissions	High ↑
Physical	Acute	• Increasing abnormal weather phenomena (typhoons, floods, heavy snowfall, etc.)	• Damage to facilities, production facility shutdown and delays, etc. • Increasing damage to business sites located on the coast	• Increased market share due to stable product supply when compared to competitors	• Monitoring weather change • Establishing emergency response manuals • Strengthening stability in the workplace	High ↑
	Chronic	• Increasing rate of sea level rise	• Increased risk of flooding in most domestic workplaces located near the coast	• Attracting potential customers by supporting local communities and helping them adapt to climate change	• Conducting continuous monitoring of sea level rise • Reviewing plans to relocate business sites in the mid- to long-term • Establishing drainage measures to prevent flooding at business sites located on the coast	High ↑

[1] Energy storage system
[2] Advanced air mobility
[3] Carbon border adjustment mechanism

Response to Climate Change

Carbon Neutrality

CARBON NEUTRALITY STRATEGY

Carbon Neutrality Direction Hyundai is committed to its vision of "Progress for Humanity", valuing mobility for human being while ensuring minimal burden on the environment. Hyundai has instituted the Integrated Solutions to Climate Change to achieve carbon neutrality by 2045 at IAA Mobility in September 2021 as part of its efforts to pass on a sustainable global environment to future generations and do the right thing for humanity. With Clean Mobility, Next-Generation Platform, and Green Energy at its core, we will establish a sustainable operating system for future generations by expanding our electrification capabilities and transitioning to renewable energy. Additionally, we will continue to strive to build a circular economy ecosystem with the goal of achieving carbon neutrality across the entire mobility value chain.

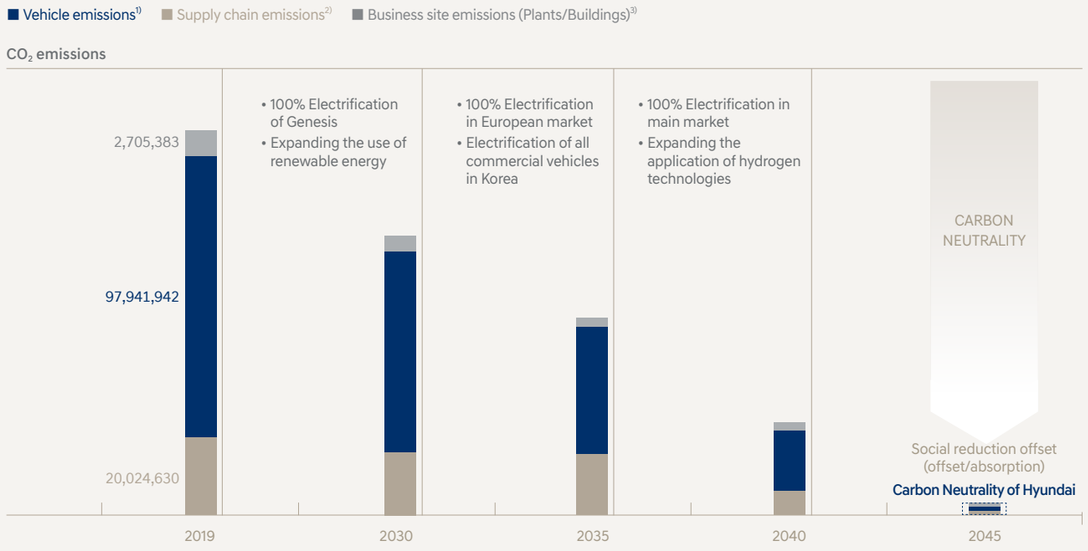
Based on its own hydrogen energy production technology and integrated solutions that encompass the entire city, Hyundai will realize a sustainable future that includes not only electrification but also a hydrogen society and smart cities. For the electrification business, we are considering ways to reduce GHG emissions even after vehicle sales, such as recycling batteries. In the hydrogen business, we plan not only to build a lineup of passenger and commercial FCEVs, but also to promote storage, transportation, charging, and production of hydrogen energy. Moreover, we are also accelerating the development of new mobility based on eco-friendly power, such as advanced air mobility (AAM) and purpose-based mobility (PBV), for a clean and mobility-free urban lifestyle of the future.

Carbon Neutrality Targets Hyundai's carbon neutrality target goes far beyond simply reducing GHG emissions at its business sites and aims to completely eliminate and offset the GHG emissions generated by our customer's use of sold vehicles (Tank to Wheel) through electrification. Regarding vehicle emissions, Hyundai aims to achieve 100% electrification in the European market by 2035 and 100% electrification in other major markets by 2040. In the emerging markets, we plan to accelerate electrification by considering consumer needs, market conditions and infrastructure construction status. To reduce GHG emissions in the process of vehicle production, we will establish a cooperative system between subsidiaries and directly produce renewable energy through solar panels, etc. Additionally, we will implement RE100 (100% Renewable Energy) by 2045 through renewable energy procurements (PPAs, RECs) and the purchase of green premium electricity, among others. For supply chains such as parts and raw materials, we will encourage them to achieve carbon neutrality by 2045 by collaborating for energy transition and reducing carbon emissions of critical raw materials supply chain.

To deal with residual carbon emissions, Hyundai will invest in CCUS and will continue to pursue offsetting activities such as recycling second life batteries for ESS and restoring marine ecosystems. In addition, we plan to maximize the synergy between the hydrogen business and carbon neutrality through hydrogen power generation and processes by using the electrification process based on the hydrogen fuel cell system.

2045 Carbon Neutrality Roadmap

(Unit: tCO_2-eq)



Classification	2019 (base year)	2030	2035	2040	2045
Business sites	Business site emissions[3] (2,705,383 tCO_2-eq)	Reduction of 1,217,422 tCO_2-eq (45% down compared to 2019) RE 60% transition	-	RE90% transition	RE100% achieved
Supply chain	Supply chain emisions[2] (20,024,630 tCO_2-eq)	Cooperation with major suppliers for raising awareness on carbon neutrality and energy transition	Encouraging carbon reduction in core raw material supply chain		Encouraging supply chain to achieve carbon neutrality
Vehicles	Vehicle emissions[1] (97,941,942 tCO_2-eq)	30% electrification	-	80% electrification	100% electrification
		100% electrification of Genesis vehicles	100% electrification of European market sales	100% electrification of major market sales	Accelerating electrification in emerging markets

* GHG reduction targets were established based on the "Science-based Target", and the reduction targets were calculated for 100% of the base year's emissions.
[1] Vehicle emissions: Emissions from the customer's vehicle operation process (tank-to-wheel: TTW)
[2] Supply chain emissions: Emissions from raw material and parts suppliers we aim to reduce and achieve encourage carbon neutrality
[3] Business sites emissions (plants/buildings): Sum of Scope 1 + Scope 2 emissions

Response to Climate Change

FIVE MAIN AREAS TO ACHIEVE CARBON NEUTRALITY

Electronification To achieve carbon zero beyond carbon reduction, Hyundai has declared 100% electrification of the Genesis by 2030 and 100% electrification in the European market by 2035 while aiming for 100% electrification for all its vehicles sold in major markets by 2040. For commercial vehicles such as large trucks and buses, we plan to completely convert all lineups to electrified vehicles by 2028. We are also continuing R&D and investment in commercial FCEVs. In 2023, we launched the UNIVERSE hydrogen electric bus in Korea and introduced the XCIENT fuel cell tractor in North America.

Reducing Our Carbon Emissions at Work Hyundai is an active supporter for the Paris Agreement and recognizes its corporate role and responsibility to reduce global GHG emissions. In this regard, we strive to achieve carbon neutrality at our business sites by 2045 by switching to renewable energy, improving the energy efficiency of production processes through the introduction of high-efficiency motors and inverters, and utilizing hydrogen energy. In the short term, in conjunction with the RE100 roadmap, we plan to promote the transition from electric energy used in the manufacturing process to renewable energy first. In the long term, our goal is to achieve carbon neutrality by 2045 by expanding the application of green hydrogen and the use of renewable energy in conjunction with the realization of a hydrogen society.

Social Activities for Reducing Carbon Emissions (treatment of residual emissions) In addition to reducing carbon emissions, Hyundai is strengthening its activities such as carbon absorption and removal and resource recycling. We developed CCUS technology in 2012 and has since applied it in Korea while continuously pursuing designs that can recycle waste batteries and maximize recycling at the scrap vehicle stage. We apply recycled plastic materials to wheel guards, under covers, and battery trays while actively utilizing eco-friendly materials in the production of the IONIQ 6.

Hydrogen Business Synergy Effects Hyundai announced its hydrogen business vision of "2040, The Completion of Hydrogen Energy Shift" in 2021, based on which we are striving to increase the popularity of the hydrogen business by focusing on three primary areas (scalability, economic feasibility, and eco-friendliness) so that hydrogen energy could be used widely in all areas of human life and industry, beyond the means of mobility, by 2040. To achieve this vision, we will continue to grow and develop both our hydrogen energy system-related business and technology use endeavors. We will supply hydrogen energy systems at competitive prices and contribute to carbon neutrality and environmental improvement through the transition to hydrogen energy.

Support for Net Zero in the Supply Chain In line with global trends such as climate change, carbon neutrality, and ESG management, Hyundai not only improves the quality and technology of its suppliers, but also encourages and supports their carbon neutrality. To achieve this objective, our initial step involves assessing the carbon emission status of our primary suppliers. We will then identify key suppliers for enhanced management and provide them with guidelines to align their practices with our sustainability goals. Additionally, we plan to carry out reduction activities for each supplier grouped according to their characteristics, and prepare supply chain collaboration programs, including carbon neutrality education and awareness raising. In particular, we will join forces with the suppliers of raw materials with a high proportion of carbon emissions to promote a joint response in conjunction with automotive design technologies, such as recycling materials and expanding the use of new materials.

BUSINESS CASE

Blue Carbon Project

As part of implementing a unique carbon offsetting strategies to respond to climate change, Hyundai has been reviewing marine ecosystem restoration projects, and has discussed cooperation plans with related organizations for the creation of sea forests. Based on these discussions, on May 10 of 2023, Hyundai signed an MOU with the Ministry of Oceans and Fisheries and the Korea Fisheries Resources Agency for cooperation in the development of seaweed blue carbon.

The term "sea forest" describes a coastal area characterized by abundant growth of seaweed, forming a forest-like ecosystem that serves as a habitat for diverse marine species. It is known to be able to absorb carbon dioxide, in addition to its excellent ecological value. Blue carbon refers to the carbon absorbed by marine ecosystems such as seaweed and tidal flats. Under this agreement, Hyundai will support research on carbon reduction effects and development of related methodologies so that seaweed blue carbon can be officially recognized by the international community as a carbon sink.

Furthermore, Hyundai plans to participate in the Sea Forest Blue Carbon Council, which consists of the Ministry of Oceans and Fisheries, the Korea Fisheries Resources Agency, academia, and NGOs, according to the agreement while striving to create synergies by leveraging our global network. The Sea Forest Blue Carbon Council is scheduled to be launched in the second half of 2023 after discussing its composition. With the goal of seaweed being registered as an official sink of blue carbon with the Intergovernmental Panel on Climate Change (IPCC), an organization devoted to assessing the impact of climate change, we will share research data and develop results. As a member of the council, Hyundai will consider methodology registration and R&D support while serving as a potential source of blue carbon credits to achieve carbon neutrality.

To restore sea forests, we plan to create sea forests through seaweed planting activities in the coastal areas of Korea whose ecosystem is severely damaged due to ongoing sea desertification. Restoration of sea forests will bring various positive effects, such as reducing GHG emissions, improving species diversity in marine ecosystems, and purifying marine water quality by removing heavy metals such as nitrogen and phosphorus. Through these efforts, we intend to contribute to the preservation of the environment and the response to climate change.

The project will include the planting of seaweed in areas where ecosystems have been severely damaged by marine desertification caused by rising water temperatures and reckless development in coastal areas. Sea forest restoration not only reduces greenhouse gas emissions, but also has various positive effects, such as promoting the diversification of species in the marine ecosystem, purifying marine water by removing nitrogen, phosphorus and heavy metals, and contributing to communal fishing. Hyundai will also contribute to environmental preservation and respond to climate change through a blue carbon seaweed related project that is currently under the spotlight around the world.

* Source: Korea Fisheries Resources Agency

Response to Climate Change

Monitoring GHG Emissions Hyundai uses LNG as its main fuel to produce the heat necessary for vehicle production and to heat its business sites, with GHG emissions from LNG combustion accounting for a significant portion of Scope 1 emissions. Our Scope 2 emissions from the use of electricity at our business sites account for approximately 70% of all our Scope 1 and Scope 2 emissions. Scope 3 emissions refer to other indirect GHGs emitted outside the company to produce goods and provide services for the company or to consume products and services offered by the company. Emissions from the use (driving) of vehicles sold by the company account for the largest share (approximately 80%) in Scope 3.

Hyundai manages Scope 1 and Scope 2 GHG emissions from activities at the business sites owned, operated, and managed by the company, while further strengthening management of Scope 3 emissions from upstream suppliers and downstream distribution networks. Based on Scope 1, Scope 2, and Scope 3 emission data, we will promote effective GHG reduction activities and investment through scientific estimation, analysis, and verification processes.

Scope 1 and Scope 2 Emissions

(Unit: tCO_2-eq)

Classification	2020	2021[1]	2022[2]
Scope 1	716,237	724,013	704,726
Scope 2 (location-based)	1,680,079	1,660,058	(1,853,813)
Scope 2 (market-based)[3]	-	-	1,684,121
Scope 1 + Scope 2[4]	2,396,316	2,384,071	2,388,847
Emission intensity (GHGs emissions per vehicle produced)	0.642	0.616	0.597

Scope 3 Emissions[5]

(Unit: tCO_2-eq)

Classification		2020	2021	2022
Upstream emissions	Supply chain (purchase of raw materials and parts)	17,014,155	18,359,619	19,852,763
	Capital goods (purchase of furnishings and equipment)[6]	22	139	326
	Other energy-related activities (excluding Scope 1 and 2)[6][7]	93,518	149,556	145,177
	Waste generated in operation[6]	1,760	1,911	1,978
	Employee business trip[6]	5,222	7,069	21,370
	Employee commuting (commuting buses)[6]	14,314	5,911	6,617
Downstream emissions	Transportation and distribution (by sea and land)[6]	655,831	838,575	964,206
	Use of sold vehicles (Tank to Wheel)[8]	81,598,073	80,887,513	81,959,096
	End-of-life treatment of sold vehicles (recovery, disassembly, disposal)[9]	780,338	810,794	2,133,743
	Leased assets (headquarters and leased office buildings)[6]	3,325	804	539
	Investments[10]	369,926	728,902	704,970
Scope 3		100,536,484	101,790,793	105,790,785

Participation in the GHG Emissions Trading Scheme The Greenhouse Gas Emission Trading Scheme is a GHG reduction system that allows the government to allocate emission rights on an annual basis to businesses that emit GHGs in accordance with Article 17 of the Kyoto Protocol, so that they can emit GHGs within the allocation range. Then their actual GHG emissions are evaluated, and their remaining/insufficient emission rights can be traded with other business sites. Hyundai strives not to exceed the government-allocated emission allowance by setting strict GHG reduction targets and reducing emissions through efficiency improvements and facility improvements at its business sites. Additionally, we seek to minimize the financial losses caused by the purchase of emission credits when we need to do so.

Data Disclosure through the Environmental Information Disclosure System The environmental information disclosure system aims to enhance the voluntary will of companies to promote environmental management in accordance with the Environmental Technology and Industry Support Act. It not only lays the foundation for environmental management throughout society but also contributes to green loans and green investments for eco-friendly companies by providing financial institutions with verified environmental information. As a company subject to environmental information disclosure, Hyundai discloses key information on environmental management promotion system, resource and energy conservation, and environmental pollutant emission reduction goals and achievements. Hyundai energizes environmental management through the disclosure of environmental information and increases achievements through continuous environmental information management.

Third-party Verification of GHG Emissions Hyundai undergoes third-party verification of its GHG emissions. In 2022, we received independent verification from LRQA (Lloyd's Register Quality Assurance) for our GHG inventory and energy consumption. In particular, we were evaluated for compliance with the GHG protocol as well as the accuracy and reliability of the information on direct GHG emissions (Scope 1), indirect GHG emissions (Scope 2) from our domestic and overseas operations, and other indirect GHG emissions (Scope 3).

Establishment of Supply Chain GHG Data Management System In the second half of 2023, we plan to monitor the carbon emissions of domestic suppliers through the establishment of a carbon emission history management system for our suppliers. Through the system, we intend to provide a basis for our suppliers to calculate and manage their own GHG data. By assisting suppliers in enhancing their capacity to measure and manage GHG emissions, Hyundai is poised to play a leading role in carbon reduction initiatives.

1) According to the results of the conformity assessment of the domestic emissions trading scheme, the 2021 emissions have been slightly adjusted.
2) In 2022, additional sites were added (Indonesia, Vietnam, and Mexico). The sum of Scope 1 and 2 emissions produced in 2022 excluding the added sites is 2,242,879tCO_2-eq.
3) Scope 2 emissions: Addition of market-based emissions in 2022
4) Began to calculate the sum of Scope 1 and 2 emissions (market-based) in 2022
5) Some Scope 3 emissions increased because of reopening after COVID-19 recovery (increase in product sales, increase in employee business trips, normalization of supply chain, etc.)
6) Based on the country where the Headquarters is located
7) Upstream emissions of fuel consumed at business sites (excluding electricity and steam)
8) Excluding emissions before vehicles are fueled/charged (Well-to-Tank)
9) Emissions produced at the end-of-life treatment stage was increased due to the addition of emissions in 2022 produced during the recycling process
10) Scope 1 and Scope 2 GHG emissions from six of the listed investee companies in which Hyundai owns more than 20% of the shares.

Response to Climate Change

Reducing Product Carbon Footprint

CONVERSION TO ELECTRIFICATION

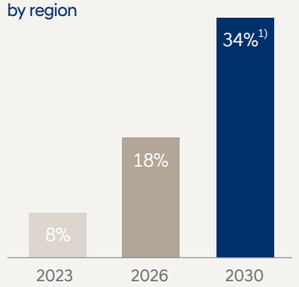
Transition Direction of Electrification Hyundai does its utmost to achieve carbon neutrality by 2045 by promoting carbon reduction and zero-emission in our vehicle sales. To accomplish this, we are transitioning our business structure from internal combustion engine vehicles to an electrification-focused approach. Hyundai is continuously developing and producing not only hybrid and PHEVs but also EVs and FCEVs that have zero carbon emissions during operation. Hyundai is prioritizing the development of EV-focused technologies, such as the E-GMP (Electronic-Global Modular Platform), and enhancing the performance of hydrogen fuel cell systems that can be applied to a variety of types of vehicles, including passenger cars and commercial vehicles. Additionally, we are actively driving the expansion of electric and hydrogen infrastructure to ensure convenient and accessible charging and refueling facilities anytime and anywhere. As a Mobility Solution Provider, we are not only focused on improving the hardware performance of mobility devices but also on strengthening our software capabilities to consistently provide optimized services, generate revenue, and promote sustainable development.

2030 Mid-to Long-term Electrification Strategy In its efforts to achieve the 2030 electrification strategy goals, Hyundai is pursuing a comprehensive electrification strategy that includes expanding production within regions where there is high demand for EVs, developing next-generation battery technologies, implementing battery modularization, and enhancing the marketability of EVs through the integration of hardware and software. In particular, we are accelerating the transition toward carbon neutrality by pursuing the following electrification initiatives of achieving 100% electrification for Genesis vehicles by 2030, 100% electrification in the European market by 2035, and 100% electrification in major markets by 2040.

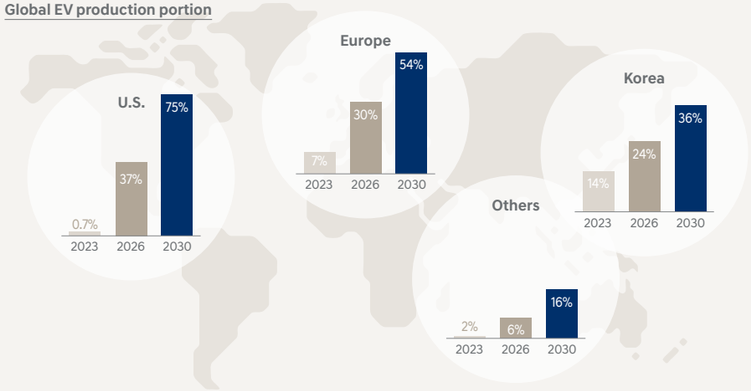
We plan to increase our share of global EV production from 8% in 2023 to 34% by 2030, while gradually expanding our regional production volume by employing a two-track approach to line conversion and the establishment of new plants, rather than focusing solely on production in Korea.

Transition to EV Production

Increase the portion of EV production efficiently through transition to EV lines and addition of new dedicated EV plants by region



Global EV production portion



1) Major markets (Korea, U.S., Europe) 48%

Vehicle Electrification Roadmap by 2030

2030	2035	2040	2045
• 100% electrification of Genesis models	• 100% electrification for the European market	• 100% electrification for the major markets	• Accelerate electrification for the emerging markets (carbon neutrality achieved)

Gaining EV Technology Competitiveness To expand EV sales, Hyundai is implementing a comprehensive battery strategy that combines three key strategies – stable battery supply, next-generation battery technology development, and modularization. To procure the required large-scale batteries for the sale of 2 million EVs by 2030, Hyundai is strengthening collaboration with global top-tier battery suppliers. In addition, we are pursuing local battery sourcing in key production regions and establishing a battery cell joint venture factory in Indonesia. We are focusing on maximizing the performance of existing lithium-ion batteries to achieve EV performance improvements and cost reductions. Simultaneously, we are also investing in the development of next-generation battery technologies such as all-solid-state batteries. Furthermore, Hyundai is working toward the standardization and modularization of key EV components like batteries and motors through the development of an integrated modular architecture (IMA) system, which is expected to be completed by 2025.

Development of Dedicated EV Platforms Hyundai's E-GMP is a vehicle chassis that encompasses the battery, motor, and power electronics system. It is a modularized and standardized integrated platform that allows for the configuration of a variety of types of vehicles, thanks to its expandable wheelbase. Additionally, Hyundai plans to introduce two dedicated EV platforms – the "eM" platform for passenger vehicles and the "eS" platform for PBVs. The eM platform features an expanded common range compared to E-GMP, and will be developed in a form that can be applied to all segments. eS will be developed with a flexible structure and will play a key role in responding to B2B demand such as delivery and car hailing. We are developing our next-generation EV-dedicated platforms with the goal of increasing battery capacity by 40% and motor output by 28%, while raising competitiveness by increasing the charging time following increased battery capacity. In addition, we are seeking to reduce the slow charging time by 50% compared to the current level. In terms of safety, we plan to introduce a new structure that will not be exposed to flames in the event of a battery fire, while maintaining the existing highest crash safety performance in all regions.

Standardization and Modularization of Core EV Components Hyundai aims to standardize a total of nine types of battery systems, allowing for easy response to battery demand based on vehicle class. Furthermore, we plan to transition from the current "cell-to-module" structure to a "cell-to-pack" approach by 2025, removing the module stage. This transition is intended to enhance energy density and improve overall battery performance.

Expanding EV Charging Infrastructure Hyundai is expanding the charging infrastructure for EVs and FCEVs to enhance the convenience of using eco-friendly vehicles and accelerate their adoption. In Korea, we have been expanding our service operations for the high-speed EV charging service known as "E-pit" ever since its launch in 2021. In Europe, we are expanding high-speed charging infrastructure through strategic investment in IONITY, an EV charging network company. In the U.S., we have entered into a business agreement with global energy company Shell to explore and review options for expanding EV charging infrastructure and enhancing charging convenience.

E-pit – Ultra-fast EV Charging Station E-pit provides the fastest charging speed in South Korea, allowing EVs to be charged in less than 18 minutes (based on the IONIQ 6, from 10% to 80% battery charge with a 350-kW ultra fast charger.) Furthermore, E-pit offers several services to its customers, including Digital Queue which provides estimated charging time and queue information to users; Plug & Charge Technology which enables users to automatically authenticate, charge, and make payments; Digital Wallet which allows users to authenticate and make charging payments even at other charging networks; and Route Recommendation which guides users to the nearest available charging station with the optimal route.

H Moving Station – Mobile Hydrogen Charging Station H Moving Station is a mobile charging station (truck) that can be easily moved to areas where hydrogen charging stations are not provided or are out of order. Hyundai's mobile hydrogen charging station, H Moving Station, can store 80 kg of hydrogen per unit and charge up to 25 FCEVs per day with a charging pressure of 350 bar. In particular, these charging pressure figures are in accordance with the international standard charging protocol (SAE J2601), and durability and safety for mobile facilities are also procured. Going forward, we will expand operations to enable the charging of a variety of mobilities such as heavy equipment and drones that use hydrogen fuel.

Response to Climate Change

EXPANSION OF ELECTRIFICATION

EV Starting with the development of the dedicated eco-friendly model IONIQ in 2016, Hyundai unveiled the Kona EV, a compact SUV, in 2018, which was followed by the 2020 launch of IONIQ, a dedicated EV brand based on E-GMP. As of 2022, we have six EV models (3 models from Hyundai and 3 models from Genesis), including the IONIQ 6. Hyundai's global EV sales in 2022 stood at 210,352 units, up 49.1% from the previous year.

HEV and PHEV Hybrid models are available for all models except for large SUVs and small sedans such as IONIQ, Elantra (AVANTE), Kona, Sonata, Tucson, Santa Fe, and Grandeur. We are also offering a plug-in hybrid lineup in our IONIQ, Sonata, Tucson, and Santa Fe models. In 2022, Hyundai's global HEV sales volume stood at 239,181 units and PHEV sales were 46,043 units, up 2.6% and 20.3%, respectively, from the previous year. Going forward, we will increase the sales portion of HEVs and PHEVs to 15.6% of the entire sales volume with sales of 910,200 units (HEV:873,900, PHEV:36,300) by 2030.

FCEV The NEXO, launched by Hyundai in 2018, is a leading FCEV with a maximum driving range of 611 km (US certification) and a charging time of about 5 minutes (6.33 kg per charge). We are expanding our FCEV lineup by expanding our FCEV leadership and mass-producing the Elec-City fuel cell bus, and the XCIENT fuel cell heavy-duty truck. Hyundai's global FCEV sales in 2022 stood at 11,217 units, up 22.5% from the previous year.

Other Eco-friendly Vehicles Hyundai has also launched regional eco-friendly models that run on bioethanol, liquid petroleum gas (LPG) and compressed natural gas (CNG). In South America, we launched the HB20, a bi-fuel vehicle, to meet the demand for bioethanol, while in India we introduced the Aura CNG model to respond to the country's growing demand for CNG. Going forward, we are aiming to expand the sales portion of flex-fuel vehicles and liquid petroleum gas vehicles to 5.2% and 1.5% by 2030.

EV Sales Performance and Expansion Plan

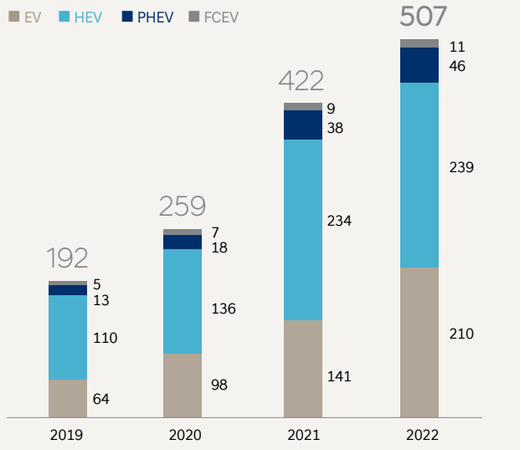
EV Sales Performance In 2022, Hyundai's EV sales volume is 210,352 units, accounting for approximately 5.3% of total vehicle sales. This figure grew by about 49.1% compared to 2021 EV sales of 141,101 units. In particular, IONIQ 5, IONIQ 6, and GV60 based on the EV-dedicated platform E-GMP led EV sales growth.

EV Sales Goal As global EV demand grows faster than market forecasts, we have raised the 2030 sales target that we announced at the 2022 CEO Investor Day from 1.87 million to 2 million units. We have also raised our sales targets for each of our major regions, and are prepared to flexibly adjust those sales targets according to regional market demand.

Expansion of Models Based on EV-dedicated Platform Hyundai plans to launch the IONIQ 7 in 2024 following the release of the IONIQ 5 and the GV60 in 2021, based on the first EV-dedicated platform E-GMP, and the IONIQ 6 in 2022. Based on the next-generation EV-dedicated platform, which will inherit the original features of, and further develop, the E-GMP, we plan to expand our EV lineup significantly by launching nine new models (four Hyundai and five Genesis models) from 2025 to 2030.

Global Sales of Electrified Vehicles

(Unit: 1,000 units)



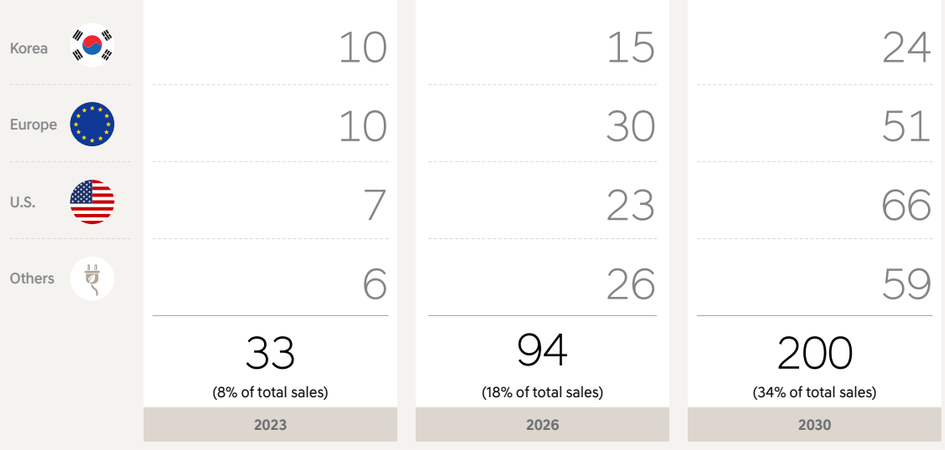
Sales of Other Eco-friendly Vehicles

(Unit: Vehicles)

	2019	2020	2021	2022
Flex-feul vehicles (Bio-ethanol/Bi-fuel)	201,874	152,977	179,193	195,485
Compressed Natural gas vehicles	3,005	1,352	1,489	1,581
Liquid petroleum gas vehicles	59,634	49,534	40,350	35,797
Total	**264,513**	**203,863**	**221,032**	**232,863**

EV Sales Goal for 2030

(Unit: 10,000 units)



Response to Climate Change

Development of EV Battery Efficiency Improvement Technology Hyundai continues to research and develop "thermal management technology" to minimize the waste heat in EVs and increase battery efficiency. To minimize the energy supplied from the battery for heating, Hyundai has developed "radiant heat warmer" technology, which raises the temperature of the heating element based on radiant heat. We have also developed the "heated glass defrost system" technology, which uses heated glass to remove snow and ice from the front windshield, rather than using hot air. Hyundai's dedicated EV batteries are designed to provide a maximum driving range of 250,000 to 300,000 kilometers when reaching 70-80% of battery performance. This translates to a cumulative usage of 12 to 15 years when assuming an annual driving distance of 20,000 kilometers. Furthermore, to maintain optimal charging speed and efficiency under a variety of weather conditions, Hyundai is developing an "external thermal management station". This system injects cooling water of the required temperature from the outside during charging to optimize the battery temperature.

Battery Management Based on Digital Twin Hyundai is implementing digital twin technology to manage the performance of a key component of EVs – batteries. The battery life prediction technology, utilizing digital twin, analyzes a variety of factors based on the actual vehicle's driving history to continuously re-evaluate the battery life, enabling more accurate battery life predictions. By creating a virtual EV in the digital world based on a variety of driving data collected from real-world driving of EVs (such as the IONIQ 5), Hyundai predicts the battery life for each vehicle. The integration of AI, machine learning, and physics models is utilized in a sophisticated data analysis model to comprehensively analyze vehicle-specific information, including charging/discharging, driving habits, parking, and driving conditions, which can impact EV battery performance. This approach aims to increase the accuracy of battery life predictions.

Certified Energy Efficiency by EV Model

Model	Korea (Combined)[1]	Europe (WLTP)[2]	U.S. (EPA)[2]
Electrified G80	4.3 km/kWh	19.1 kWh/100km	97 MPGe
Electrified GV70	4.6 km/kWh	19.2 kWh/100km	91 MPGe
GV60	5.1 km/kWh	17.0 kWh/100km	112 MPGe
Kona Electric	5.5 km/kWh	14.7 kWh/100km	120 MPGe
IONIQ 5	5.2 km/kWh	17.0 kWh/100km	114 MPGe
IONIQ 6	6.0 km/kWh	14.3 kWh/100km	140 MPGe
IONIQ Electric	6.3km/kWh	13.8 kWh/100km	133 MPGe

[1] Electrified G80 (19-inch, 2,265 kg), Electrified GV70 (19-inch, 2,230 kg), GV60 (standard 2WD), Kona Electric (long range, 1,720kg), IONIQ 5 (long-range 2WD exclusive, without built-in cam), IONIQ 6 (long-range 2WD, 18-inch)
[2] Europe and the USA make distinctions based on the representative TRIM standards for each model

FCEV Battery Performance

Vehicle	Fuel tank capacity	Fuel economy (combined)	Driving distance per charge	Warranty period for separately guaranteed parts
Nexo	6.33 kg / 156.6 Liter	96.2 km/kg	609 km	10 years, 160,000 kilometers
	Based on Modern I 17-inch tire			

IMPROVING FUEL ECONOMY

Improvement of Vehicle Fuel Economy Hyundai is aiming for a long-term transition to EVs while also making efforts to minimize greenhouse gas emissions from ICEVs which take large portion of our total sales volume as of current. Through continuous research and development of powertrain efficiency improvement, we are adapting to country-specific fuel economy and emission regulations while achieving greenhouse gas reduction during vehicle operation. Furthermore, we are focusing on R&D aimed at making vehicles more lightweight, enhancing aerodynamics, and other measures to improve fuel economy, thus enhancing both environmental and economic benefits.

Technologies to Enhance Vehicle Fuel Economy The 7th generation Grandeur, launched in 2022, was able to reduce its carbon emissions despite increased vehicle specifications and improved convenience features, thanks to aerodynamic enhancements and a variety of fuel economy technologies. Compared to the previous models, the 7th generation Grandeur achieved a maximum 9.2% reduction in carbon emissions, decreasing from 178 g/km to 163 g/km. The hybrid model, in particular, achieved an additional 10.2% reduction, lowering carbon emissions from 97 g/km to 88 g/km. This was achieved by setting development goals for aerodynamic improvements in design and engineering across a variety of areas, such as optimizing bumper curvature, trunk end kick-up, and full undercovers, as well as applying technologies like air guards (ICEV) and active air flap (HEV) to reduce cooling resistance. In addition, the optimal injection method suitable for driving conditions was achieved by applying the 3rd generation powertrain involving the advantages of both MPI and GDI, resulting in a 4.9% improvement in fuel economy. The integration of a flow control valve also allowed for optimizing cooling water temperature control based on driving conditions, further enhancing fuel economy. Furthermore, the addition of fuel economy technologies such as Continuously Variable Valve Duration (CVVD) in the intake system and Low-Pressure Exhaust Gas Recirculation (LP-EGR) in the HEV powertrain contributed to the reduction of carbon emissions.

Making Vehicles Lightweight Hyundai uses not only carbon-fiber-reinforced plastics but also lightweight materials such as aluminum, clay nano, and clad metal. The Genesis G70, for example, incorporates aluminum in its hood (-9.1 kg), front suspension (-6.7 kg), and rear suspension (-5.2 kg), resulting in a weight reduction of 29.7 kg.

Enhancing the Public Confidence in Fuel Economy Testing Hyundai complies with the fuel economy regulations of key markets such as Korea, North America, Europe, China, and India. To obtain fuel economy certification, we conduct tests according to the standards of each country. To enhance the reliability of fuel economy and emission measurements conducted in controlled conditions (on-cycle), Hyundai undergoes inspections of fuel economy measuring equipment by external specialized organizations such as the Korea Laboratory Accreditation Scheme (KOLAS) and the Korea Automotive Technology Institute (KATECH). Furthermore, Hyundai collaborates with a variety of government research institutes and conducts fuel economy tests jointly to ensure public confidence in the accuracy of the fuel economy measurement results. The results of on-cycle and off-cycle test comparative analysis are reported to the executive in charge of powertrain research and development at least once a year.

Real-Road (Off-Cycle) Fuel Economy Test The vehicle fuel economy is influenced by a variety of factors, including internal factors such as gear shifting, vehicle weight, and air conditioning, as well as external factors like road conditions and traffic congestion. In light of this, Hyundai conducts fuel economy tests not only in controlled conditions (on-cycle) considering a variety of factors but also performs off-cycle tests that simulate real-world driving profiles.

Collaboration with Third-Party Agencies Hyundai conducts correlation analysis between the fuel economy test results obtained from real-world (off-cycle) tests and those of other organizations. In the US market, we compare our fuel economy data with those published by third-party organizations such as the EPA, J.D. Power, and Consumer Reports. In the European market, comparisons are made with data from third-party organizations such as Green NCAP, Auto Bild, and Spritmonitor. By comparing the fuel economy measurement results with those of third-party organizations in each country, we enhance the credibility of our own fuel economy test results.

Response to Climate Change

Responding to Fleet average CO_2 standards (Fuel Economy) in Major Markets The fleet average CO_2 standards or corporate average fuel economy regulations, implemented in major countries, are continuously being strengthened to achieve their carbon reduction goals. In the EU, regulatory targets have been adopted to reduce passenger car CO_2 emissions by 55% by 2030 compared to 2021 and achieve complete decarbonization of vehicle CO_2 emissions by 2035. The US government has announced regulations starting in 2023 to progressively increase fuel economy standards by 5-10% annually, aiming to reach 55 miles per gallon by 2026. They have also set a target to replace 50% of new vehicle sales with electrified vehicles (including EVs, PHEVs, and FCEVs) by 2030. The government of California in the U.S. plans to replace 35% of new vehicle sales with zero-emission vehicles (including EVs) starting from 2026, increasing to 68% by 2030, and has set plans to prohibit the sale of new internal combustion engine vehicles starting from 2035.

Hyundai is expanding the sales of electrified vehicles in response to the strengthening of CO_2 regulations in major regions until 2030, aiming to reduce the average carbon emissions of our fleet in each region. We have a long-term goal of achieving zero fleet carbon emissions, and to minimize regulatory risks, we at Hyundai are calculating and incorporating the regulatory compliance volume, including the volume of EVs, into our annual sales volume plan. We also monitor and evaluate regulatory compliance based on monthly sales performance. To prepare for the possibility of not meeting regulations, we adjust our sales volume and utilizes a variety of measures such as the use of accumulated credits to mitigate regulatory risks in advance.

Korea

Korea has strengthened its GHG regulations related to automotive emissions, demanding a reduction in vehicle emissions from 97 g/km in 2020 to 89 g/km by 2025 and 70 g/km by 2030. In case the emission limits are exceeded, a fine of KRW 50,000 per gram is imposed. Furthermore, a basic plan has been presented to promote eco-friendly vehicles, aiming to supply 2.83 million units by 2025 and 7.85 million units by 2030, leading to a 24% of exhaust gas emission reduction.

EU

The EU has finalized its goals through a resolution by the European Parliament, which includes reducing the current fleet average CO2 standards for passenger cars (119 g/km based on WLTP), with an aim to achieve a 15% reduction by 2025 and a 55% by 2030 compared to the levels in 2021. In addition, the EU has set a goal to achieve a 100% reduction in emissions from passenger cars by 2035. As a result of these regulations, starting from 2035, the sale of new ICEVs in the EU market will be practically impossible. Furthermore, countries like Norway, the Netherlands, and Germany are even pursuing individual national policies to prohibit the sale of new internal combustion engine vehicles earlier than 2035.

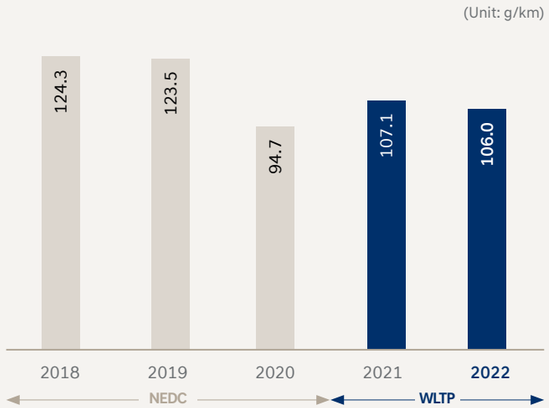
U.S.

The US government has increased their average fuel economy target from 40 miles (64.4 km) per gallon to 55 miles (88.5 km) per gallon by 2026. They have also set a goal to reduce greenhouse gas emissions from 224 grams per mile to 161 grams per mile by 2026. Furthermore, both the federal and state governments are expanding incentives for the transition to eco-friendly vehicles through increased purchase subsidies. The federal government has set a goal to transition 50% of all vehicles, including electric vehicles (EVs), to zero-emission vehicles by 2030. Additionally, the California state government is pursuing a policy to ban the sale of internal combustion engine vehicles starting in 2035.

China

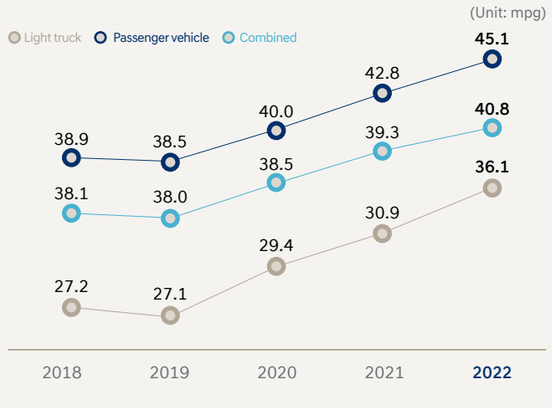
The Chinese government is also continuously strengthening fuel efficiency regulations and enhancing the mandatory sales requirements for new energy vehicles (NEVs), including EVs. In particular, they aim to progressively increase the mandatory sales share of NEVs, reaching 20% by 2025, 40% by 2030, and 50% by 2035. Additionally, they have set a target for EVs to account for over 95% of NEV sales by 2035.

Average CO_2 Emissions in the EU



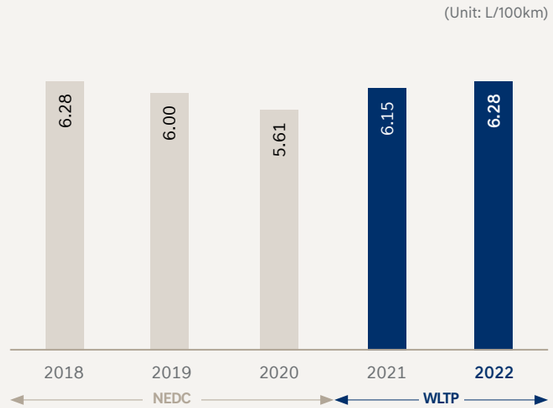
* 2021/2022 performance is not able to be compared with the performance of prior years for the EU Commission (EC) changed the CO_2 emission standard from NEDC to WLTP; and the regulatory value was also from 95 g/km (2020) based on NEDC to 112.5 g/km (2021) based on WLTP according to the change of methodology.
** The figure for 2021 has been revised from our internal estimate (109.7 g) to the officially announced figure by the European Commission (107.1 g).
*** The input figure for 2022 is based on our sales performance and is our own estimate. Going forward the final confirmation of the figures by the EC will be necessary.

Average Fuel Economy in the US



* The average fuel economy in the U.S. and China is determined annually based on the average fuel economy performance of individual car brands as disclosed by the respective government agencies (NHTSA) in the U.S. and the Ministry of State Security in China).

Average Fuel Economy in China



* 2021 performance is not able to be compared with the performance of prior years for the Chinese government changed the fuel economy certification standard from NEDC to WLTP.

Response to Climate Change

Carbon Reduction at Business Sites

DIRECTION OF CARBON REDUCTION AT BUSINESS SITES

Energy Efficiency Hyundai acknowledges and supports the direction and goals set by the 2015 Paris Agreement, and we recognize our role and responsibility in global greenhouse gas reduction and have been actively developing and implementing a variety of energy-saving initiatives. Leading example includes the adoption of energy-efficient facilities to reduce energy consumption in our operations, and we strive to transition to renewable energy sources as part of our commitment to sustainability.

Carbon Capture Utilization and Storage To achieve carbon neutrality, it is necessary to cease the use of fossil fuels in the automotive manufacturing process. However, reaching the target point for energy transition requires a significant amount of time. During this transitional period, Carbon capture utilization and storage (CCUS) technology, which involves capturing and processing CO_2 emitted from fossil fuel combustion, is being recognized as a practical solution and a high-potential means for carbon neutrality.

Hyundai has been developing CCUS technology to capture carbon emitted by LNG in manufacturing processes, given that a large amount of the fuel is used despite its relatively low carbon emissions among fossil fuels. In addition, Hyundai's research institute is conducting CCUS pilot studies to commercialize the technology, aiming to extend its application beyond the automotive industry to other business sectors. Continuous market monitoring is also being carried out to stay updated on the latest developments in CCUS technology.

Improvement of Production Process Hyundai is committed to improving energy efficiency in our production processes through a variety of efforts. We plan to incorporate high-efficiency motors and inverters and transition to renewable energy sources. By using hydrogen energy, we aim to achieve carbon neutrality at our business sites by 2045, and we will be replacing fossil fuels and electric energy used in the manufacturing process with renewable energy. Also planned is to enhance the efficiency of the paint process, which primarily uses LNG fuel, through the introduction of high-efficiency equipment, waste heat recovery, and process improvements.

Sites with the Energy Management System (ISO 50001) Certification

Site	Certificate validation date
Beijing Hyundai Motor Company (BHMC)	Jan. 26, 2025 (Renhe/Yangzhen Plants)
	Dec. 12, 2024 (Changzhou Plant)
Hyundai Motor India (HMI)	Oct. 04, 2024
Hyundai Assan Otomotiv Sanayi (HAOS, Turkey)	Jul. 16, 2024

Energy Consumption[1)]

(Unit: MWh, MWh/vehicle)

Classification		2020	2021	2022
Non-renewable energy consumption	LNG	3,534,350	3,562,760	3,442,276
	Diesel, kerosene, gasoline	184,158	154,015	131,268
	Steam, heat	98,777	90,510	94,027
	Other fuel	123,433	143,460	172,986
	Electricity (non-renewable)	3,344,292	3,338,657	3,377,133
Renewable energy consumption	Electricity (renewable)	70,376	120,171	280,498
Total of energy consumption[2)]		7,355,386	7,409,573	7,498,188
Energy intensity		1.97	1.91	1.87

* Intensity: A value representing the environmental resources used or the environmental impact emitted when producing one car
1) Due to changes in energy consumption calculation criteria and an expansion of the calculation scope, the data for previous years has been revised.
2) In 2022, additional sites were added (Indonesia, Vietnam, and Mexico). The total of energy consumption in 2022 excluding the added sites is 7,217,893 MWh.

TRANSITION TO RENEWABLE ENERGY

RE100 Implementation Plan Hyundai, along with other major Group affiliates of Kia, Hyundai MOBIS, and Hyundai WIA, declared our commitment to the global initiative RE100 in July 2021, aiming for 100% renewable energy usage. In April 2022, this commitment was approved. Hyundai now aims to achieve 100% renewable energy transition by 2045, ahead of the RE100's target year, 2050. To achieve this goal, we take into account the renewable energy supply environment, government policies and regulations, and plant-specific conditions in each country. We plan to install solar panels on the roofs of key production plants, purchase renewable energy certificates, and establish power purchase agreements (PPAs) with external renewable energy generators. The aim is to gradually expand the use of renewable energy until 2045 by applying optimal solutions. Hyundai's manufacturing subsidiaries in the United States, India, and Turkey, specifically, have set a target to achieve RE100 by 2025.

ADOPTION OF RENEWABLE ENERGY AND ENERGY SAVING AT MAJOR BUSINESS SITES

R&D Sites To reduce GHG emissions, Hyundai utilizes recycled waste heat and steam from facilities and equipment in its research facilities. We also harness waste heat generated during waste disposal. In addition to the existing 562 kW-scale photovoltaic power generation facility, we plan to install an additional 3 MW-scale facility.

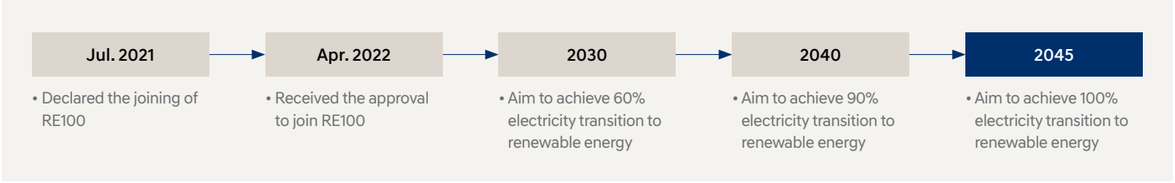
Hyundai Motor India (HMI) HMI sources approximately 33.3% of its total electricity consumption through the purchase of eco-friendly energy (PPAs) to power its factories, and 8.5% of its electricity is purchased through renewable energy certificates (RECs). Furthermore, HMI has its own photovoltaic power generation facility, with a capacity of 0.3% (0.69 MW). It procures 42.1% of its total electricity from renewable sources and aims to meet 100 percent of its electricity consumption with renewable energy by 2025.

Hyundai Motor Manufacturing Indonesia (HMMI) HMMI achieved RE100 in its vehicle production in 2023 by signing a forward purchase agreement for RECs issued by a geothermal power plant located in Bandung in the West Java province.

Hyundai Motor Manufacturing Czech (HMMC) HMMC has transitioned to 100% renewable energy for the electricity used in its plant through the guarantee of origin (GO) system in 2022. It has also implemented the Eco Smart vapour emission control (VEC) system, based on the gas monitoring system in the paint shop, to improve energy efficiency. In addition, HMMC is implementing measures such as compressed air supply control and LED lighting replacement to reduce energy consumption.

Hyundai Assan Otomotiv Sanayi (HAOS) HAOS in Turkey set the goal of achieving RE100 by 2025, so did HMI and HMMC. HAOS procures 51.7% of its total electricity from renewable sources, and it has also implemented a variety of process improvements and introduced state-of-the-art equipment, such as reducing compressed air usage and installing high-efficiency inverters, to minimize unnecessary power consumption.

RE100 Roadmap



Response to Climate Change

Life Cycle Carbon Reduction

CARBON REDUCTION IN THE SUPPLY CHAIN

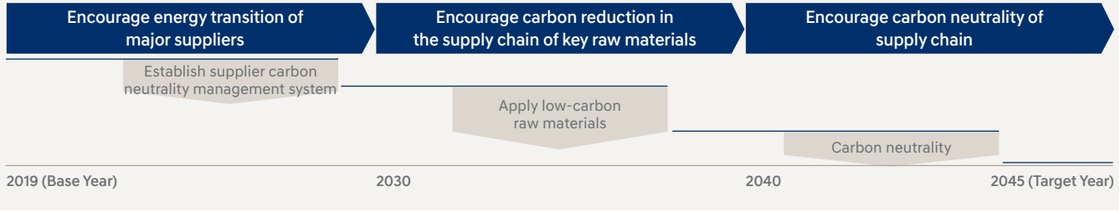
Supplier Carbon Neutrality Hyundai is committed to encouraging its tier-1 part suppliers and raw material suppliers to achieve supply chain carbon neutrality. GHG emissions generated by our raw material supply chain are 20 million tons, which is about 18% of total GHG emissions generated throughout the life cycle of Hyundai's products. To support the carbon neutrality of suppliers, we plan to establish a monitoring and management system for suppliers' carbon emissions. In the long term, we plan to promote carbon reduction in the supply chain through eco-design and the use of low-carbon materials. In addition, we developed and distributed the Carbon Neutral Guide for Suppliers and plan to introduce the CDP Supply Chain program starting from 2023 to engage suppliers in environmental initiatives and support them. As such, we are making multifaceted efforts to reduce GHG emissions throughout the entire automotive manufacturing process in addition to helping our suppliers reduce their carbon emissions.

Support for Suppliers' Carbon Reduction Efforts Hyundai conducts surveys on suppliers' carbon emissions and reduction plans, and based on the results, we establish and implement initiatives to support suppliers' carbon reduction. We offer training courses to raise awareness of carbon neutrality among suppliers' employees and provide them with guidelines for implementing carbon neutrality. In March and July 2022, we operated the Supplier Carbon Neutrality Council to gather opinions on Hyundai's carbon neutrality strategy and exchange views on key issues. Furthermore, we set greenhouse gas emission standards and targets for top-emitting suppliers and promote their establishment of internal carbon neutrality response systems through support activities.

Participation in CDP Supply Chain Hyundai and Kia have jointly joined CDP Supply Chain in 2023. CDP Supply Chain is one of the environmental disclosure projects operated by CDP, which enables the assessment of suppliers' carbon-related information such as climate change issues, strategies, carbon emissions, and more. To facilitate smooth participation of suppliers in CDP Supply Chain, Hyundai provides on/offline training on a variety of topics including carbon neutrality overview, emissions calculation, and questionnaire guidance to some 360 tier-1 suppliers in Korea. Continuous support is also offered through the production of instructional videos and the operation of a Help Desk.

Creation of an Ecosystem for Low Carbon Logistics and Transportation Hyundai strives to reduce carbon emissions from the "first mile" stage, where freight moves from production plants to logistics warehouses, to the "middle mile" and "last mile" stages, where it moves from warehouses to a variety of hubs. In the first mile stage, hydrogen-powered electric trailers suitable for long-distance driving are being deployed. In the middle mile and last mile stages, electric trucks and other innovative technologies such as EVs, FCEVs, urban air mobility, and robotics are being utilized to lead the reduction of carbon emissions in the logistics and transportation service ecosystem. Furthermore, Hyundai has signed a multi-stakeholder agreement with Hyundai Glovis, the Ministry of Land, Infrastructure and Transport, the Ministry of Trade, Industry and Energy, and the Ministry of Environment to expand the electrification of the logistics and transportation sector by 2030. Hyundai is striving to distribute 10,000 hydrogen-powered trucks in the logistics field by 2030.

Roadmap for Supply Chain Carbon Neutrality



Activities for Supporting Suppliers' Carbon Reduction Efforts

Activity	Description of activities
Training for and raising awareness of suppliers	• CEOs: Hosting the Partnership Day for suppliers and introduce Hyundai's carbon neutrality strategies • Employees: Offering training on the enhancement of suppliers' capabilities of carbon neutrality (Global Partnership Center)
Operation of the Supplier Carbon Neutrality Council	• Convening the Supplier Carbon Neutrality Council (March and July 2022) • Gathering opinions on Hyundai's carbon neutrality strategies and exchange opinions on major issues
Providing suppliers with the carbon neutral guide for suppliers	• Presenting suppliers with an implementation guide to promote carbon neutrality • Establishing an in-house management system, reducing GHG emissions at business sites/supply chain/logistics, disclosing emission information, etc.

Activity	Description of activities
Survey of suppliers' GHG emissions and energy consumption	• Investigating GHG emissions and energy consumption of parts suppliers, etc. • Promoting the establishment of a supplier carbon emission management system (second half of 2023)
Review of suppliers' reduction targets and development of support programs	• Specifying suppliers' GHG emission reduction plans (criteria and targets) • Promoting projects such as support for carbon reduction facilities for suppliers and consultation on GHG emission diagnosis

Supply Chain Carbon Information Disclosure & Services for Logistics/Transportation Energy Efficiency

Disclosure of carbon information of the supply chain	**Goal**	• Establishing a plan to specify and support our supply chain carbon reduction strategy by disclosing information on carbon emissions of suppliers
	Efforts for education and support	• Conducting on/offline education related to CDP Supply Chain (carbon neutrality overview and emission calculation, guidance on questionnaire items, etc.) • Continuing support for suppliers by offering educational videos, verifying carbon emissions, and operating a help desk
	Future utilization measures	• Planning to upgrade the calculation of carbon emissions (Scope 3, Category 1) at suppliers' workplaces using the CDP supply chain • Planning a review to reflect CDP supply chain results in purchase policy
Services for enhancing the efficiency in logistics and transportation	**Achievement of packaging efficiency**	• Reducing the amount of energy used for collecting packing materials through the development of foldable plastic boxes[1] • Pursuing packaging efficiency through cooperation with suppliers and expand logistics energy efficiency
	Transitioning to eco-friendly transportation means	• Enhancing energy efficiency and reduce GHG emissions through coastal shipping
	Eco-driving of cargo vehicles	• Enhancing the integrated transportation management system within the logistics business and improve the fuel efficiency of cargo vehicles • Monitoring fuel efficiency improvement activities by installing a digital tachograph (DTG)

[1] When used as a packaging material for automobile parts, foldable plastic boxes can be recovered and folded up to a fifth of their size, greatly increasing the amount of boxes that can fit into a collection container.

Response to Climate Change

LIFE CYCLE ASSESSMENT

LCA Methodology Hyundai conducts life cycle assessments (LCA) based on ISO 14040 and 14044 international standards to assess the environmental impacts throughout the entire process of vehicle production, including raw material extraction, component manufacturing, component transportation, vehicle manufacturing, vehicle distribution, vehicle operation, and end-of-life treatment. As of 2022, the proportion of vehicle models that underwent LCA was 25.03%. The LCA was conducted using the full-LCA methodology for all vehicle models.

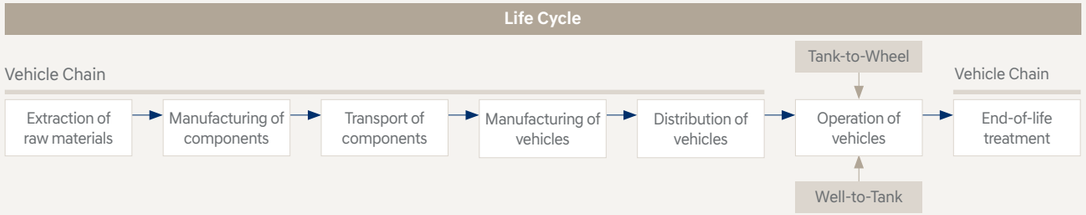
LCA was conducted using the CML (Centrum voor Milieukunde Leiden) methodology, considering a variety of impact categories such as global warming (GW), abiotic depletion potential (ADP), acidification potential (AP), eutrophication potential (EP), ozone depletion potential (ODP), and photochemical ozone creation potential (POCP), as well as human and ecosystem impact categories. To assess the impacts arising from suppliers' manufacturing processes, reliable commercial databases were utilized. For factors such as vehicle transportation, distribution, and energy use, as well as pollutant emissions, actual data measured at the facilities were applied. In 2022, the accuracy of the LCA was improved by differentiating primary materials, such as aluminum, into virgin and recycled sources at the raw material extraction stage. Additionally, the operational stage of EVs involved predicting the impact on future electricity production based on the basic plan for power supply.

LCA Expansion Based on the LCA process established until 2021, LCA was conducted for four powertrains (ICEV, HEV, EV, FCEV), a total of 14 passenger vehicle models and 2 commercial vehicle models in 2022. In addition, the Genesis brand has completed LCA for all of its vehicle models.

Use of LCA Hyundai comprehensively analyzes the environmental impacts at each stage of the entire process based on the results of LCA. Using this information, we identify and promote activities to improve the environmental friendliness of our vehicles. In the raw material extraction stage, we are expanding the use of eco-friendly steel and aluminum materials. In the part-manufacturing and vehicle-production stages, we are committed to carbon neutrality through initiatives like RE100 and resource circulation. When developing new models, we aim to minimize environmental impacts by considering LCA.

LCA Results As of 2022, we have completed LCA for a total of 20 vehicle models. The LCA results of 14 passenger vehicle models that underwent LCA are shown on the right. The results for the remaining factors, such as parts manufacturing and vehicle maintenance stages, which are currently not included, will be addressed and improved through advanced LCA methodologies.

Life Cycle Stages Covered by LCA



Impacts Covered by LCA

Ecological consequences			Resource use	Human health
Acidification (AP)	Ecotoxicity (ETP)	Eutrophication (EP)	Abiotic depletion (fossil fuels, minerals)	Human Toxicity (HTP)
Global Warming (GW)	Ozone Depletion (ODP)	Photochemical Ozone Formation (POCP)	Water Depletion	

Cumulative Vehicle Models and Ratio of Sales by Model in 3-year Full-LCA

LCA Results by Model

Pre-manufacturing, Transportation, Manufacturing, Distribution, Use, End-of-life treatment, Recycling (Unit: gCO_2-eq/km)

Model	Classification	GHG emissions	Percentage of GHG emissions generated by life cycle stage
NEXO[1]	FCEV	224.8	
IONIQ 6	EV	157.4	
Grandeur (IG)	ICEV	220.2	
Grandeur (IG)	HEV	169.1	
Grandeur (GN7)	ICEV	215.4	
Grandeur (GN7)	HEV	156.8	
GV60	EV	146.9	
G70	ICEV	236.8	
GV70	ICEV	265.2	
GV70E	EV	214.7	
G80[2]	ICEV	311.6	
G80E	EV	234.1	
GV80[2]	ICEV	325.6	
G90	ICEV	311.0	

[1] Based on the case using hydrogen produced via steam methane reforming (SMR) process
[2] Based on gasoline 3.5 AWD

Establishment of a Circular Economy

Hyundai complies with the end-of-life vehicle (ELV) recovery and disposal regulations in countries where it sells its vehicles, while also implementing extended producer responsibility (EPR) to increase the recovery, disposal, and recycling of ELVs. [Re-think] We continue look for materials that minimize negative impact on the environment and human health starting from the vehicle design phase. [Reduce] While reducing the use of one-time raw materials, such as plastics, as much as possible, we are increasing the application of eco-friendly materials. [Recycle] In addition, we are shifting our business operation method from a linear structure to be circular so that recyclable materials can be recycled. To increase the recovery, disposal, and recycling of ELVs, we are intensifying the process internally while also strengthening cooperation with outsourced companies.

Extended Producer Responsibility

DESIGN FOR RECYCLING AND RECYCLED MATERIALS

Designs for Recycling Starting from a new vehicle's design and development phase, we take the recovery, disposal, and recycling of wastes that are generated from ELVs. In addition to increasing the application of recyclable materials, we are replacing non-metals, such as plastic and glass, with recycled materials, biomaterials, and other eco-friendly materials to enhance vehicles' eco-friendliness. Hyundai vehicles are 85% recyclable if vehicles' thermal energy is not recovered, and the recyclability rate rises to 95% if the recovery of thermal energy from waste disposal is included. In particular, metals, such as ferrous and non-ferrous materials, account for approximately 70% of vehicle materials, and we are reusing or recycling most of them.

Eco-friendly Material Technologies Hyundai values recycling as a way to preserve a sustainable future environment. We are therefore expediting the establishment of a closed loop for recycling plastic waste, while also building an open loop system for waste from other industries than automobile industry as well as domestic waste as part of our efforts for eco-friendly activities that consider the recycling ecosystem.

Based on the circular plastic system, we make continued efforts to expand the use of recycled plastics to exterior parts of lamps and closure parts, in addition to applying recycled plastics to interior parts of wheel guards, undercover parts, battery trays, and fan-shrouds. We have established a mid- to long-term plan on continually discovering new wastes and developing recycling element technologies, and are giving concrete shape to strategies on applying and expanding recycled plastics based on these internal resources. Moreover, we will build a system that can monitor the status of recycled plastic application to our vehicles to efficiently manage the entire recycled plastic application process.

In addition to recycled plastics, we produce bioplastics made of raw materials extracted from sugar cane and wood, and use them for finishing materials of dashboards and others, and also use eco-friendly paint that uses coconut seed extracts. Vegetable oil that is produced from flaxseeds is applied for seat processing, and we have developed eco-friendly anthropogenic leather that applies bio-polyol derived from cornstarch, thereby reducing around 47% in carbon generation compared to previous anthropogenic leather. As part of an environmental project that makes marine environment pollutants into resources and applies them to automotive parts, we developed a technology that recycles waste tuna fishing nets and applied them to floor mats and plastic parts. To expand application, we are establishing collaborative relations with outside parties, such as agreements with the fishing industry. We are continually securing recycled material technologies, such as developing parts that apply bio-composite materials using coffee grounds and developing interior parts that reuse waste wood, including whiskey/oak barrels.

Increased Application of Eco-friendly Materials to New Vehicles Hyundai is applying eco-friendly materials, including recycled materials, to its new EV models first. Yarn extracted from sugar cane and processed yarn from recycled PET bottles were applied to the IONIQ 5's door trims and seats, followed by expanded application to the head linings, pillar trims, sun visors, and package trays of the IONIQ 6, GV60, Electrified GV70, and Electrified G80 models. In addition, materials made of recycled waste fishing nets that were discarded in the ocean were applied to the floor mats of the IONIQ 5 and IONIQ 6. Natural fabric that contains 30% wool was applied to the front of the headrest and side of seats for the Electrified GV70. Also, the Electrified G80 applied forged wood decoration that is made of leftover pieces of wood.

Application of Eco-friendly Materials to EV Models

IONIQ 5	Bio paint extracted from rape blossoms and corn, oil extracted from flaxseed, yarn extracted from sugar cane, processed yarn from recycled PET bottles, etc.
IONIQ 6	Paint from recycled waste tire, plant raw material-based paint, yarn extracted from sugar cane, processed yarn from recycled PET bottles, etc.
GV60	Bio-polyol derived from corn and sugar cane, processed yarn from recycled PET bottles, etc.
Electrified GV70	Natural fabric containing 30% wool, processed yarn from recycled PET bottles, etc.
Electrified G80	Natural dye, processed yarn from recycled PET bottles, forged wood made of recycled leftover pieces of wood, etc.

Eco-friendly materials applied to IONIQ 5

Eco-friendly materials applied to Electrified G80

Establishment of a Circular Economy

ESTABLISHING THE ELV RESOURCE CIRCULATION SYSTEM

Eco-friendly ELV Service In line with customers' requirement for eco-friendly ways of scrapping vehicles, we provide a one-stop service that assists our customers through the vehicle recovery, dismantling, and recycling processes. Customers can apply for the service at Hyundai's website. We pick up the scrapping vehicle at the time and place desired by the customer, after which the vehicle is sent to an eco-friendly junkyard for eco-friendly dismantling and recycling based on the principle of indoor storage of recovered materials and recycling of all recovered parts and materials.

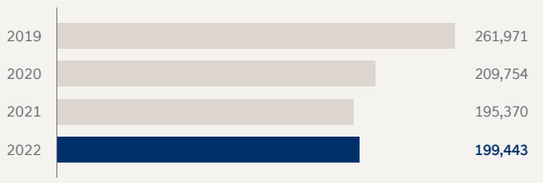
Recovering and Recycling ELVs Hyundai signed an agreement with the Korean Ministry of Environment in 2011 to implement a pilot project to advance the recycling system for ELVs by justifying the adoption of EPR in the automobile sector after introducing it to packaging materials and electronic products. We are strengthening collaborative relations with scrap car companies, such as providing vehicle dismantling manuals and necessary training to scrap car companies, supporting the eco-friendly disposal of waste refrigerants contributing to climate and ecosystem change, and subsidizing the recycling of materials that are difficult to recycle. In 2022, we recovered about 199,443 tons of resources at the end-of-life stage, with the recycling rate of end-of-life cars reaching 82.4% without including heat recovery and 91% when included. In the meanwhile, Hyundai does not have a financial benefit from the end-of-life vehicles' take back programs.

Eco-friendly ELV Principles

Prevention of soil and water pollution	Resource circulation, prevention of global warming
• Carry out the dismantling process indoor • Store recovered parts and materials indoor	• Recover liquid waste and A/C refrigerant by type • Recycle all recovered parts and materials

Resources Recovered from ELVs

(Unit: Tons)



UPCYCLING PROJECTS

Hyundai goes beyond the reuse and recycling of wastes and continues with upcycling projects that create new value based on wastes, such as fashion accessories, new materials, and renewable energy. We will make continued efforts to conduct various upcycling projects, thereby creating new value of waste resources in the automotive industry as well as other industries.

Re:Style

Hyundai unveiled "Re:Style", an eco-friendly upcycled fashion platform, in 2019 in collaboration with designer Maria Cornejo to combine leftover leather and fabric from car seats that are discarded in the automobile manufacturing process with Maria Cornejo's signature pieces to be reborn as 15 innovative pieces of clothing. For the second project of Re:Style, we took a step further from the 2019 project to use various waste materials, such as vehicles' glass, carpet, and airbag that are discarded in the automobile manufacturing process, and create a collection that reflects the philosophies of six eco-friendly designers.

In early 2023, we joined hands with the world-renowned fashion designer Jeremy Scott and unveiled a collection that used bio plastic skin (fabric containing a bio-material extracted from sugar cane), an eco-friendly material that was applied to the IONIQ 6, as well as wipers, tail lights, and seat belts used for EVs. In addition, the "parametric pixel", which gives a geometric form to pixel, the smallest unit to constitute an image, was used to produce various accessories for sale, including micro mini bags, notes, and keyrings.

Producing clean hydrogen using biogas based on organic waste resources

Hyundai is moving forward with a business that produces and supplies clean hydrogen by using biogas (methane) generated at public sewage treatment plants in collaboration with the Ministry of Environment, Cheongju City in North Chungcheong Province, and Institute for Advanced Engineering, through which we seek to contribute to reducing carbon and vitalizing the hydrogen ecosystem. We plan to complete construction of a hydrogen production facility in a public sewage treatment plant in 2024 after commencing construction in 2023 in partnership with Cheongju City, with an aim to begin operations in 2025. Once the hydrogen production facility goes into operation, 500 kg of hydrogen is planned to be produced a day. The facility will later be extended to increase daily hydrogen production to 1,000 kg in 2027. Hydrogen produced at the facility will also be supplied to hydrogen charging stations in the local community to supply local residents with clean hydrogen at reasonable prices compared to byproduct hydrogen. Its areas of use will be expanded to include mobility for public services, such as hydrogen buses and hydrogen cleaning trucks.

Overseas, we are running a business of producing electricity by converting livestock excretions into biogas in Lampung, located on the island of Sumatra, Indonesia, through which we are contributing to reduction of GHG emissions and job creation for the local community.

Appling renewed materials based on marine waste

In partnership with Healthy Seas, a marine conservation organization in Europe, Hyundai is carrying out marine ecosystem restoration activities while providing marine pollution-related education and striving to prevent marine pollution. In 2022, we undertook large-scale cleanup and education project in Ithaca, Greece and collected 18.5 tons of abandoned fishing nets and 5 tons of other marine wastes. The collected fishing nets and marine wastes are processed into ECONYL® (nylon material recovered from upcycled nets and cloths) to be used in diverse areas, including fashion products, clothing, and floor mats of the IONIQ 5 and IONIQ 6. In addition, in collaboration with Enaleia, an NGO in Greece, we provided incentives to fishermen who stopped fishing in the breeding season, when fish should be protected, and instead collected marine plastic wastes. We plan to widen the scope of marine ecosystem restoration activities to include northern Africa and Korea, in addition to Europe. Going forward, we will expand the application of marine waste-based renewed materials to new car models and our brand accessories.

Establishment of a Circular Economy

Establishment of a Virtuous Circulation System for Batteries

ECO-FRIENDLY BUSINESS BASED ON SECOND-LIFE BATTERIES

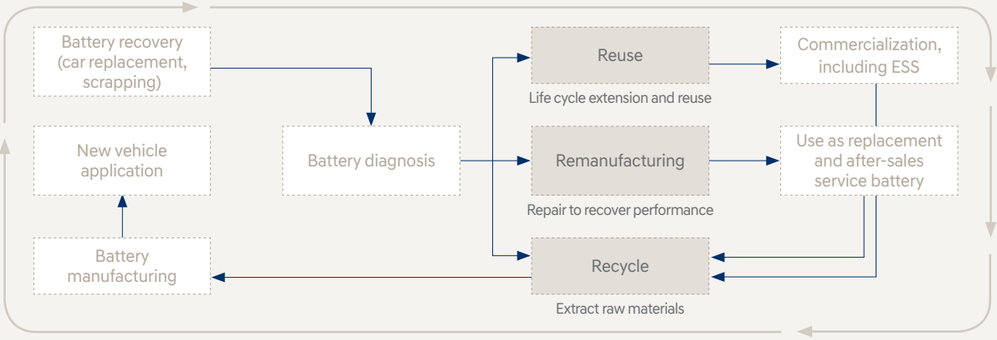
Establishment of Cooperative System for Battery Circulation Based on the battery life cycle, Hyundai is establishing an eco-friendly battery circulation system that aims for sustainability through the recycling and reuse of second-life batteries generated from end-of-life EVs. The battery life cycle consists of an eco-friendly loop encompassing manufacturing of battery cells using raw materials to production of battery systems for electric vehicles, reuse of batteries after use, extraction of materials from finally discarded batteries, and application of the extracted materials to battery manufacturing. We formed a taskforce team in 2022 to establish a group-wide cooperative system throughout the battery life cycle, while exploring green business models and developing relevant competencies.

In building a cooperative system for battery circulation among Hyundai Motor Group affiliates, Hyundai Motor Company will be in charge of creating a system that enables us to obtain large amounts of second-life batteries through our global sales and service network. We will also establish a virtuous circulation system for batteries through which we extract such key battery materials as cobalt, lithium, and nickel, from second-life batteries that cannot be recycled or remanufactured, and then use them for battery-manufacturing process.

Hyundai GLOVIS plans to use its global logistics network to conduct a business that recovers second-life batteries through ground/marine transportation and reuses the collected second-life batteries for energy storage system (ESS). Hyundai MOBIS is planning a remanufacturing business that prolongs the life of batteries by means of new packaging, such as sorting out collected batteries and restoring performance, and inputs them for use. Remanufactured batteries will be used for old electric vehicles and repair (after-sales service).

Recovery of Second-Life Batteries In partnership with Hyundai GLOVIS, we are building up a global network and transportation control system to collect and transport second-life batteries discharged from various places including junkyards and dealers around the world. Hyundai GLOVIS has developed and acquired a patent for a dedicated platform container that can transport hard-to-handle used batteries safely and effectively, and is equipped with logistics systems that meet the complex and diverse regulations of various countries. We will use Hyundai GLOVIS' logistics know-how and network to establish a second-life battery recovery system throughout the battery life cycle and complete the link between the downstream and upstream segments.

Virtuous Battery Circulation System



Reuse of Second-Life Batteries Hyundai has been conducting pilot projects to reuse second-life EV batteries for ESS. In December 2020, we became the first company in Korea to obtain approval to give a special regulatory sandbox demonstration of an energy storage device for reusing second-life batteries. Having built a 2 MWh ESS and a 300 kWh ESS, respectively, at our Ulsan plant and the Gongju plant of OCI Specialty, our demonstration partner, we began commercial operations using photovoltaic power in January 2021. In April 2022, in cooperation with the Korea Water Resources Corporation, we built a new 400 kWh ESS in Busan Eco Delta Smart City, which will be used in the P2P-based power transaction pilot project. Starting in 2023, Hyundai's various ESS pilot projects based on second-life batteries will be led by Hyundai GLOVIS, which is planning to convert into a full-fledged second-life battery reuse business equipped with a unified pipeline ranging from a recovery system to a reuse business.

Remanufacturing of Second-Life Batteries Among second-life batteries generated from our battery life cycle, top-quality second-life batteries with high residual value will be linked to remanufacturing business according to our own classification criteria. We will work together with Hyundai MOBIS to establish a collection system and a remanufacturing base by using the domestic and global after-sales parts supply chains of Hyundai MOBIS. We then remanufacture purchased/collected second-life batteries into batteries for old vehicles and after-sales service, thereby prolonging the service life of batteries.

Recycling of Raw Materials from Second-life Batteries Second-life batteries that cannot be remanufactured or recycled via Hyundai's battery circulation system are broken into pieces and sent to a recycling business that extracts from them valuable metals such as lithium, cobalt, and nickel. Hyundai is concentrating on securing technology that can recycle a large amount of second-life batteries in an eco-friendly, safe way. By linking the raw materials that are secured as a result with battery manufacturing processes, we will complete the virtuous circulation system of batteries. We plan to build a stable electric vehicle ecosystem by strengthening our battery raw material supply capabilities in the region through the virtuous battery circulation system.

Strengthening the Global Battery Supply Chain

Hyundai Motor Group is expanding battery cell plants in areas located near EV production sites in order to procure required batteries stably and locally for the global expansion of EV production and sales. To this end, it is increasing investments and strategic alliances with battery companies, including LG Energy Solution and SK on. Through local procurement of battery cells that are optimized in line with electric vehicles' performance and detailed specifications, we seek timely production and sales of high-efficiency, high-performance safe EVs with a high level of competitiveness in accordance with market circumstances. In addition to establishing EV-dedicated production plants in Korea and the US, we are changing previous internal combustion engine vehicle (ICEV) production sites to a system optimized for EV production. In particular, the manufacturing innovation platform that Hyundai Motor Group Innovation Center in Singapore (HMGICS) demonstrated and developed will be applied to new electric vehicle production sites to enable demand-centered intelligent control, use of eco-friendly, low-carbon construction methods, and safe, efficient work.

Establishment of a Battery Cell Production Joint Venture in North America

In partnership with SK on, Hyundai Motor Group is constructing a plant with an annual battery cell production capacity of 35 GWh in Georgia, US to stabilize battery procurement in North America. Hyundai MOBIS will assemble battery packs using cells from the plant, then supply them for the production of Hyundai, Kia, and Genesis EV models manufactured in the US. In addition, the plant is located close to Hyundai Motor Manufacturing Alabama (HMMA) and Hyundai Motor Group Metaplant America (HMGMA), EV production subsidiary that will be launched in 2025, which is expected to enable us to have a stable local procurement system based on which we will strive for increasing EV sales in North America.

Construction of a Battery Cell Plant in Indonesia

Hyundai Motor Company, Kia, Hyundai MOBIS, and LG Energy Solution are establishing a joint battery cell plant with an area spanning 330,000 m^2 in Indonesia to strengthen the battery cell supply chain that is optimized for EV-dedicated models. The plant will have the capacity to produce a total of 10-GWh worth of lithium-ion battery cells every year and is scheduled to begin mass production in the first half of 2024. In particular, Hyundai Motor Group will perform the role of strengthening battery cell production capability through integrated quality control regarding overall battery systems and application to finished vehicles. The battery cells produced at the joint plant in Indonesia will be used in various electric vehicles that will be produced in 2024 and onwards.

Reduction of Environmental Impact

Companies have the responsibility to meets the needs of the present without compromising the ability of future generations to meet their own needs. Hyundai is making utmost efforts to perform this role. There are rapid changes in the internal and external environment that surrounds companies, while water shortage grows in severity due to climate change and reckless corporate activities, and such environmental issues as air and water pollution cause great harm to Earth and all life on Earth. In addition, there is increasing raw material risk, which was triggered by war and inflation. Amid stricter regulations of environmental authorities, sustainable use of natural resources has become an important issue more than ever. Hyundai therefore strives to restrain increases of resource use and waste generation that are connected to the rise in production, which has been increasing after COVID-19.

Sustainable Use of Resources

RESOURCES INFLOWS

Increased Efficiency of Raw Material Input Volatility of raw material prices is rising, mainly attributable to global inflation, supply chain circumstances, and the Russia-Ukraine War. Raw material price volatility is a factor that directly affects finances. Hyundai is therefore striving to minimize internal and external risks that can be triggered by raw materials, including a rise in costs, instability in supply and demand, and depletion of natural capital, by improving efficiency in raw material use and expanding the three Rs (Reduce, Reuse and Recycle). Main raw and subsidiary materials that are used at Hyundai's production plants are steel sheets (steel), aluminum, paint, thinner, foundry sand, and plastics. In case of scraps that are generated by the press process, where steel sheets (steel) and aluminum are mainly used, we sell them to outside parties and enable reuse of the entire amount. In 2022, Hyundai Motor Manufacturing Russia (HMMR) not only recycled 4,351 tons of scrap iron, but also 1,877 tons of cartons and 172.55 tons of plastics as part of efforts to improve its raw material efficiency. Hyundai Motor Brasil (HMB) adjusted fender thickness and reduced steel input by around 8%. Hyundai Motor India (HMI) reduced steel use by 161 tons by reducing blank pitch.

Strengthening Water 3Rs (Reduce/Reuse/Recycle) As the global water shortage caused by climate change intensifies, a number of risks associated with water resources have already emerged. In response, Hyundai evaluates water risks by business site based on the WRI Aqueduct Water Risk Atlas Tool. As a result, we have identified HMI and HAOS as business sites with extremely high water stress and are increasing water 3Rs (Reduce, Reuse and Recycle) mainly at high-water-risk business sites. HMI and the Asan Plant in Korea have established a zero liquid discharge system to reuse and recycle 100% of the water they use. HMI, located in Chennai, India where water shortage is severe, reduced daily water consumption by 130 tons by taking diverse measures, such as strengthening rainwater harvesting facilities and expanding reservoirs. HMB reuses washing water in some production process steps. In 2022, water reuse amounted to 2,284,154 tons, a year-on-year increase of 5%, and the reuse rate remained similar to the previous year's at around 21%. The water usage target for 2022 was set as 10,868,795 tons, which is a 5% reduction from the estimated amount of use that was determined based on the 2022 production plan. Actual water usage was 10,790,093 tons.

RESOURCES OUTFLOWS

Expanding Waste 3Rs (Reduce/Reuse/Recycle) Various kinds of waste materials are generated in the automobile production process. Of these waste materials, metals are 100% recycled. We strive to recycle other waste materials as much as possible, such as waste paint, waste thinner, packaging materials, and sludge. In 2022, we recycled 90.8% of all waste materials generated at our business sites, while treating difficult-to-recycle waste in an environmentally-friendly way. The Asan Plant changed the filter media of the pressure filter at its industrial water purification plant to a recycling treatment method. Our service centers in Korea are holding campaigns on preventing loss of major resources, including aluminum wheels and batteries. The waste reduction target for 2022 was set as 59,875 tons, a 10% reduction from the estimated waste volume that was determined based on the 2022 production plan. Actual waste volume was 50,453 tons. Beijing Hyundai Motor Company (BHMC) changed the waste paint drying method from natural drying to electric heating and reduced final waste volume by 36.75 tons. Hyundai Motor Manufacturing Czech (HMMC) makes continuous efforts to reduce sludge in its wastewater treatment process through sludge dryers and compressors.

Raw Material Use

(Unit: Tons, Tons/Vehicle)

Classification	2020	2021	2022
Steel/aluminum use	1,031,113	1,138,929	1,177,082
Use per vehicle	0.27	0.29	0.29
Steel/aluminum scrap	382,965	400,419	408,662

Water Use

(Unit: Tons, Tons/Vehicle)

Classification	2020	2021	2022
Total use[1)]	10,967,709	9,941,274	10,790,093
Reuse and Recycling	-	2,179,600	2,284,154
Use per vehicle	2.94	2.57	2.70

[1)] Value resulting from excluding the discharge amount from the sum of urban water and water supply facility, surface current, and underground water intake amount

Waste Discharge

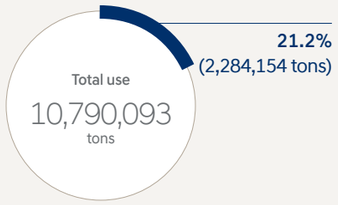
(Unit: Tons, Tons/Vehicle)

Classification	2020	2021	2022
Total reuse/recycling	455,211	492,787	498,162
Total waste volume[1)]	43,105	45,986	50,453
Waste volume per vehicle	0.0115	0.0119	0.0126

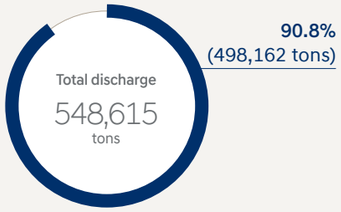
[1)] Sum of landfilled, incinerated, biodegraded waste that does not include the reused/recycled amount

Ratio of scrap amount in 2022

Ratio of water reuse and recycling in 2022



Ratio of waste recycling in 2022



Reduction of Environmental Impact

Reducing Pollutant Emissions Hyundai has set stricter in-house management standards than the legal standards of the countries in which its business sites are located as a way to preemptively respond to air and water pollution. The Ulsan, Asan, and Jeonju plants have each established an integrated monitoring system for IoT environmental facilities to comply with the environmental laws and prevent serious environmental accidents. They have reduced risks caused by environmental pollutants and established an efficient workplace environment management system by introducing advanced new technologies such as water level alarm systems for water tanks, remote disaster prevention facilities, and flow management of environmental facilities, as well as air quality monitoring. HMMC manages its air pollutant emissions considerably lower than the legal standards by reducing air pollutant emissions from each process. It has been planting trees on unused land within the factory, and checks for mercury (Hg) and cadmium (Cd) discharge every day and manages it to be less than 15% of the legal standards. HTBC does not use transport vehicles and utility center boilers any more, and thus reduced boiler load during cold weather to less than 5 t/h, leading to reduced pollutant emissions. The Asan Plant raised wastewater treatment efficiency by installing an additional vacuum dryer, resulting in stable production and supply of industrial water. In addition, facility improvements were made to result in increased wastewater treatment efficiency. HMI reduced pollutants by using chemical and biological treatment methods at its wastewater treatment plant.

Pollutant Emissions

(Unit: Tons, kg/Vehicle)

Classification		2020	2021	2022
Air pollutants	Total emissions (tons)	935	1,211	1,411
	Emissions intensity (kg/vehicle)	0.250	0.313	0.353
Water pollutants	Total emissions (tons)	605	643	723
	Emissions intensity (kg/vehicle)	0.172	0.166	0.181
VOCs	Total emissions (tons)	11,047	10,756	7,796
	Emissions intensity (kg/vehicle)	1.062	0.915	0.547

Management of Harmful Substances

HARMFUL SUBSTANCE MANAGEMENT SYSTEM

Harmful Substance Management Standard Hyundai classifies and manages harmful substances in three stages – prohibition of use, limited use, strengthened management – according to international standards and initiatives. Substances classified as "prohibition of use" are banned from use as high-risk regulated substances for which substitutes must be found, while substances falling into the category of "limited use" can only be used for purposes specified in the exception article, and those falling into the category of "strengthened management" can only be used under constant monitoring and systematic management.

Although we strive to minimize harmful substances under internal standards, it is difficult to completely block harmful substances from products because automobiles consist of many thousands of parts. We therefore apply the same management standards for harmful substances to our supply chain in order to ensure that the products that are delivered to us do not contain any regulated substances.

Inspection and Analysis of Harmful Substances Hyundai has adopted the International Material Data System (IMDS), jointly operated by global automobile manufacturers, to systematically manage information on harmful substances. We also apply the Material Analysis Management System (MAMS), developed in-house, to conduct risk assessments based on substance information on parts collected from the development/design stage of a new vehicle, thereby blocking the use of high-risk substances from the outset. Moreover, we investigate the inclusion of regulated substances during the new car development stage in order to preemptively respond to newly regulated substances. Hyundai also checks information on substances that are liable to change during the mass production processes through parts and material analysis and inspections during regular supplier site inspections.

Management of Harmful Substance Information Hyundai does its utmost to prevent accidents by preemptively reviewing new high-risk substances and replacing them with alternative substances. Upon handling hazardous chemicals, we are striving to maintain a safer working environment by utilizing the integrated monitoring system of environmental facilities to check for leakages of hazardous chemicals in real time. Since 2003, we have been sharing information on domestic and international harmful substance regulations and response requirements with our suppliers, as well as strictly managing harmful substances in the supply chain by helping suppliers set up their own systems of response to harmful substance regulations, whenever necessary, in addition to running annual IMDS user trainings to improve the consistency of IMDS data.

Preemptive Response to Regulation and Initiatives Hyundai supports international regulations, standards, and initiatives concerning harmful substances. We strive to preemptively develop and apply alternatives even before finalization of regulations that prohibit/restrict the use of harmful substances in Korea and abroad. In response to amendment and/or strengthening of legislation on end-of-life vehicles (ELV) and REACH of EU, a leader of governing harmful substances, we work on replacing high-risk substances. Persistent organic pollutants (POPs) that have recently become known to be resistant to environmental degradation accumulate in the body of animals and plants through the food chain, causing damage to the central nervous system and disturbances in the immune system, thereby adversely affecting the ecosystem and human health. As global discussions are in full swing on regulations that prohibit use of POPs, Hyundai has preemptively established countermeasures. Discussions on regulations concerning perfluorinated compounds (PFAS) have been taking place in Europe. Aiming to prohibit PFAS use before 2027, which is when regulations are expected to be adopted, we are identifying alternatives and the status of regulated substance use and reviewing when to apply alternatives.

Focused Management of Four Major Heavy Metals Hyundai prohibits use of the four major heavy metals – lead, cadmium, hexavalent chromium, mercury – that are prohibited from use in the EU market based on the July 2003 EU ELV regulation and that can accumulate in the human body and cause heavy metal poisoning. In addition, we strictly prohibit the use of high-risk substances such as brominated flame retardants. We manage such harmful substances in accordance with the harmful substance management standards established in December 2002.

Pyramid-type chemicals management system

Hyundai has set in place a pyramid-type chemicals management system that covers the head office–business sites–unit plants. We also operate the department responsible management system and social media communication channels for real-time sharing of chemicals injection information (planned time of injection, injection amount, etc.), thereby taking preemptive measures to prevent chemicals accidents.

Ulsan Plant's commitment to zero hazardous chemicals

Hyundai's Ulsan Plant is striving to reduce hazardous chemicals themselves with a goal of reducing chemical accidents. It has been making continuous plant facility improvements since 2014, while developing alternatives together with suppliers. As a result, it achieved a 90% reduction in hazardous chemicals and plans to become a zero hazardous chemicals business site by 2030.

Reduction of Environmental Impact

BUSINESS CASE

ECO-FRIENDLY ACTIVITIES BY PLANTS

Hyundai is improving quantitative environmental indicators for each business site in Korea and overseas. Our business sites also have been taking active part in eco-friendly activities and initiatives. These qualitative activities are included in business sites' performance indicators, along with quantitative indicators, and reflected in their environmental performance evaluations. Based on this performance system, we are strengthening the eco-friendly activities of each business site and leveling up the company's environmental management based on the horizontal development of excellent environmental activities.

Business Sites in Korea

Ulsan Plant As the company's largest single manufacturing plant complex, the Ulsan Plant engages in a range of eco-friendly initiatives individually tailored to each of its manufacturing plants. Plant 3 plans to build a wastewater reuse system including water transfer piping so that effluent from the wastewater treatment plant can be reused as circulating water for the scrubber in the painting booth, enabling the plant to reuse 52,000 tons of water per year. The engine transmission plant has installed a real-time leakage detection system to prevent environmental accidents caused by leakage of cutting oil used for cooling, rust prevention, and lubrication. The flow of leaked cutting oil is identified in real time, and an alarm system is activated immediately if necessary, enabling the plant to take action before any leaked oil enters the drainage ditch.

The materials plant became the first in Korea to apply an automatic management system for washing water of wet scrubbers to eliminate odor and reduce hydrogen chloride discharge concentration. If the pollution level – set based on this system – exceeds, washing water is automatically replaced, which has enabled us to manage air pollution prevention facilities in a more stable and efficient way. We also strive to implement ESG management through a wide range of cultural events that promote environmental management, such as ZUPZUP campaign of the Plant 1 and labor-management environmental workshop of the Plant 2.

Asan Plant The Asan Plant's waste recycling ratio is 95%, which is higher than the average waste recycling ratio (91%) of all our plants across the globe, and its waste-to-landfill is close to zero at 0.04%. Based on a high recycling ratio and very low landfill, the Asan Plant is working on receiving external Zero Waste To Landfill (ZWTL) certification which assigns a grade according to the actual recycling rate after confirming a business site's waste recycling level. According to the preliminary inspections of the certificate agency, the Asan Plant is anticipated to achieve Gold level validation. This will be the first ZWTL validation among automotive manufacturing plants, contributing to enabling Hyundai to strengthen its ESG competitiveness.

Jeonju Plant The Jeonju Plant is strengthening management step by step across the entire scope of air measurement, ranging from selection of an air measurement company to management of measurement result data, to prevent regulation risks from stricter laws concerning self-measurement of air pollutants and incorrect measurements. In particular, it has dual measurement companies to enable mutual comparison and analysis of results. In addition, it strengthened field surveys and continually discovers and reflects new pollutants. It is also strengthening follow-up improvement activities based on measurement and field survey results, such as scrubber improvements.

Asan Plant's Waste Treatment Status

1	2	3	4
Recycling	Heat recovery incineration	Neutralization	Landfill
95.43%	4.03%	0.07%	0.04%

Overseas Business Sites

Hyundai Motor Manufacturing Alabama (HMMA) Located in Montgomery, Alabama in the U.S., HMMA is carrying out multi-faceted improvement activities to reduce wastewater pollutants to protect Montgomery's water supply. In January 2023, HMMA established a regular conference body with an external professional company to inspect the water quality of wastewater, in addition to significantly strengthening water treatment standards of the wastewater treatment facility. It has also established a real-time wastewater quality monitoring system and strengthened water quality inspection equipment.

Hyundai Motor Brasil (HMB) HMB was the first Hyundai business site to achieve zero waste-to-landfill. Based on this performance, it became the first automotive company in Brazil to obtain the Responsible Company Seal in relation to waste management and the Waste Zero Seal for two consecutive years in 2023. In addition, HMB is conducting a regular impact assessment (monitoring) on the overall environment – including air, water quality, biodiversity, soil, underground water – to minimize its environmental footprint, while also making improvement based on assessment results.

Hyundai Motor Manufacturing Czech (HMMC) HMMC is strengthening its efforts to reduce sludge waste from the sewage treatment plant to protect nearby water supply. In order to improve its sludge compression process, HMMC changed the sludge coagulant to one with stronger alkalinity, thereby reducing sludge waste by 37%. It will adopt an additional sludge compressor to reduce sludge waste by at least 60%.

Hyundai Motor Manufacturing Russia (HMMR) Soil loss and erosion trigger floods and soil erosion, not to mention damage to biodiversity. To minimize negative impact from soil loss and erosion, HMMR is improving the business site environment by restoring old pipes in the business site that have a possibility of soil loss and erosion and inserting filter cartridges in areas where there was soil loss, thus preventing additional loss.

Hyundai Motor India (HMI) Air pollution caused by rapid industrialization is emerging as a social issue in India. In response, HMI is continually strengthening improvement activities aimed at reducing air pollutants, including Particulate Matter (PM) and nitrogen oxide (NOx). It recently built a system that recovers waste heat from regenerative thermal oxidizers (RTOs) and uses the waste heat as a substitute for boilers, resulting in a 27% reduction in air pollutants generated during boiler use. In addition, it has reduced fuel consumption by 91% through waste heat recycling, contributing to energy saving and cost reduction.

Hyundai Assan Otomotiv Sanayi (HAOS) HAOS has achieved a reduction of about 23% in the amount of contaminated wastes per vehicle in the last three years, but found it difficult to measure it by department since it was taking total measurements for HAOS. It therefore adopted a waste barcode system to address difficulties in detailing activities by department. By attaching a barcode sticker to each shop contaminated waste bag and measuring the weight in the waste warehouse, it can conduct real-time monitoring of the amount of contaminated waste by department. HAOS plans to implement additional reduction activities by department based on monitoring results.

Beijing Hyundai Motor Company (BHMC) The BHMC Yangzhen Plant in China reused and adopted a waste cutting oil treatment facility of the Changzhou Plant, which stopped operation according to a mid- to long-term plant operation plan, to strengthen treatment of waste cutting oil, which is an environmental pollutant. This has enabled the Yangzhen Plant to prevent environmental pollution that is caused by waste cutting oil by being equipped with a dual (separation/microbial) waste cutting oil treatment system that includes microbial treatment.

Hyundai Motor Manufacturing Indonesia (HMMI) HMMI began its plant operations in 2022 and provided employee training to raise environmental awareness in consideration of its low environmental implementation score compared to neighboring countries, including Singapore and Thailand. HMMI created an emergency manual and set up emergency equipment to respond to emergency situations, such as pollutant leakage and other such environmental accidents. It is also strengthening relevant employee training so that they can become familiar with relevant matters.

Protection of Biodiversity

Biodiversity is an essential element for life on Earth to maintain balance with the natural environment. Hyundai recognizes that biodiversity has a significant impact on humanity's food security, health, air, water, and soil quality. To minimize biodiversity loss due to business operations, we are assessing species composition and diversity as well as improving environmental factors that influence biodiversity. Moreover, we will undertake various projects that take characteristics of the natural ecosystem into account with a goal of enhancing biodiversity. To this end, we will continue with projects aimed at preserving/restoring species and population near business sites or local communities, and restoring habitats and establishing alternative habitats.

Preservation, Restoration, Expansion of Biodiversity

BIODIVERSITY PROTECTION SYSTEM

Establishment of Biodiversity Protection Policy In 2022, Hyundai established the Biodiversity Protection Policy based on the Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora, and Guidelines for Applying Protected Area Management Categories. We are complying with laws and regulations on diversity promotion, wild fauna and flora management, natural habitat conservation, and use of forest/soil/water resources of countries where our business sites are located. Also implemented based on the biodiversity policy includes the assessment of environmental impact throughout our business operations and conservation/restoration activities. Implementation of our pledge on mid- to long-term biodiversity restoration and promotion, biodiversity policy declaration and establishment/amendment, assessment of biodiversity and setting of impact reduction activities, and forest destruction prevention and reforestation project is endorsed by BOD or management.

Biodiversity Assessment and Protection by Business Site Hyundai conducts an environmental impact assessment of its large business sites based on relevant laws and regulations in the respective country to forecast and analyze the impact on resident life and natural environment by environmental factors that arise in the process of newly building/extending business sites or operating business sites. The air environment, water environment, land environment, fauna and flora, and other factors are subject to environmental impact assessment. Based on assessment results, we identify major risk factors and establish mitigation measures. Some production subsidiaries additionally conduct a biodiversity risk assessment that identifies numbers of fauna and flora and ecosystem status, through which they forecast impact and risk factors on specific species and population and establish mitigation measures. In addition, each business site carries out biodiversity and habitat protection activities and collaborates with government and relevant organizations, non-profit groups, and professional organizations to raise the effectiveness of protection activities.

Hyundai Motor Company Biodiversity Protection Policy

Biodiversity Assessment – Numbers of Fauna/Flora and Analysis of Impact

① **Select species and individuals**
We select species and individuals that are subject to an assessment in a way that allows identification of fauna and flora as well as the ecosystem status in consideration of a business site's operation method, operation size, and nearby local environment characteristics. In particular, we include endangered animals, protected wild animals, natural monuments, and species that are designated for preservation/protection by international agreements in assessment targets.

② **Set the assessment area (range)**
The area that has the business site's major axis length as the radius is used as the basis, but we set impacted neighboring areas from business site boundaries as the assessment range. If needed, we expand the assessment range in consideration of fauna and flora's movement route, area of activity, and vegetation distribution. Also, in consideration of seasonal characteristics, we conduct an assessment at a different time.

③ **Define the assessment method (means)**
We carry out a basic survey of ecosystem geography and ecology, including an inquiry, documentary survey, and questionnaire. We identify the status of numbers of species through unaided eye observation, field inquiry, picture-taking, sound detection, spot survey, and trap installation, in consideration of fauna and flora's area of activity, time, frequency, and other factors. Assessment results are managed as characteristics information, including method of confirming species per assessment spot, legally protected species, indigenous species, and observed and confirmed population.

④ **Forecast and analyze impact**
We forecast and analyze the impact and risk factors of natural environment changes caused by business operations, air/water/soil pollution, and noise and vibration generation on changes in species and population. When forecasting impact, we refer to similar assessment cases, such as establishment of new business site, capacity expansion, and business operation. Based on assessment results, expected changes to species and population are described in quantitative or qualitative form. We forecast impact in detail for major species and individuals that are expected to be substantially impacted from business operations. Priority is placed on considering species that are sensitive to anthropogenic interference.

⑤ **Establish mitigation measures**
Based on the results of forecasting and analyzing negative impact on species and population, we establish measures on mitigating negative impact on fauna and flora species and population. We change business site locations, adjust business operation schedules, and establish alternatives to avoid significant impact, and adopt environmental facilities to remove and minimize environmental pollution. In case of unavoidable damage to a major habitat, we establish alternative habitats and vegetation belts, and artificial space, including wildlife passage.

Methods for assessing the species and individual inhabitation status (picture-taking, spot survey, field inquiry)

Protection of Biodiversity

BIODIVERSITY PROTECTION APPROACH AND MITIGATION MEASURES

	Hyundai's Approach	Hyundai's Mitigation Measures
Avoid	• Restrict or put off the establishment and extension of business sites in areas that have a high impact on biodiversity • If negative impact is confirmed, conduct restricted operations until the impact is offset	• Before establishing/changing/expanding a large business site, we pre-assess how the activity will impact the nature assets, including biodiversity (flora and fauna) and natural environment (air, water, soil), of the planned project site and surrounding area. According to assessment results, we decide on carrying out the project or restricting/putting off the project.
Reduce	• Make facility investments to remove and minimize the discharge of air, water, and soil pollutants • Develop technologies that reduce environmental pollutants that arise in the process of manufacturing and using vehicles	• We adopt environmental facilities that can minimize discharge of air/water/soil pollutants of our business sites, such as use of the regenerative thermal oxidizer (RTO), dust collector, zero liquid discharge system, and waterborne-based paint. • We conduct life cycle assessments (LCAs) in the areas of global warming, acidification, eutrophication, and photochemical oxidant generation to assess our vehicles' potential impact on the environment - LCA results indicated that EVs can reduce the carbon footprint as much as 67% compared to ICEVs, when using new and renewable energy-based electricity. Hyundai is therefore striving for 100% electrification by 2045. • We apply exhaust gas-reducing technologies, such as the gasoline particulate filter (GPF) and diesel particulate filter (DPF), to reduce vehicle exhaust gas such as NOx and PM.
Transform	• Make structural improvements to the topography of business sites or surrounding areas so that there is no impact on biodiversity • Participate in policy-making and engage in cooperation in the industrial sector to reduce negative environmental impact	• We are establishing eco-friendly ecological parks based on private-government cooperation and developing/spreading new technologies that restore the ecosystem. - We established the Yeouido Saetgang Ecological Park based on a three-party agreement among Hyundai Motor Company, Seoul Metropolitan City, and social cooperative Hangang, adopted non-point pollutant source reduction facilities, and conducted a planting project in the area. - In partnership with The Nature Conservancy (TNC) in Brazil and Sao Paulo State University's Department of Forest Science, we established a research forest to develop new technologies for forest restoration (Green Field, etc.) and are spreading new technologies.
Restore	• Promote species and population that reduced or became extinct in a business site's surrounding or nearby area • Establish (alternative) habitats to maintain-restore species and population	• We restore endangered high-risk species and endangered species threatened by climate change. - Animal restoration: Preserving and restoring species, such as by setting protection zones for the endangered long-billed ringed plover and eagle, which is a natural monument, living in the Taehwa River in collaboration with Ulsan Metropolitan City and East Asian-Australasian Flyway Partnership - Plant restoration: Following a project in the Hongcheon area to restore Korean fir and tulip tree, endangered species threatened by climate change, we collaborated with the Korea National Park Service and conducted a project on restoring plants on Mt. Deokyu that are categorized as endangered species threatened by climate change, including the Korean fir, spruce, and yew.
Regenerate	• Contribute to enhancing natural/biological capital and improving productivity other than business site surroundings • Induce increases in species and population by improving the forest, ocean, and soil environment	• We undertake a land/marine/pond ecosystem regeneration project. - Land ecosystem: Through "IONIQ Forest" project, we will regenerate forests by planting 1 million trees by 2025 across the globe, to provide sustainable habitants for both flora and fauna (Trees support over 80% of the world's terrestrial biodiversity). - Marine ecosystem: In collaboration with Healthy Seas, we will collect a total of 230 tons of ocean waste (waste fishing nets, etc.) in 10 European countries and Korea by 2025 to increases in marine life population, including return of marine fish species. - Pond ecosystem: Together with the Gurugram city government of India, we are regenerating the ecosystem of three ponds. By regenerating ponds, which serve as habitats of various forms of life, we are inducing the restoration of species that mainly live in ponds.

Classification	Region	Metrics	Target	Progress
Terrestrial ecosystem	Korea, U.S., Brazil, Europe (the Czech Republic)	• Area of regeneration • No. of trees planted to build forests	• Area of regeneration: Regenerate a total of 650 ha of terrestrial ecosystem (forest, grassland) by 2025 • Planting trees: Plant 1 million trees by 2025	• Area of regeneration: Completed regeneration of a total of 270 ha of the terrestrial ecosystem, including forests and grasslands, from 2016 to 2022 (achieved 41% of the target) • Planting trees: Completed planting a total of 225,923 trees from 2016 to 2022 (achieved 23% of the target)
Marine ecosystem	10 countries in Europe, including Greece, Korea (Gangwon Province)	• Collected marine wastes, including waste fishing nets	• Collect 230 tons of marine wastes by 2025	• Completed collecting a cumulative 100 tons of marine wastes across around 20 occasions in 8 European countries and Korea from 2021 to 2022 (achieved 43% of the target)
Pond ecosystem	India (Hariahera, Palasoli, Tajnagar)	• Number and area of regenerated ponds	• Regenerate three ponds with an area of a total of 2.3 ha by 2023	• Completed regenerating 3 ponds with a total area of 2.3 ha from 2022 to the first half of 2023. Together with the regeneration of the pond ecosystem, 132,623 cum of water storage potential was secured (achieved 100% of the target)

Protection of Biodiversity

BUSINESS CASE

BIODIVERSITY IMPACT ASSESSMENT – HYUNDAI MOTOR BRASIL (HMB)

Overview of Biodiversity Assessment

Hyundai Motor Brasil (HMB) has been carrying out the seasonal biodiversity impact assessment annually since 2010 to track changes in biodiversity change near its business site, attributable to the use of natural capital required for its business operations and to the impact of the business operations. It also conducts biodiversity assessments to identify the impact that its internal restoration project of riparian forests (Corrego Capim Fino) has on surrounding biodiversity.

Description of the Assessment Area

The areas chosen for the biodiversity assessment are identified as Area T1, Area T2, Area T3, and Area T4, near Piracicaba City in the Brazilian state of Sao Paulo where HMB is located. In principle, a biodiversity assessment area should be within a 1-km radius from the business district, but the assessment area range can be expanded in consideration of the characteristics of amphibians, reptiles, mammals, and birds, which are the fauna mainly subject to the assessment. Area T-1 corresponds to the region of the mouth of Ribeirão Capim Fino, and has a secondary forest area where eucalyptus monoculture, a major plant species that grew naturally, was re-established. Area T-2 corresponds to the region of the permanent preservation areas (APPs), and this site has well preserved secondary forest. It is in the center of two residential condominium areas. Area T-3 is a water resource protection area, and this region has anthropic pressure on the borders due to intense sugar cane cultivation. The T-4 area has the APP of a water resource that flows directly into the Rio Piracicaba. This region has anthropic pressure on the edges due to the intense cultivation of sugar cane and the highway that runs along one side of the fragment.

HMB is identifying the status of species and numbers in areas surrounding the business site and also assessing the level of biodiversity impact of environmental factors that arise from the business site through the seasonal biodiversity assessment. If negative impact on biodiversity is expected, HMB carries out mitigation activities (maintain-restore-promote) to decrease impact and monitors whether the activities are effective for maintaining-restoring-promoting biodiversity. In addition, it conducts the Seasonal Biodiversity Assessment on a regular basis to track and manage changes (increases and decreases) in the number of species.

Methodology

With participation by an ecology expert, HMB conducted sample and field surveys on amphibians, reptiles, mammals, and birds. Based on literature materials on the status of biodiversity distribution of the assessment area, HMB pre-identified the species and population and then confirmed them by means of an unaided eye observation, field inquiry, picture-taking, sound detection, and spot survey. When the biodiversity assessment was conducted, optical image equipment, trap cameras, and GPS and sound-recording devices were used in consideration of the geographical characteristics of the assessment area and weather environment at the time of the assessment. HMB directly confirmed and estimated species' abundance, frequency, and area occupancy through the Seasonal Biodiversity Assessment, and also conducted a sensitivity analysis that estimates changes in species as a result of anthropogenic influence, including reduced habitats, depleted water resources, water pollution, fire, and traffic operation.

Species and Individual Inhabitation Status

The assessment results indicate that there are no indigenous species and introduced species that live only in the area and that there are no high-risk species, such as endangered species. Most species are generalist species that adapt to changes in the surrounding environment and anthropogenic influence. Some mammals and birds were confirmed as specialist species that are sensitive to changes in the surrounding environment. These specialist species are highly dependent on forests and sensitive to changes in the surrounding environment. They have been analyzed as species that inevitably move to a new habitat if there is a change in the environment. From among assessment areas, most species live near the river and areas that house indigenous vegetation. An imbalance in species or overpopulation was not found.

Species	No. of species identified in 2022	Cumulative no. of species identified since 2010
Amphibians/ reptiles	8[1)]	33
Mammals	6	25
Birds	87	197
Total	**101**	**255**

[1)] Including 2 newly identified species

Forecasting and Easing Biodiversity Impact

It was assessed that cumulative anthropogenic impact as a result of the development of farmlands and residential areas surrounding the business site and daily life activities of local residents and crop cultivation is significant on changes in species in the biodiversity assessment area, rather than environmental factors that arise during HMB operation having an impact on biodiversity. In addition, an imbalance in the number of species, such as a dominating specific species, or overpopulation of a specific species was not found in the assessment area and neighboring regions.

Based on the biodiversity assessment results, HMB is conducting a qualitative habitat improvement project for net positive impact on species. Starting in 2012, it has been planting indigenous plants through the project on restoration of riparian forests near the business site. HMB completed planting 50 thousand trees near the business site. Starting in 2023, it will collaborate with The Nature Conservancy (TNC) to further improve the habitats of land species by planting a total 100 thousand indigenous trees in a 40-ha area of Sao Paulo, where a Hyundai plant is located, and State of Minas Gerais nearby Sao Paulo.

1. Sample areas of the Seasonal Biodiversity Assessment (T-1, T-2, T-3, T-4)
2. Methodology – Night survey
3. Cururu toad – Amphibians identified through the species and individual inhabitation status survey

Social

"for Tomorrow" initiative powered by Hyundai and UN Development Programme (UNDP)

The primary purpose of every business is to generate profit. However, those which fail to fulfill their obligations as responsible members of society in the process of creating economic value are no longer sustainable.
Having committed itself to the pursuit of sustainable growth, Hyundai considers the right direction for achieving growth and the right changes for society as a member of the global community, spreading social value so that more people can benefit from the greater value created by Hyundai.

Creative Organizational Culture

Hyundai is building a human resources and organizational management system that can deliver the highest level of value throughout the entire life cycle of employees, including talent acquisition, development, evaluation, compensation, benefits, and retirement. This system ensures the timely securing of outstanding talents through continuous recruitment and employee referral programs while investing in infrastructure to foster a self-driven learning culture. Furthermore, at Hyundai, we have implemented a performance evaluation and fair compensation system based on mid- to long-term business objectives; run tailored welfare programs that employees can perceive in their daily lives; and build an autonomous work environment to improve employee engagement. We also promote activities that enhance diversity, enabling employees with a variety of cultural backgrounds to work together, aimed at creating an organizational culture that values creativity and achievement. In our efforts to continue improving organizational culture, 5% of KPIs for executives reflect the internal culture survey scores.

Strategic HR Management

TALENT RECRUITMENT AND MANAGEMENT

Talent Recruitment Process and System Hyundai has moved away from the annual recruitment system and introduced a year-round recruitment system to flexibly respond to changes in the business environment and labor market. A procedure is now being operated that allows the field to take the lead in selecting job-oriented talents in a timely manner. Departments that want to hire talent define the expertise such as competence, qualifications, and skills required of applicants, as well as establishing selection criteria and making decisions. In the process of selecting applicants, job competencies are verified in a variety of ways, such as assignment presentations and group interviews, to hire talents who meet the criteria. In order to support the expansion of field departments' participation in the recruitment process by introducing a year-round recruitment system for excellent talent, a "Recruit Support Center" is in operation for each large-scale business site to provide support throughout the recruitment process. Additionally, decision-makers involved in recruitment, such as the HR department responsible for hiring and the business departments carrying out practical work, actively participate in the selection process to fairly assess the applicants' professionalism and job suitability.

After the recruitment process, regular internal audits are conducted to ensure transparency throughout the entire process. If any issues related to fairness and reliability are identified, corrective measures are taken to address them. Hyundai has further enhanced transparency throughout the recruitment process by operating a checklist that allows self-assessment of the fairness of candidate selection, and we have also reorganized our recruitment website to provide applicants with an intuitive and convenient platform to access and apply for job openings. The internal recruitment management system has been upgraded as well to enhance fairness and reliability in the recruitment process by enabling data-driven analysis of a variety of applicant information.

Target Sourcing System Hyundai has established the Target Sourcing System in the second half of 2022 to proactively secure talents in new business and emerging technology fields, required for enhancing future competitiveness. Building upon this system, we are promoting preemptive proposals for recruitment positions and reinforcing our in-house recruiting through talent acquisition and talent networks. In order to effectively secure top talent, we have established a dedicated Talent Sourcing Center and are building a proactive talent pool aligned with our new business strategies. This involves sourcing talents from a variety of channels and establishing connections with external talents through hosting and participating in a variety of tech conferences. We are also expanding our network with external talents by organizing and participating in a variety of tech conferences, which allows us to establish connections with exceptional talents from outside our organization while promoting industry-academia collaboration to build a talent pipeline. These efforts contribute to enhancing our recruitment brand image as a future mobility tech company.

Recruitment Promotion Hyundai is communicating with applicants through a variety of means of online recruitment promotion, providing them with information about the company and job positions. We have introduced a metaverse job fair which has gained attention as a means of consultation and communication, particularly for candidates who are more accustomed to contactless interactions.

With the adoption of contactless recruitment processes due to the spread of COVID-19, this approach has been received as a new recruitment solution. We have therefore established a dedicated metaverse space to communicate with applicants on a regular basis. We are also making continuous efforts to promote the company through such online platforms as YouTube, providing a positive corporate image and offering in-depth information that may not be easily accessible from external sources. Moreover, we are planning additional promotional activities to sustain interest and awareness in the company, taking into account the unique characteristics of each business site. This ensures that Hyundai continues to attract ongoing attention and engagement from potential candidates.

Metaverse job fair

Strategic Workforce Planning Hyundai is formulating strategic workforce plans from a mid-to long-term perspective to secure the necessary talent for executing and achieving our long-term business strategies, including strengthening EV portfolio and developing future strategic technologies. In addition, we proactively attract key talents who will lead our future business, and support their growth by helping them to design their career paths and arranging for them to meet personally with our corporate leaders, while striving to spread their proactive and innovative way of working throughout the organization.

Strategic Workforce Planning Process

Planning	• Introduce various methods of talent analysis to secure excellent human resources and analyze their relative competitiveness
Use	• Use the results of the talent analysis in the core competency analysis of the company's manpower, recruitment process, portfolio of HR planning, recruitment strategy, etc.
Outcome	• Increase collaboration between departments through organizational network analysis • Conduct organizational culture assessment and make improvements to analyze potential reasons for leaving the organization and establish countermeasures, etc.

Talent Analysis

Employee Competency Analysis	Performance Measure	• Review job performance and competency development of each employee based on key performance indicators (KPIs) on a constant basis • Select outstanding talents, including employees who have consistently achieved exceptional results compared to their peers in the same job position and level, or exceeded performance targets
	Skill Gaps Identifying	• Define competency requirements for each job position and level, and measure and manage individual employees' competency levels • Identify outstanding employees based on quantitative measurements of competencies for each element
Internal Organization Analysis	Network Analysis	• Identify inter-departmental relationships by analyzing frequency and time spent on inter-departmental collaborations as well as the efficiency and productivity of collaboration processes • Select and manage departments that may feel excluded or isolated during the collaboration process
	Employee Retention	• Conduct organizational culture assessments among employees to identify individual grievances, expectations, and potential turnover risks • Improve personnel policies and welfare programs, and promote proactive communication to retain top talent
External Environment Analysis	Competitive Intelligence	• Conduct regular monitoring of market conditions, including industry competition, emergence of potential competitors, and supply chain uncertainties • Implement a continuous recruitment system to secure talents with required capabilities and skills
	Recruiting & Hiring	• Generate interest from outstanding talents through online promotion and virtual job fairs in the metaverse • Organize separate recruitment sessions for international master's and doctoral candidates to attract global top talents

Creative Organizational Culture

TALENT DEVELOPMENT AND PROFESSIONAL COMPETENCIES

New Growth System Hyundai is creating a workplace culture that encourages self-driven learning to develop the capabilities necessary for the transition towards electrification, software competitiveness, and future growth drivers such as autonomous driving, PBV, AAM, and robotics. In particular, we are formulating career development and competency enhancement plans based on employee growth guides and competency assessment data, followed by the development of programs which enable employees to engage in continuous learning and facilitate knowledge-sharing.

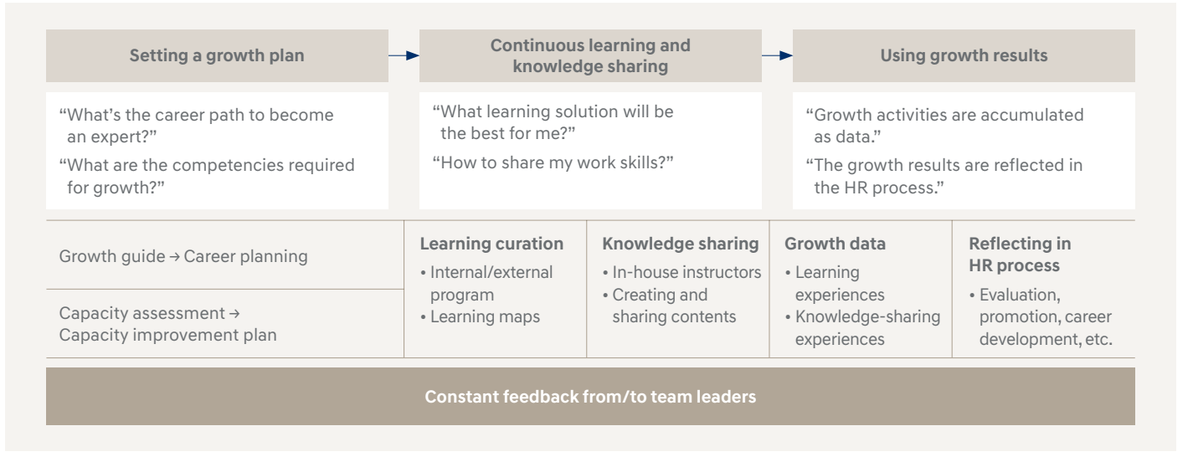
The accumulated data (experience points) through continuous learning and knowledge-sharing is used for the development of growth platforms and new educational programs. The data is also incorporated into HR processes such as evaluation, promotion, and career development. Based on the data and insights obtained through the operation of the new growth system, Hyundai plans to develop and enhance platforms that allow experiences and knowledge to spread beyond individuals and across the organization, providing support for employee learning and development.

Global Career Development Hyundai runs a Global Career Development program, where highly talented individuals with a global mindset and recognized expertise in their respective fields are regularly dispatched to over 50 overseas locations worldwide. This program allows employees to lead global field organizations in areas such as research, production, and sales, providing them with valuable opportunities to drive future business plans and generate results, serving as a significant opportunity for employees to grow into global talents.

Learning Lounge Hyundai operates the "Learning Lounge", a new growth support system designed to respond swiftly to rapid market and environmental changes. Through the Learning Lounge, employees can establish future growth plans and receive recommendations for learning solutions tailored to their individual growth plans, enabling them to engage in autonomous continuous learning. The Learning Lounge provides approximately 12,000 learning solutions, empowering employees to proactively drive market changes and transform into game-changers.

Learning Lab The "Learning Lab" is a study group formed voluntarily by employees to independently acquire knowledge on common topics. It is designed to enhance employees' competency and promote a culture of growth by allowing them to autonomously select the learning content, time, location, and participants. In addition to their assigned tasks, employees can participate in groups focused on deeper learning and engage in sharing and discussing creative ideas. The Learning Lab facilitates activities such as exploring and experimenting with advanced location positioning technologies, researching, and analyzing data related to e-mobility trends, and understanding and implementing monitoring systems for autonomous driving vehicles.

New Growth System

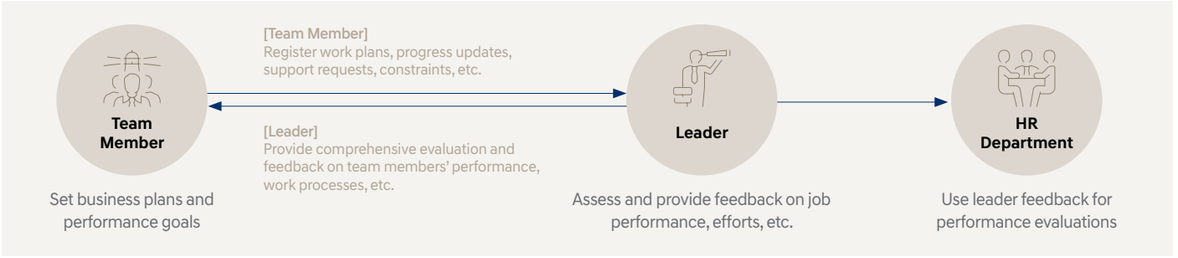


Internal Recruitment and Job Transfer Hyundai has established the "Internal Recruitment and Job Transfer" system which enables the company to have right talent in a timely manner within its talent pool and provides opportunities for employees to gain new job experiences. When there is a need for personnel in a particular department, employees can apply for the desired department and position based on their career and competency. Through the evaluation process, including document review and interviews, candidates for internal transfer are selected. Hyundai actively utilizes this system to reduce costs associated with new recruitment, shorten the organizational adjustment period, and provide opportunities for existing employees to develop their abilities as managers.

Performance Evaluation System Hyundai implements an objective and fair performance evaluation system, with a focus on employee performance. This includes KPI evaluations based on management by objectives (MBO), 360° multi-faceted evaluations, and peer-to-peer evaluations. The MBO-based KPI evaluation is applied to general and research employees, while all other employees set individual goals based on their job responsibilities or specific targets aligned with the objectives of their respective departments. Feedback is provided to employees based on their performance against these goals. As a result, all employees at Hyundai are subject to the MBO-based performance evaluation system. Furthermore, through team unit evaluation and KPI settings by each division, Hyundai attempts to evaluate performance in various level.

360° Multi-Faceted Evaluation Hyundai has implemented a multi-faceted evaluation system that includes "Leadership Surround View" and "Peer Surround View" evaluations. In 2022, this evaluation system was conducted for 95.8% of executives, general employees, and research staff. Moreover, Hyundai imposes restrictions on the highest rating, enabling the comparison and analysis of performance among employees at the same rank. This indicates that the evaluation system incorporates relative elements under the framework of an absolute evaluation system.

View-T System



24/7 Feedback (View-T) Hyundai operates a 24/7 feedback system called "View-T" which allows leaders and team members to share and exchange feedback on job performance, career development, skill enhancement, and performance management. When team members register their work plans, progress, support requests, constraints, and other related information, leaders evaluate and provide feedback based on not only the outcomes but also the team members' efforts and the process of task execution. The feedback and shared performance information between leaders and team members through the continuous feedback system are utilized in the performance evaluation process.

Remuneration System Hyundai provides variable pay (performance-based bonuses) that is linked to performance evaluations. Base salary is increased annually to ensure the well-being of employees, and the magnitude of the increase is adjusted considering internal and external economic conditions, market conditions, and business performance. The company does not discriminate among employees when it comes to setting base salaries or determining salary increases. Wages calculated accurately according to their working hours (above the minimum wage under the local law) are paid to them on a regular basis on fixed dates.

Performance-based Compensation At Hyundai, employees' variable pay is determined fairly based on their job performance. In addition to variable pay based on performance evaluations, we also motivate our employees by distributing surplus profits to all employees annually based on the company's business performance.

Employee Stock Ownership Plan Hyundai has implemented an employee stock ownership plan (ESOP) to enhance employee motivation, job engagement, and alignment of business objectives with personal values. As part of this plan, a portion of the variable pay is provided to employees in the form of company stock. In 2022, Hyundai offered 1,020,552 shares to employees. By 2022 we had granted a total of 2,857,635 shares, equivalent to 1.3% of total shares, to our employees through the ESOP. All our full-time employees, who account for about 90% of the company's total workforce, are eligible for both the ESOP and the employee stock repurchase plan.

Creative Organizational Culture

Project-based Joint Research Programs In collaboration with renowned research institutions at home and abroad, Hyundai is running a "project-based joint research" program. Through this program, we are strengthening R&D capabilities in future core technologies and address persistent issues in our products. The outcomes of these joint research efforts are then applied to our finished vehicles and advanced technologies. In addition, we have been organizing a variety of research dissemination seminars based on these research findings to foster technology internalization and enhancing their research and development capabilities.

Customer-oriented Car Master Training Program Hyundai focuses on customer-centricity through our "Car Master Training Program" to cultivate talents in sales, customer service, and service sectors from a customer experience perspective. We have established a service convergence education system to strengthen product knowledge (electric vehicles, luxury cars) and enhance consultation skills (CSR, CS) through training. This enables us to enhance customer touchpoint services. As a result, the Korean Customer Satisfaction Index (KCSI) has shown improved customer satisfaction in all passenger vehicle/RV sectors compared to the previous year. We have achieved consecutive wins in the passenger vehicle sector for 29 years and in the RV sector for 19 years.

Leadership and Job Competency Training The solid leadership of the top management is of paramount importance in realizing Hyundai's management philosophy of realizing the dream of mankind by creating a new future through creative thinking and taking on endless challenges. Hyundai is conducting a variety of leadership training programs such as a customer-oriented mindset for top leaders, a collaboration system that can create synergy effects with the highest level of expertise, and the establishment of an organizational culture that can generate innovative minds among members. Furthermore, in order to enhance competitiveness in future mobility beyond automobiles, we are operating job competency reinforcement training courses to learn about major core technologies such as vehicle electrification and autonomous driving.

Training to Internalize Sustainability Hyundai is conducting sustainability awareness improvement training to integrate sustainability into the job responsibilities of our employees. In particular, we operate ESG education programs in the areas of human rights, safety, environment, and quality to enhance the management of our suppliers. Furthermore, we strive to internalize the concept of sustainability among our employees by providing specialized ESG training tailored to specific job roles. Through this approach, our aim is to build a sustainability mindset and strengthen the capabilities of sustainability management.

Results of Project-based Joint Research in 2022

Development of new technologies	Creation of solutions to on-site problems	Patents and research paper	Dissemination of research results	Participation rate
43	25	52	42	65%

* The participation rate is calculated as the number of participants among the R&D development personnel who are subject to training in the "Project-based Joint Research Programs."

Results of Car Master Training Program in 2022

Based on Korea	Own operations	Agency	Total
Number of courses held	33	20	53
No. of participants	11,610	12,252	23,862
Participation rate	100%	100%	100%

* The Participation rate is calculated as the number of employees who participated among own operations and agency workers who are subject to education of "Customer-oriented Car Master Training Program".

Sustainability Education Programs in 2022

	Human rights	Safety	Environment	Quality	Total
No. of courses	23	948	772	671	2,414

* Keyword search results in the Learning Lounge platform

On/Offline Training for Leadership and Competency

	No. of coursers (on/offline)	Percentage of learning hours
Leadership	995	1.4%
Job	15,638	84.2%
Organizational culture	230	0.6%
Onboarding	144	7.8%
Others	140	6.0%
Total	**17,141**	**100%**

Education Offered through Learning Lounge in 2022

(Unit: No. of courses)

	Education, lectures, and Learning Lab
Company-related	Management/strategy (329), Product/automobile technology (956), Development process (28), Organizational and corporate culture (464)
Leadership-related	Continuous learning (1,007), Formal education (557)
Job-related	Quality/production-related (1,720), R&D (2,076), Strategic technology/ICT (524), Business-related (1,538)
Compulsory education	Compliance/security (126), Fire/safety, etc. (463)
External training	Offline lecture (462), Online learning such as e-learning (264)

HMG Developers Conference

The importance of software development capabilities in future mobility has been on the rise. In particular, efforts are being made to develop core software technologies such as artificial intelligence, autonomous driving, and data science to implement software defined vehicles (SDV), which are vehicles centered around software.

Hyundai is making multifaceted efforts to enhance and internalize our software technology capabilities, with a particular focus on strengthening developer competencies. We hold the "HMG Developers Conference" to facilitate the exchange of mobility development experiences and expertise between Hyundai Group developers and external experts. In 2022, over 60 executives and developers leading research and development presented on some 50 topics related to key technologies for the transition to the SDV era, including autonomous driving, infotainment, data science, artificial intelligence, car cloud, electronics, and body. These presentations provided opportunities for interaction and collaboration with external participants.

H-Mobility Class

In response to the rapid change in the mobility industry ecosystem, the importance of nurturing mobility talents has increased significantly. In line with this, the HMC R&D Division operates the "H-Mobility Class" for undergraduate and graduate students who are interested in the future automotive industry. The H-Mobility Class is designed as a "match-up" program, where Hyundai employees in the field design job-oriented educational curricula and receive support from the Ministry of Education. The entire program is provided free of charge, and the educational courses are conducted online. So far, we have provided educational programs on vehicle electrification, autonomous driving, and robotics to approximately 5,000 engineering students and graduate students. Upon completion of the education, participants are granted eligibility to take certification assessments for the corresponding technical positions, and outstanding learners receive benefits such as exemption from certain R&D Division documentation requirements. Hyundai will make continuous efforts to establish a variety of educational programs to support the development of future talents and connect them to employment opportunities.

Discovery and Nurturing of External Startups

Hyundai has been active in the discovery and nurturing of external startups through its open innovation platform, ZER01NE. Through the ZER01NE ACCELERATOR program, we are promoting more than 100 collaborative projects with internal field teams, providing support for equity investments, product development, exhibitions, and investment attraction. Furthermore, we have been supporting the technological development of 31 technology startups by participating as an operating company in the TIPS (Tech Incubator Program for Startup) program[1], organized by the Ministry of SMEs and Startups, since 2015 until the present year of 2023. Hyundai aims to foster mutual growth and collaboration with startups by facilitating coordination with internal field teams, providing equity investments, and offering a variety of nurturing programs.

Support for In-house Startups

Hyundai operates an in-house start-up system to support employees with creative ideas, discover promising new businesses and commercialize them. In 2000, we started operating "Venture Plaza", an in-house startup fostering program, and since then, we have expanded the support field to include promising new businesses beyond automobiles. Through the in-house start-up system, we are achieving the effect of establishing a stable supply chain and creating jobs through the localization and mass production of future technologies. So far, 76 in-house startup teams have been selected and nurtured, and 30 companies have spun off. Among the spin-off companies is "Auton", a KOSDAQ-listed company, and Hyundai supports the stable growth of the startups through open innovation even after the spin-off.

[1] Program aimed at supporting the incubation of technology startups through the private-led-investment and government's matching support for R&D.

Creative Organizational Culture

Great Workplace Culture

IMPROVING WORKPLACE CULTURE

Diagnosis of Organizational Culture Hyundai recognizes that high employee engagement is a significant factor that influences the company's performance and individual talent development. We therefore conduct a diagnostic assessment to gauge the level of organizational culture among our employees. The assessment consists of 67 questions in five areas of Biz, People, Work, Leadership, and Organizational Effectiveness, as well as two areas related to company-wide systems and infrastructure. In 2022, 72.6% of all employees, including general, research, and legal positions, participated in the organizational culture diagnostic assessment. Based on the results, we will make continuous efforts to enhance employee engagement.

Accelerating Change and Innovation by Division Hyundai promotes innovation of the organizational culture at each division in two directions – a top-down method initiated by leaders and a bottom-up method driven by team members. Through executive-level workshops, we engage in discussions regarding the direction of organizational culture. Each division's leader, in partnership with the designated person to take charge of changes in the organizational culture and innovation for each organization, works together to lead a cultural shift within their respective divisions. They continuously monitor organizational culture issues and strive to implement solutions based on the voice of employees (VoE), enabling tangible transformational activities to take place.

Idea Contest for Organizational Culture Innovation Hyundai operates a continuous idea sharing platform called the "Hyundai Idea Contest" where all employees can freely participate at any time. Once a year, outstanding ideas are selected and rewarded, and the chosen ideas undergo a thorough review by field departments to develop concrete implementation plans and bring them to life.

In 2022, a total of 5,713 ideas were proposed, and we are currently conducting execution reviews and implementations for the 47 selected outstanding ideas. Additionally, we organized a New Year's event in the form of "Town Hall Meeting" where management and employees can freely communicate. We also operate channels for anonymous communication, such as "Hyundai Bamboo Forest" to encourage our members to lead changes actively and horizontally.

Hybrid Work System We have implemented a hybrid work system to foster an organizational culture that respects the diverse lifestyles of our members and allows them to immerse themselves in their work autonomously, regardless of location. We have formed a consensus on the introduction of this policy based on the opinions of our employees. In order to facilitate efficient work even in remote situations, we have established a VPN environment that enables mobile PC access from outside the office and have utilized online video conferencing IT tools. We have conducted a variety of transformative activities to create an environment conducive to effective remote work.

Way of Working, "CoC (Code of Conduct)" Hyundai conducted a survey called "Kill the Company" among all employees to identify employee perspectives on working in a way that can save the company. Based on the survey results, we developed Hyundai's way of working, "CoC (Code of Conduct)". From the CEO to new hires, all employees participate in sharing their own thoughts and commitments regarding a positive mindset, responsibility, tenacity, and embracing new challenges and initiatives. As such, we plan to develop a corporate culture program to immerse employees in their work based on voluntary participation and continuous communication.

The Hub Office "H-Work Station" Hyundai operates eight sites of the hub office "H-Work Station" in Seoul and Gyeonggi-do. In order to enhance work efficiency, a variety of spaces such as café-style seating, stand-alone seating, and conference rooms have been created. The H-Work Station is operated on a pre-reservation basis to provide employees with a pleasant working environment. Through the H-Work Station, employees have the flexibility to choose their working location beyond the traditional office setting, which is expected to improve work efficiency and job satisfaction.

Labor Union Communication in Korea Hyundai guarantees the rights that are fundamentally respected based on the Constitution, such as the right to organize, the right to collective bargaining, and the right to collective action for our workers. We have established and operates a collective bargaining consultation body and a labor-management council. In addition, we have formed the Future Change Response TFT and the Job Stability Committee to promote pre-discussions and consensus-building between labor and management regarding future changes. Hyundai is committed to enhancing trust between labor and management, establishing mature labor-management relationships, and fostering organizational culture innovation. Based on these efforts, Hyundai has successfully concluded four years of peaceful collective bargaining since 2019.

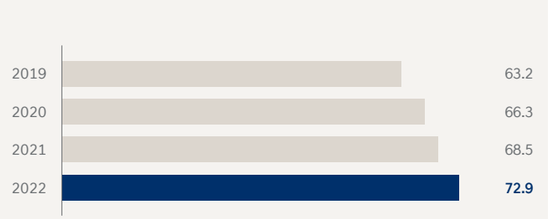
In 2022, Hyundai established the 4th Advisory Council for the Job Stability Committee, consisting of a total of six experts. With the acceleration of changes in the automotive industry, such as electrification and future mobility, and increasing internal and external uncertainties, the 4th Advisory Council sought solutions for employment issues and crisis management. The 4th Advisory Council also played a role as mediators in resolving any differences of opinion between labor and management.

Labor Union Communication Overseas Among Hyundai's overseas subsidiaries, unions have been established in Hyundai Motor Manufacturing Czech (HMMC), Hyundai Motor Brasil (HMB), and Hyundai Motor India (HMI). Overseas subsidiaries in China have established the Chinese Trade Unions, a worker representative organization. Corporations with established labor unions engage in collective bargaining with labor unions in accordance with local labor-related laws and regulations. We hold regular or ad hoc meetings to find out the working conditions and welfare system that employees want, and based on this, we are trying to find an agreement from a viewpoint that is mutually reasonable and can satisfy both labor and management. Although there are no labor unions established in subsidiaries in the US, Russia, Turkey, and Indonesia, we listen to the voices of our employees through active and direct communication with them.

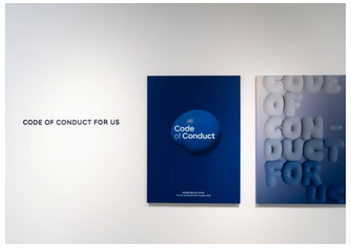
In addition, at the head office level, surveys and interviews are conducted among executives and employees of overseas subsidiaries on a biennial basis, and based on the results, improvement activities are conducted to enhance employees' satisfaction, trust, and pride in the company. Each overseas subsidiary is making efforts to preemptively resolve employees' grievances and requests by individually holding regular meetings between employees and management, operating grievance counseling centers, and touring the field sites.

Results of Culture Survey

(Unit: Points)




Hyundai Motor Group Town Hall Meeting (New Year's event)



CoC – Hyundai's way of working


H-Work Station

Creative Organizational Culture

PROMOTING EMPLOYEE DIVERSITY

Establishing Diversity Policy Hyundai strives to create an organizational culture that respects diversity and to contribute to the transition to an inclusive society. To this end, we formulated and released the "Hyundai Motor Company D&I Policy", which stipulates our diversity and inclusion management factors, in June 2022.

Hyundai Motor Company D&I Policy

Basic Principle of Diversity

Hyundai shall prohibit discrimination against employee's gender, race, ethnicity, nationality, cultural background, age, individual gender identity, differences in political and religious beliefs, weakness in social status, etc., without due reasons, and provide equal opportunities in employment, promotion, education, wages, and welfare.

Article 1. Gender
Hyundai shall treat all employees and stakeholders equally, regardless of gender, gender identity, sexual orientation, etc.

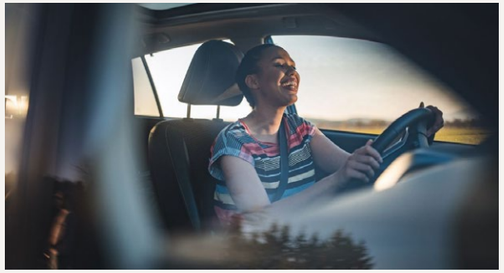
Article 3. Age
The employees of Hyundai shall respect and communicate with each other in an open manner, regardless of age.

Article 4. Disability
Hyundai shall not discriminate against employees based on disability or disease without reasonable grounds.

Article 5. Veterans
Hyundai honors veterans and their families, such as those of national merit and independence, during the recruitment process.

Campaign Commemorating the International Women's Day

Every year on March 8th, the world celebrates International Women's Day, honoring the social, economic, cultural, and political achievements of women worldwide. In commemoration of International Women's Day, Hyundai created and distributed a playlist titled "Who drives the world?" to bring happiness to women traveling on the roads. The playlist features songs by diverse women musicians from around the world, including Lizzo, Miley Cyrus, Victoria Monét, and others. Through this engaging and meaningful campaign, Hyundai aimed to celebrate International Women's Day.



"Who drives the World?" Playlist

Key Diversity Programs

Classification	Outline
Onboarding course for heads of overseas subsidiaries	This course covers discussions on the role of corporate leadership in building a "healthy communication and working culture" within an organization where members with diverse cultural backgrounds work together.
Expatriate Staff Assignment Course	This course includes conducting the GlobeSmart assessment to enhance understanding of the cultural diversity in which one will be assuming the post. Based on the assessment results, educational sessions are offerred to enhance awareness and understanding of cultural diversity.
Cross Cultural Seminar	This seminar focuses on providing cross-cultural understanding and communication training for foreign executives.
Learning Lab	(All employees) Under this platform, members of the organization with similar interests and job roles come together for voluntary learning, experience sharing, and other activities aimed at enhancing organizational synergy.
Remembrance Day	(R&D Division) This program provides education to newly appointed department heads, team leaders, and members with a focus on building a positive organizational culture based on mutual understanding.
Connect-fit	(Korea Business Division) This program facilitates experience sharing and career mentoring through connecting junior employees, who are scheduled for their initial rotation, with experienced senior employees.

Diversity Programs Hyundai provides opportunities for enhanced communication and teamwork among diverse groups through workshops, training, and other activities. These programs have significantly improved the awareness of cultural diversity within the organization and have made a significant contribution to fostering a greater acceptance of diversity.

Employee Resource Groups (ERG) Hyundai believes that sharing common interests and promoting cultural exchange among employees with diverse backgrounds is one of the effective ways to foster a leading organizational culture. Therefore, we at Hyundai support Employee Resource Groups (ERGs) where employees with shared interests, including gender, culture, age, and hometown, can communicate and connect. Through the ERG program, we provide career development opportunities at the individual and team levels, cultural-based mentoring, and engagement in external activities such as community involvement. Hyundai hopes that these initiatives will not only have a positive impact within the company but also extend to the local community, spreading positive influence.

Hyundai ERG Activities

Title	Target	Key activities
Women @ Hyundai	Female	• Create an inclusive environment that grants independence to female employees, customers, and employees of partner companies • Implement mentoring programs and females-supporting activities aimed at career development from the perspective of female employees
Hyundai @ Soul	Black and African American	• Discuss how to enhance the Hyundai brand image within the black and African American community • Provide a variety of support to improve cultural competency of Hyundai management
HANA (Hyundai Asian Network Alliance)	Asian	• Discuss methods to enhance the Hyundai brand image within the Black and African American community • Provide a variety of support for cultural competency improvement within Hyundai's executive leadership
Amigos Unidos	Hispanic and Latin American	• Present innovative management ideas using the cultural intelligence of the Latino community • Present ideas for Hyundai's future direction from the perspective of Latino employees
Young Leaders	Millennials	• Think about a variety of ideas, solutions, and improvements using the strengths of the millennial generation • Conduct a mentoring program for individual employee development and self-development
Equality	LGBTQ+	• Provide training, career development, networking, and workplace collaboration opportunities for LGBTQ employees • Share ideas to raise awareness of Hyundai's brand within the LGBTQ community
Hyundai CARES	Disabled	• Improve the work life of the disabled and raise positive awareness of disability • Support employees with congenital or acquired disabilities, middle-aged employees with disabilities due to aging, etc.
Stars & Stripes	Veteran	• Implement a forum where Hyundai employees, their spouses, their families, and supporters of U.S. Army veterans gather • Provide a safe and inclusive space where one can feel a sense of belonging

Creative Organizational Culture

Human Rights Management

BUILDING A FOUNDATION FOR HUMAN RIGHTS MANAGEMENT

Human Rights Management Governance We report on the revision and dissemination of the Human Rights Policy, the planning, execution, and outcomes of human rights risk assessments, risk mitigation and reduction measures, and the effectiveness of such measures to the ESG Committee and Sustainability Management Committee under the Board of Directors, in which the management participates. Our ESG, HR, Compliance and Procurement departments share responsibility of implementing the human rights management, and organically collaborate on managing human rights risk.

Human Rights Policy Hyundai implements human rights management while also striving to prevent human rights violations and mitigate related risks in our business operations by establishing and revising the Human Rights Policy. The Policy includes key elements for internalization and dissemination of human rights management, such as the commitment to prohibiting forced labor/child labor, freedom of association, collective bargaining rights, and the prevention and respect of non-discrimination. Hyundai's Human Rights Policy applies to all employees (executives, staff, and non-regular workers), domestic and international production and sales corporations, subsidiaries, and grandchild subsidiaries, as well as joint venture employees. Hyundai employees are expected to adhere to the Policy when dealing with suppliers, sales, and service organizations. Furthermore, we encourage all stakeholders in business relationships to respect and uphold the Human Rights Policy.

Human Rights Policy of Hyundai Motor Company

Non-Discrimination & Anti-Harassment Policy Hyundai accounted a Non-Discrimination & Anti-Harassment Policy, aiming to prevent incidents and issues related to workplace discrimination, harassment, and sexual harassment while respecting the right of employees to be treated equally and without discrimination. In accordance with the Non-Discrimination & Anti-Harassment Policy, the following behaviors are strictly prohibited – exclusion or rejection of individuals or groups based on their differences; inflicting physical or mental suffering by leveraging one's position or relationship within the workplace; and engaging in actions that cause sexual humiliation or feelings of disgust.

Hyundai Motor Company
Non-Discrimination & Anti-Harassment Policy

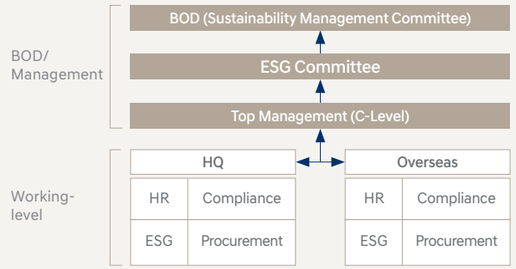
Handling of Human Rights Grievance Hyundai has set in place a procedure for receiving, addressing, and taking action on issues related not only to discrimination, harassment, and sexual harassment but also to improving organizational culture and working conditions. The grievance handling channels are operated in a variety of forms, both online and offline, such as postal services, hotlines, and cyber audit office, to enhance accessibility for complainants. The anonymity and confidentiality of complainants are ensured, and any form of retaliation, identity exposure, or adverse employment actions related to reporting complaints is strictly prohibited. Upon receiving a complaint, the process involves promptly assessing the situation according to the established procedures. If necessary, efforts are made to address the root causes of the complaint, improve internal systems or work methods, and prevent recurrence. Furthermore, for employees who have had a negative impact on human rights through actions such as discrimination or harassment, we review the criteria and procedures specified in employment rules and disciplinary regulations to consider appropriate personnel measures.

Hyundai refers to "Principle 31" of the UN Guiding Principles on Business and Human Rights to verify the effective and efficient operation of the grievance handling procedure, encompassing channels, receipt, processing, actions, and prevention of recurrence.

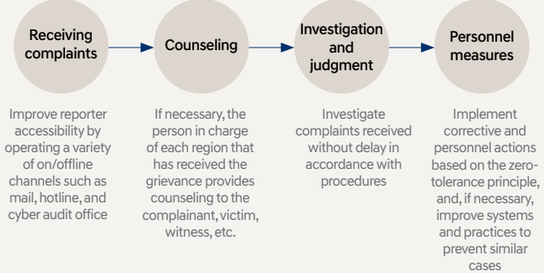
Human Rights Education Hyundai has developed and implemented human rights education programs to promote compliance with the Human Rights Policy and enhance awareness of human rights. The human rights training programs offered by Hyundai encompass a total of 23 courses. These include not only compulsory education on such topics as sexual harassment prevention and improving awareness of disabilities but also broader education on the concept of human rights management, cases of human rights violations, legislation related to human rights, and industry trends in human rights management.

In addition, Hyundai organized briefings on "Supply Chain ESG Risk Assessment and Auditing" and "Conflict Minerals Management Process" specifically for our suppliers. These briefings aimed to explain the importance of human rights management and provide guidance on managing human rights risks. Furthermore, we provided online training courses on the Supplier Code of Conduct, which outlines the fundamental principles of human rights management that suppliers are expected to comply with. These principles include non-discrimination, humanitarian treatment, and management of working hours. The ESG briefings for suppliers saw the participation of 303 representatives, covering 100% of Hyundai's domestic suppliers. The online training courses had a participation of 1,123 supplier representatives in total.

Human Rights Management Governance



Grievance Handling Procedure



Human Rights Education in 2022

ESG Mindset Education (Korea)[1)]	Number of employees subject to training	Approximately 73,000 people
	Training participation rate	Approximately 90.1%
Supplier ESG Briefing	Ratio of participating suppliers	Domestic - 100%
Online Training for Suppliers	No. of participating suppliers	410 companies (6,882 persons)

[1)] Consisting of 5 areas – human rights, ethics, safety, environment, and general ESG. Education on the concept and importance of each area of human rights, best practices, etc.

ESG Mindset Education

- **Purpose:** To improve employees' basic understanding and awareness of ESG
- **Target:** About 73,000 people in general, research, legal, technical, maintenance, and sales positions
- **Content:** Education on the concept and importance of each ESG area, best practices, etc.

Education Roadmap

Watching ESG Mindset Videos
- Composed of a total of 5 videos (ESG overview, ethics, human rights, safety, environment)

Sending Newsletter
- Summary of video training content
- Summary of ESG content specific to Hyundai

Continuous learning
- Providing continuous learning content through our internal learning platform "Learning Lounge"

Ethical Management Education

- **Purpose:** To foster a shared understanding of ethical management and enhance the role of team leaders in promoting ethical sensitivity and improvement in the workplace.
- **Target:** All team leaders in Korea

Content

STEP 1.
Expanding principles and convictions to the individual → leader → organizational level

STEP 2.
Experiences in ethical decision-making situations and methods for upholding principles and convictions

STEP 3.
Establishing a plan to be reborn as a leader who protects and spreads principles and convictions

* Plan to develop an ethical management training course specialized for expatriate staff and heads of overseas subsidiaries (targeted for the second half of 2023)

Creative Organizational Culture

HUMAN RIGHTS RISK MANAGEMENT PROCESS

Scope of Human Rights Risk Assessment Hyundai prioritizes conducting human rights risk assessments for domestic business sites, including the headquarters, research institutes, Ulsan plant, Asan plant, Jeonju plant, as well as regional headquarters and subsidiaries in Europe, North America, Central and South America, India, China, and other overseas locations, covering business sites with more than 300 employees. This initiative already encompasses over 90% of Hyundai's workforce. Moving forward, we aim to refine and enhance the indicators and standards for human rights risk assessment. In addition, the scope of assessments will be expanded to include distribution centers and subsidiaries, with the goal of achieving 100% coverage in conducting these assessments.

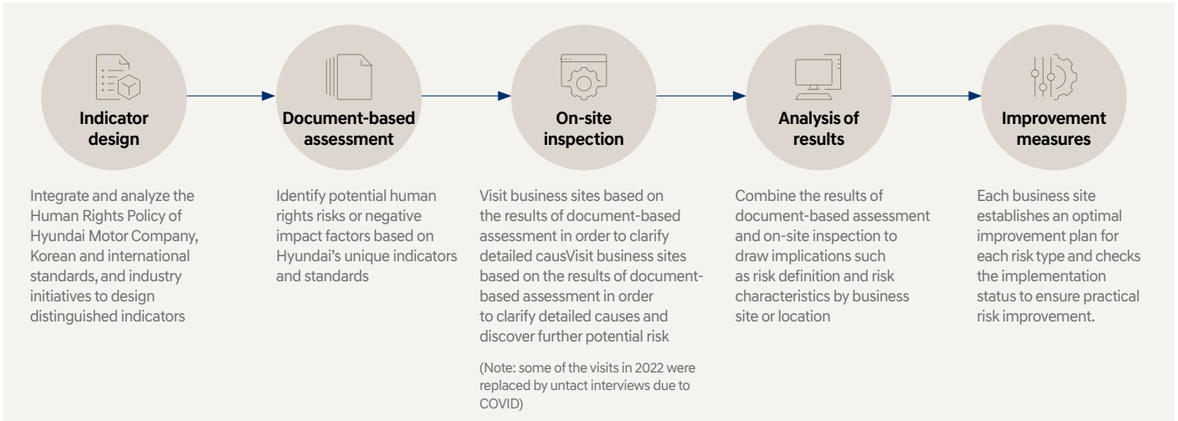
Human Rights Risk Assessment Targets Taking into account factors such as employee composition, business operations and locations, products and services offered, environmental and community impact, as well as the sourcing of products and services from the supply chain, Hyundai has identified employees, women, children, migrant workers, workers in partner companies, and local residents as key subjects for assessing human rights risks.

Design of Human Rights Risk Assessment Indicators Hyundai strives to accurately identify potential human rights risks within the scope of our human rights risk assessment. To this end, we develop and implement our own indicators for human rights risk assessment and due diligence based on variety of resources, from our own Human Rights Policy to all of the followings: domestic and international human rights management standards, industry initiatives manuals, and best practices in similar industries, past grievances that have been reported and handled, input from employees, and a review process by third-party expert organizations.

Prediction of Human Rights Risk Prior to conducting document-based assessment and on-site inspections of human rights risks, Hyundai conducts research on the following: the legal and regulatory landscape regarding human rights in each country; investigative materials from domestic and international institutions and media related to human rights; documentation from industry initiatives on human rights; interviews and consultations with business site personnel to gather their insights and opinions. By investigating the internal and external environments, Hyundai aims to proactively anticipate potential human rights risks that could arise from a variety of groups, including employees, women, children, migrant workers, supplier employees, and local residents.

Based on the preliminary assessment of human rights risks, Hyundai applies assessment and due diligence indicators differentiated by business site and stakeholder group. These indicators are continuously refined and strengthened to ensure a more accurate identification of risks. The pre-emptive identification of human rights risks has highlighted potential risks related to the working environment, working conditions, occupational health and safety, local communities, and the risk of conflict minerals within our supply chains. Specifically, there is an anticipated possibility of human rights risks related to child labor and female workers in the sourcing and supply chains of conflict minerals.

Human Rights Risk Assessment Process



Document-based Human Rights Risk Assessment Hyundai identifies potential human rights risks among a variety of worker groups through document-based assessments conducted in the form of surveys, based on our differentiated indicators and criteria for human risk assessment and due diligence. To facilitate the document-based assessments at each business site, we provide specific assessment criteria and requirements, ensuring an effective assessment process. The potential human rights risks identified through document-based assessments are further verified and validated through on-site inspections. In 2022, we conducted document-based assessments based on a total of 63 indicators. Going forward, we plan to maintain, expand, and streamline our indicators to proactively identify and address potential human rights risks within our business sites based on the implications derived from the results of human rights risk assessments.

On-site Human Rights Risk Assessment To ensure the reliability of the document-based assessment results, Hyundai selects business sites for on-site inspections taking into consideration of various factors such as the location of the site, operational characteristics, worker composition, and impact on the local community. Particular attention is given to business sites where potential human rights risks are identified or where negative impacts are anticipated, prioritizing them for on-site inspections. On-site inspections are conducted by internal experts responsible for HR, safety, and organizational culture. Consulting by external experts in labor and law may be involved if necessary. To assess working conditions, a variety of documents are reviewed, and interviews are conducted with key personnel. Site visits are also conducted to verify the safety measures and working environment. Hyundai continuously improves the on-site inspection process to incorporate diverse perspectives and enhance the reliability of human rights risk assessments.

Preliminary Diagnostics of Human Rights Risk and Major Risks Identified

Human Rights Issues	Targets of Human Rights Risk Assessments					
	Employees	Women	Children	Immigrant and contract workers	Suppliers	Local communities
Work environments (including emotional labor, discrimination, freedom of association, etc.)	Low Risks	Low Risks	Low Risks	Low Risks	Potential Risks	Low Risks
Work conditions (including hours, pay, and child and forced labor, etc.)	Low Risks	Low Risks	Low Risks	Low Risks	Potential Risks	Low Risks
Health and safety (including workplace safety facilities, wearing safety equipment, etc.)	Low Risks	Low Risks	Low Risks	Low Risks	Potential Risks	Low Risks
Business impacts (environmental and social impacts on places near businesses)	Low Risks	Low Risks	Low Risks	Low Risks	Potential Risks	Low Risks
Conflict minerals (concerns about raw materials when procuring raw materials)	Low Risks	Potential Risks	Potential Risks	Low Risks	Potential Risks	Low Risks

Results of Human Rights Risk Assessment (Document-based & On-site)

(Unit: %)

	Classification	Results
Hyundai business sites	Ratio of business sites where human rights risks assessment was conducted[1)]	90.4
	Ratio of business sites where risks were identified	8.3
	Ratio of improvement measures and activities taken	50
Suppliers	Ratio of suppliers where human rights risks assessment was conducted	100
	Ratio of suppliers where risks were identified	2
	Ratio of improvement measures taken	100

[1)] Percentage of number of employees of business sites where the human rights risk assessment was conducted to total number of employees

Creative Organizational Culture

Results of Document-based Assessment and On-site Inspection The results of document-based assessment and on-site inspections showed that the compliance rate for indicators at domestic and international business sites all exceeded 85%. Specifically, Korea showed a compliance rate of 96.3%, Europe 98.8%, North America 98%, Latin America 100%, China 93.1%, and India 93.7%. The European region has demonstrated leadership in minority protection and non-discrimination, with ongoing improvements in working conditions aligned with social safety nets. Manuals have been created and disseminated to guide workers in reporting and addressing human rights issues. In India and China, it has been observed that human rights management is still in the early stages due to national laws and regulations, social customs, and cultural backgrounds. In terms of specific areas of assessment and due diligence, risks have been identified in policy and systems, non-discrimination, humanitarian treatment, forced labor, and human rights of customers.

Analysis of Document-based Assessment and On-site Inspection Results by Area Based on the document-based assessment and on-site inspection results, potential risks have been identified in certain domestic and overseas business sites, including in the policy and system category. The evaluation of policy and system focuses on the internalization of Hyundai's Human Rights Policy through employee guidance and human rights-related education, rather than assessing actual risks. In addition, potential risks have been identified in the categories of non-discrimination and humanitarian treatment. To manage the identified risks, we have implemented company-wide distribution and education of the Human Rights Policy and are taking mitigating measures concerning the identified risk factors.

Results of Human Rights Risk Assessment by Region Hyundai has diagnosed human rights risks at its domestic business sites, as well as joint venture company (Beijing Hyundai Motor Company), and 16 overseas business sites in North America, Central and South America, Europe, India, and China. This has enabled us to identify current status of human rights management at each region, and thus to develop improvement measures and implementation plans.

Measures to Address Human Rights Risks Through document-based assessments and on-site inspections, improvement tasks are identified, and each business site establishes implementation plans for these tasks and takes relevant measures. For identified risks, the business site representatives discuss and establish improvement tasks, considering the timing, approach, and potential issues related to the implementation. The progress of implementing improvement tasks according to each business site is monitored, tasks that require a significant amount of time or necessitate regulatory or systemic improvements or large-scale investments and structural changes are set as company-wide tasks, and long-term implementation plans are being developed from a strategic perspective.

Results of Human Rights Risk by Region

Europe

Subsidiaries in Europe strictly prohibit discrimination based on gender, ethnicity, age, race, and other factors through our Code of Conduct. The company provides clear guidelines on how employees should act in the event of human rights risks, specifying the appropriate actions to be taken.

North America

Both federal laws and state regulations provide detailed provisions for human rights protection. The country ensures national-level human rights protection for minorities, including gender, ethnicity, race, and sexual orientation.

Central & South America

Subsidiaries in Central & South America have independently implemented human rights protection policies, including the establishment of policies, dissemination them among employees, and conducting education on preventing sexual harassment and workplace bullying. In this region, a variety of policies and regulations are being enacted to address labor-related issues and promote their resolution.

India

Although the formal caste system has been abolished, the influence of social stratification persists. Societal awareness regarding workplace harassment is relatively low, yet, severe consequence is imposed in case of human rights violation occurs within the company. In order to protect maternity, subsidiaries in India operate various support policies such as guaranteeing maternity and postpartum leave and operating an in-house daycare center.

China

At the national level, there is a system in place for collecting and managing ethnic information of workers, and there is a lack of obligation for collective bargaining. The legislation regarding workplace harassment and sexual harassment is still in its early stages, and there is a lack of social awareness on these issues. Multiple subsidiaries in China have started implementing employee assistance programs (EAP) for individual counseling and organizational diagnostics, aiming to address the psychological well-being of employees.

Plan to Advance Human Rights Risk Assessment Hyundai is committed to establishing a system to manage potential human rights risks that may arise at business sites and minimizing the negative impact of human rights risks on business operations. To identify and address actual issues with high operational impact and potential risks at business sites, we plan to enhance assessment and due diligence indicators. Through assessment and due diligence, identified human rights risks will be actively mitigated to prevent further dissemination and transmission. Since 2022, we have been incorporating the rates of human rights assessment and due diligence and the handling of grievances into KPIs of, CEO and relevant departments responsible for human rights. Furthermore, we plan to enhance the efficiency of document-based assessments and on-site inspections. Prior to these procedures, pre-explanatory sessions on the procedures and indicators for assessment and due diligence will be conducted for site-specific personnel. We will also be providing training to strengthen the capacity for assessment and due diligence and response.

Measures to Address Risks by Type

Distribution of Human Rights Policy and Non-Discrimination & Anti-Harassment Policy	• Distribute the Human Rights Policy aimed at strengthening awareness of respect for human rights and spreading human rights management • Establish and distribute the Non-Discrimination & Anti-Harassment Policy to prevent discrimination and harassment in the workplace and raise awareness
Statement of salary in English	• Provide pay slips in English, including wages, allowances, deductions, etc. for foreign workers

Measures to Address Risks by Region

India	• Operate company-wide complaint reception channels (HR, Audit Department) related to workplace bullying. Upon receipt, complaints are subjected to immediate investigation followed by disciplinary action, where appropriate. • Operate in-house daycare facilities and guarantee maternity/parental leave to improve social awareness • Build legal and institutional safeguards is underway to improve women's human rights (late-night commuting bus for females, external investigators, participation in investigation of sexual harassment cases, etc.)
China	• Operate an offline grievance handling center to report and handle cases of workplace bullying and sexual harassment • Consider implementation and introduction of EAP for individual psychological counseling and organizational diagnosis

Communication with Global Investors

Hyundai held ESG non-deal roadshow (NDR) targeting global investors in August 2022 in Boston and San Francisco in the US, London and Edinburgh in the United Kingdom, Singapore, and Tokyo, Japan. Through these events, we shared our key activities related to supply chain ESG risk management, strengthening industrial safety and health, and assessing human rights risks. We received inquiries from global investors regarding human rights risk assessment, mitigation and improvement plans, and our strategy in responding to the implementation of the EU Corporate Due Diligence Directive, and we shared our current activities, achievements, and future plans. The demands and opinions of global investors will be considered in the development and planning process of human rights management activities, aiming to enhance sustainability. Going forward, we will expand communication with investors through a variety of channels based on the outcomes of the ESG NDR.

Measures and Activities to Address and Mitigate Child Labor in Suppliers

Hyundai conducted a comprehensive investigation and assessment of its overall supply chain in North America after confirming the employment of underage workers at two companies, SL Alabama and SMART Alabama, which have a cooperative relationship with Hyundai Motor Manufacturing Alabama (HMMA) in 2022. We identified that a third-party employment agency had misrepresented applicant information, and thus we immediately discontinued our business dealings with the respective employment agency. In addition, SL Alabama agreed to establish a special audit committee to oversee compliance with relevant labor laws. Furthermore, HMMA is in the process of divesting our ownership stake in SMART Alabama.

HMMA conducted investigations on 29 tier-1 suppliers in North America through interviews, on-site inspections, and other methods. HMMA has also been actively collaborating with the US Department of Labor to implement employment-related regulatory compliance training since March. The training covers Hyundai's zero-tolerance policy regarding unfair employment practices, methods for verifying applicants' identities during the hiring process, and compliance with the code of conduct for suppliers. In addition, we have instructed our suppliers to establish an anonymous grievance hotline for workers and provided education on prohibiting employment through third-party employment agencies. Our Board of Directors receives regular reports on the facts and follow-up actions regarding these issues through the Sustainability Management Committee. The Board has directed the company's management to enhance the ESG management system, including the management of unfair employment issues, across all aspects of our business.

Health, Safety and Welfare of Employees

Hyundai places the highest value on the life and safety of all its employees and other stakeholders, thereby promoting activities aimed at enhancing health and safety based on firm principles and standards of health and safety. We have established a company-wide health and safety system in order to comply with the relevant laws and regulations, while identifying and improving hazards and risk factors so as to promote our employees' health and enhance their working environments. We are also making active investment in human and material resources to implement mid-to long-term roadmap, thereby achieving key performance objectives. Moreover, we will contribute to spreading a culture of health and safety built upon participation and communication by sharing our progress and implementation status with all of our stakeholders including employees.

Health and Safety Management System (ISO 45001)-certified Workplace

100%

of all manufacturing subsidiaries at home and abroad

Strengthening Health and Safety Leadership

HEALTH AND SAFETY SYSTEM

Establishment of Health and Safety Governance Hyundai's Board of Directors and management inspect and supervise the operation of the health and safety system, the status of its implementation against the set goals, action plans, and major achievements at least once per quarter. A Chief Safety Officer (concurrently serving as the CEO) has been appointed to operate the overall health and safety governance, and the company-wide health and safety organization is operated under the direct control of the CEO.

Under the overall supervision of the Chief Safety Officer (CSO), the health and safety managers at each business site prioritize health and safety management, establish implementation plans, and conduct regular meetings in which managers and employees from across the organization and specific workplaces participate in order to share and discuss health and safety issues and risks. Furthermore, external experts in industrial health and safety inspect the health and safety conditions at workplaces and identify potential injuries, illnesses, and accidents, while also participating in post-incident investigations. Management, responsible personnel at each business site, and process managers with health and safety responsibilities set health and safety KPIs and evaluate performance based on the status of their implementation compared to the targets.

Introduction of the Health and Safety Management System All domestic and international workplaces have implemented a health and safety management system that includes the establishment of implementation plans, identification and improvement of hazardous and risky factors, evaluation of health and safety performance, and the development of improvement measures based on an activity analysis. Each workplace obtains a third-party certification for its health and safety management system, taking into consideration the laws, regulations, market conditions, and business characteristics. Additionally, efforts are made to encourage and support subcontractors in establishing their own health and safety management systems, thereby enabling them to secure their own health and safety capabilities.

Results of the 2022 Safety Leader Seminar

Date	Seminar Overview	No. of Participants
First half	• Issues related to the Serious Accidents Punishment Act and safety trends • Sharing of excellent improvement cases and advanced safety technologies	48
Second half	• Dissemination of the safety policy of the CSO • Safety leadership for me and my colleagues	63

Labor-Management Joint Declaration to Create a Safe Workplace In April 2022, representatives of labor and management, including CSO, gathered to prioritize respect for employees' lives and announced a joint declaration of labor-management for the prevention of industrial accidents and the creation of a safe workplace. The joint declaration includes the establishment of a culture of voluntary safety management, joint efforts to prioritize safety, safety inspections for high-risk processes, identification and improvement of risk factors, expansion of continuous investment in safety, establishment of a systematic health and safety management system, promotion of activities to enhance safety awareness and improve risk factors, and support for subcontractors' health and safety. Furthermore, both labor and management have agreed to actively cooperate on preventing major accidents and formed a joint labor-management task force team to that end.

Safety Leader Seminar Hyundai conducted safety leader seminars (one in the first half and one in the second half of the year) to keep abreast of external trends related to the enforcement of the Serious Accidents Punishment Act and to strengthen its safety leadership and safety awareness. The CSO participated in these seminars to disseminate safety policies and foster a shared understanding among domestic and international safety professionals regarding the establishment of a safety culture and improvement of the company's health and safety management systems. Hyundai is taking the lead in creating a safe workplace through such efforts as enhancing on-site safety awareness and strengthening two-way communication.

Safety Vision Strategy Roadmap In December 2022, Hyundai conducted an in-depth diagnosis of the safety management system at its business sites, with the participation of safety experts engaged in research and consultation, and carried out a survey of global best practices. Based on the results, we developed a safety vision and strategy roadmap comprising a development plan for the safety management system. The safety vision and strategy roadmap also includes our long-term vision as well as phased and annual strategies for realizing its core safety values. It is also focused on strengthening the alignment between corporate core values and safety culture, enhancing safety education, improving safety communication and leadership, and promoting collaborative activities between labor and management.

In accordance with the safety vision strategy roadmap prepared based on the comprehensive in-depth diagnosis, we plan to carefully establish mid- to long-term implementation plans for each stage. We also plan to conduct in-depth diagnosis by industrial safety sector in order to come up with specific solutions for improving site safety. Furthermore, we will strengthen the management system for the five key safety elements (organization/manpower, budget, training, labor-management relations, and safety culture) with the aim of becoming a global top-notch safety company.

Directions of Safety Vision Strategy

Establishment of a safety culture	• Establish Hyundai's unique safety culture by realizing safety-first core values and developing it into a "Just Safety Culture" as an advanced company
Advancement of safety training	• Advance the specialized training programs to raise the safety awareness of employees and strengthen their risk awareness capabilities in order to strengthen safety education beyond the level required by laws and regulations
Leap towards the Global Best	• Establish future strategic tasks centered on the headquarters to expand global safety governance, and actively promote a pilot introduction of advanced cases, such as the safety management system (Safety Career)
Field-based risk assessment	• Establish self-regulation by conducting risk assessment activities in which all employees participate, develop and advance employee capacity building programs for this purpose, and establish a system for identifying and improving harmful risk factors
Strengthening labor-management cooperation	• Introduce various systems (Safety Merit System) to strengthen the capability to comply with labor-management health and safety standards and enhance labor-management cooperation.
Win-win cooperation	• Reinforce various support measures (excellent partner discovery system, etc.) in order to raise the safety management capabilities of our partners to the same level as Hyundai

Health, Safety and Welfare of Employees

SPREADING THE CULTURE OF HEALTH AND SAFETY

Management of Leading Indicators for Industrial Accidents (H-LWC) Hyundai has introduced the leading indicator, "H-LWC (Hyundai-Lost Workday Case)", as a shift from the traditional lagging indicator-based management of accident rates. This has enabled us to analyze accident types in advance and focuses on activities designed to reduce industrial accidents. Leading indicators are used to measure the processes and behaviors related to preventing industrial accidents. These indicators include safety consciousness and cultural level, equipment integrity, exceeding the scope of safe operations, improvement of health and safety management systems, and the effectiveness of activities to prevent industrial accidents from recurring. Through the management of leading indicators, the accident rate has been reduced by approximately 9% compared to 2021. In particular, the total number of safety accidents has been reduced by approximately 21% by focusing on reduction activities targeting specific types of workplace accidents.

Assessment of the Health and Safety Management Level (H-SAT) Hyundai has set in place the "H-SAT (Hyundai-Safety Assessment Tool)", a tool developed inhouse in order to quantitatively evaluate and analyze the health and safety level of its business sites, address vulnerable areas, and raise the overall level of health and safety. The results of the evaluation are being linked to the KPIs of the management and business site managers, with the aim of enhancing health and safety leadership and promoting activities to prevent workplace accident. The evaluation is composed of safety, health, fire, and environment sectors. It utilizes specific indicators such as the achievement of accident reduction targets, the management of work stoppage accidents, and assessments of the health and safety roles and responsibilities of leaders.

Composition of H-SAT

Areas	Management System Assessments	On-Site Workplace Inspections
Safety	Safety meetings by management, etc.	Robot protection devices, etc.
Health	Management of musculoskeletal diseases, etc.	Ventilation facilities, etc.
Firefighting	Emergency response systems, etc.	Fire-prone areas, etc.
Environment	Environmental facilities licensing, etc.	Air pollution prevention facilities, etc.

Application of Safety Design Criteria Hyundai is establishing and expanding safety design criteria that include warnings for hazardous areas and facilities, instructions or guidance for emergency situations, and safe behaviors to be followed during work processes. Safety Design encompasses the development and application of measures based on the conditions and state of the workplace, such as restricted access, warnings for fire hazards and falling objects, the use of personal protective equipment, emergency evacuation procedures, and guidelines for safe behavior prior to commencing work. In addition, safety designs are attached to places or facilities that workers can easily recognize, and training is conducted on matters necessary for workers to understand the related contents. Safety design can be applied to various areas such as new construction and improvement projects in the workplace, logistics handling areas, automated transport systems, and lifts for material handling, among others. It is expected to show a high degree of effectiveness in reducing accidents.

Health and Safety Training Hyundai ensures that all its employees are able to access health and safety training easily and conveniently via an online education platform. The online education videos, titled "Future Safety Education Content", consist of six episodes, including six in-depth videos and 30 micro-learning videos. They cover various topics related to safety regulations, accident prevention, and major disaster prevention, providing diverse contents for employees. In particular, starting in October 2022, we further increased employee accessibility to education by enabling them to receive regular health and safety education via mobile devices. In addition, Hyundai operates VR experience-based safety education contents and facilities where employees can wear VR devices to experience simulated hazards in virtual reality, enhancing their awareness of safety. Hyundai also provides health and safety education to not only its employees but to all its subcontractors and SMEs in the same industry through the Global Partnership Center and the Foundation for Industrial Safety Partnerships. Furthermore, Hyundai requires all partner companies entering the workplace for work or construction purposes to complete pre-entry safety education.

Application of Wearable Devices Hyundai is developing and adopting wearable devices with improved functionality and convenience to prevent musculoskeletal disorders among its workers. The first industrial wearable device, "CEX", is a knee-joint-assist robot designed to help workers maintain a seated posture. Despite its lightweight design of 1.6 kg, it can support a weight of up to 150 kg. In addition, it can be adjusted to suit the user's height and posture, thereby reducing approximately 40% in the activation of the waist and lower body muscles, significantly improving work efficiency. Meanwhile, "VEX" is a vest-type wearable robot that assists workers who engage in overhead tasks for long periods. Weighing only 2.5 kg, it does not burden the worker, and its joint structure and springs are combined with body movements, enabling it to exert a force of up to 5.5 kgf.

Launching of Hyundai Motor Group's Foundation for Industrial Safety Partnerships In September 2022, Hyundai, in partnership with six Group affiliates, established the Foundation for Industrial Safety Partnerships to enhance the safety management capabilities of SMEs in industries such as automotive parts manufacturing, steel, and construction. The Foundation's mission is to support SMEs in establishing independent safety management systems and acquiring advanced safety management capabilities, with the aim of preventing safety accidents and major disasters, and eliminating the root causes of risks. The Foundation carries out projects to improve the overall safety level of industries, including small subcontractors, and to promote a culture of mutual safety, while fostering a strong commitment to safety as a top priority across the entire group of companies, as well as among subcontractors and SMEs.

Health and Safety Training Programs in 2022

Classification		Target	Training Hours
Mandatory safety training	New hire training	New hires (5,516 persons)	8 hours and more per year
	Special training	Those subject to special training (39 types)	16 hours and more per year
	Regular training for all employees	On-site staff (33,045 persons)	6 hours and more per quarter
	Regular training for managers and supervisors	On-site supervisors (1,531 persons)	16 hours and more per year
	Training on operational changes	Workers who change work	2 hours and more
Competency/ specialized training	Competency-based training	Safety managers, safety promoters, etc. (253 persons)	Up to 2 nights and 3 days
Psychological safety counseling	Psychological counseling and training	Employees, employee families, subcontractors, etc. (1,449 persons)	About 1 hour each

Business Plan of the Foundation for Industrial Safety Partnerships

1. Safety management system inspection and technical support projects aimed at preventing industrial accidents
2. Education and training support projects designed to foster professional human resources and improve quality among others
3. Safety information and data support projects, such as safety-related best practice seminars
4. AI-based utilization support projects, such as smart safety management technology
5. Awards for outstanding SMEs and for contributors to improving industrial management
6. Win-win cooperation fund support projects to vitalize business safety and safety management
7. Scholarship support for bereaved families of workers who have died in serious accidents
8. Other projects related to improving the overall safety level of the industry

VEX – vest-type wearable robot; and CEX – chair-type industrial exoskeleton robotic system

Health, Safety and Welfare of Employees

PROMOTION OF HEALTH AND SAFETY ACTIVITIES

Health and Safety Management Activities Hyundai conducts risk assessments and health and safety diagnoses, measures noise and hazardous chemicals in the work environment, and provides emergency response training for workplace health and safety management. Based on these efforts, Hyundai is promoting safety measures, preventing health hazards, and enhancing its health and safety activities regarding the work environment, machinery, instruments, and facilities. In 2022, we strengthened construction safety supervision on holidays at domestic business sites, safely carrying out 3,646 cases of facility construction work. Furthermore, we conducted fire safety inspections at our production plants, research laboratories, service centers, and facilities related to eco-friendly vehicles. A total of 101 improvement measures were identified, and action plans have been developed for their implementation.

Furthermore, we conduct investigations and assessments of hazardous factors to prevent the kinds of occupational diseases that may affect our employees. We also carry out post-measures such as individual health check-ups and treatment. We have developed measures and programs for the prevention of musculoskeletal disorders and continue to implement activities designed to improve employees' lifestyle habits and prevent job-related stress.

In particular, at our workplaces, we plan and promote health management campaigns, including smoking cessation clinics and smoking cessation camps, and we are also promoting smoke-free facilities.

Preventing Serious Accidents at Workplaces Along with compliance with the relevant laws and regulatory requirements, such as the Serious Accidents Punishment Act, we plan and operate company-wide programs for the prevention of serious accidents based on domestic and international trends in major accident response. To prevent major accidents, we regularly conduct safety inspections to identify on-site hazards, store and manage the data obtained through these inspections in a database, and establish and implement major accidents prevention measures based on analysis of the database. Furthermore, we establish and manage post-incident response measures and measures for preventing recurrence in the event of industrial accidents, including major accidents. We also distribute accident case studies and examples of excellent industrial safety management to ensure that accident prevention activities are continuously carried out on-site.

Health and Safety Management Activities

Risk Assessment	Tags of Health and Safety Signs	Safety Measures for Working Environments	Safety Measures for Machinery, Equipment and Facilities	Preventive and Health Measures against Health Hazards	Provision of Personal Protective Equipment
We identify hazards and risks related to the work environment, machinery, equipment, raw materials, gases, vapors, and work procedures; and based on the findings, we implement preventive measures to mitigate risks and hazards.	We put the safety sign tags in identifiable locations to warn employees and visitors of hazardous or risky areas, facilities, or substances; and provide guidance on how to behave in emergency situations.	We set management criteria for areas where there is a risk of falls, collapses, drops, or other potential hazards; and perform regular maintenance and inspections.	We take protective measures that take into account the functions and characteristics of machinery, equipment, and facilities, and perform regular maintenance and inspections to eliminate potential hazards.	To prevent health hazards caused by raw materials, gases, vapors, high temperatures, noise, etc., we implement necessary preventive and health measures.	We provide appropriate personal protective equipment (PPE) for the work environment and ensure the availability and management of spare PPE. Wearing protective equipment is mandatory.
Health and Safety Diagnosis	**Response to Emergencies**	**Management of Hazardous Substances**	**Activities for Health Promotion**	**Support for Health and Safety at Subcontractor**	**Investigation of Accidents**
We conduct health and safety diagnoses of workplaces that have a high risk of safety accidents, such as falls, collapses, fires, explosions, and leaks of hazardous materials.	We conduct training based on emergency scenarios such as falls, collapses, fires, and leaks of hazardous materials. We also inspect the functionality of firefighting equipment on a regular basis.	We compile and provide a list of material health and safety information for the handling of hazardous substances. We also regularly measure and address physical and chemical hazardous factors, and implement improvement measures.	We conduct regular health check-ups and implement programs for the prevention of work-related diseases such as respiratory and musculoskeletal disorders, as well as managing job-related stress.	We have established a health and safety management system for subcontractors to substantialize risk assessments, and have strengthened accident prevention through close management including diagnosis, education, and consultation.	We conduct investigations of the causes of any accidents that may occur and develop measures to prevent their recurrence. We also perform statistical analysis of industrial accidents and incorporate them into our performance improvement goals.

Preventing Serious Accidents at Subcontractors To improve the safety management level of its subcontractors, Hyundai provides safety education and operates a reward system for excellent safety management partners. We also have developed a subcontractor safety management system that enables us to assess potential accident prevention capabilities in advance and select qualified subcontractors in the first place. To establish a safety management system for our subcontractors, we have carried out safety management activities such as registering subcontractors' information, evaluating our subcontractors' safety management competency (1,515 cases), operating a safety council (160 times), and conducting joint inspections (48 times). In addition, we strived to help our subcontractors prevent serious accidents by conducting special construction safety training (3 sessions) for the CEOs of 120 construction companies and safety supervisor training for internal subcontractors (4 sessions).

Comprehensive Emergency Response Drills Hyundai has set in place a robust emergency response system to respond actively to emergency situations, including disasters such as fires, explosions, and leakages, as well as non-natural emergencies like cyber-attacks and information breaches. We conduct comprehensive emergency response drills twice a year, during the first and second halves of the year, with the participation of all employees at each workplace. This training is aimed at maintaining and improving employees' ability to respond to emergency situations. It includes developing a schedule, creating scenarios for different situations, implementing response protocols for each emergency scenario, and organizing the participants into groups and assigning specific tasks to each group.

The training coordinator evaluates whether the training is being conducted in accordance with the established standards and procedures. The evaluation criteria for the comprehensive emergency response drills are continuously revised to enhance the level and intensity of the training. The emergency response scenarios and response systems are also being updated by analyzing deficiencies and implications identified during the training.

Efforts to Prevent Industrial Accidents Involving Subcontractors Hyundai has strengthened external collaboration for on-site and process safety management at each business site by considering the nature of the business operations, the types of subcontractors, and potential risks comprehensively. In 2021, the Asan Plant entered into a business agreement with its key subcontractors (30 in total) to create an industrial accident-free automobile parts manufacturing industry. Efforts are being made to support subcontractors through safety diagnosis consulting and to establish a foundation for collaborative safety inspections between the automakers and subcontractors. In 2023, the Jeonju Plant entered into a business agreement for the prevention of major accidents and overall safety with all its subcontractors. Joint on-site inspections between labor and management were conducted, focusing on three major types of accident (falls, entanglements, and collisions) and eight major risk factors. Based on the results of the on-site inspections, guidance was provided for the improvement and implementation of safety measures in those areas where deficiencies were identified.

Main Activities to Prevent Serious Accidents at Workplaces

Classification	Description of Activities
Regular mobile safety inspections	• Continuous risk management by conducting mobile-based safety checks on a regular basis to ensure the safety of work processes and operating facilities
Installation of smart motion sensors in blind spots	• Installation of smart motion sensors in safety management blind spots to identify risk factors and prevent accidents in advance
Installation of human body detection sensors	• Installation of human body detection sensors, etc. to reduce the risk of accidents caused by workers' negligence when operating transportation machinery such as forklifts
Development of safety management regulations	• Development of step-by-step regulations for managing non-routine construction work conducted during non-working hours, from design to construction

Investigation Procedures And Step-by-step Actions in Case of a Safety Accident

Step	Action
Secure a statement	Securing the statement of the first eyewitness
Process confirmation	Check the process and listen to the cause of the accident
Photo shoot	Entire process and accident reenactment photography
Cause analysis	Root cause analysis of accidents
Take measures	Apply the most appropriate countermeasure after establishing several countermeasures

* Behavioral instructions for an accident investigation: In the event of an accident, follow the steps above and do not omit a step or rush through the steps

** Prevent missing information by conducting an accident investigation that is based on the "5 Ws and 1 H", and start from large causes and then move onto small causes (top down approach)

Health, Safety and Welfare of Employees

Customized Welfare Benefits

EMPLOYEE WELFARE SYSTEM

Flexible Work Hours Hyundai implements a flexible working-hours system that allows employees to choose their own most efficient working hours, taking into consideration the nature of their work. This flexible system applies to certain job positions, allowing employees to select their own start and end times for work within the available time slots, excluding mandatory working hours. By enabling employees to determine their own efficient work hours through the flexible working-hours system, Hyundai aims to enhance employee engagement and support performance outcomes.

Hybrid Work System Hyundai has put in place a hybrid work system that utilizes IT technology to enable employees to work flexibly without being constrained by a specific location. To ensure smooth remote work, Hyundai has established a mobile PC environment, VPN access for external connectivity, and online video conferencing servers, thereby creating a virtual work environment. This allows our employees either to work-from-home arrangements or to work from designated shared spaces rather than traditional office settings.

RETIREE SUPPORT PROGRAM

Retirement Pension System Hyundai is implementing a retirement pension scheme for all its employees to enable employees who are eligible for retirement to prepare for life after retirement and old age. The retirement pension is protected by the external accumulation of retirement pension reserves, and education on the relevant products is provided to subscribers to create a stable foundation for employees after their retirement.

Retirement Planning Hyundai operates various programs to support and assist employees with their post-retirement planning. These programs include differentiated future planning courses and specialized educational programs based on employees' positions and job functions, which have been provided to a total of 4,232 persons.

Support System for Maternity, Childcare, Family Care, and Employee Health

Classification	System	Description
Maternity	Reduced hours during pregnancy	• The daily working hours of employees in early pregnancy (within 12 weeks) or late pregnancy (beyond 36 weeks) are reduced by two hours. The reduction can be taken either as 2 hours after the start of the working day, 2 hours before the end of the working day, or 1 hour after the start of the working day plus 1 hour before the end of the working day.
	Maternity leave	• Providing a 90 days maternity leave to female employees before and after childbirth (120 days for multiple pregnancies)
	Bereavement leave	• Offering a leave whose period is determined by the pregnancy period in case of miscarriage or stillbirth
	Partner's leave	• Offering up to 10 days of partner's leave within 90 days of childbirth
	Child Happiness Travel	• Providing hotel lodgings and meals within six months before and one year after a childbirth to employees and their spouses, which includes up to two nights at hotels designated by the company
Childcare facilities or contributions	Parental leave	• Providing up to two years of leave of absence for each child under the age of 8 or a child in second grade to both male and female employees
	Reduced hours during childcare period	• For employees with children under the age of 8 or in the 2nd grade of elementary school, both male and female employees are eligible for a maximum of 2 years of reduced working hours per child. (The reduced working hours can be divided twice in the first year, and they can be divided once in the second year) • The reduced working hours can be taken in conjunction with parental leave or separately, but the total usage of reduced working hours, including parental leave, cannot exceed 2 years. • Employees can take a reduction of 2 or 4 hours before starting work, a reduction of 2 or 4 hours before the end of work, or a reduction of 2 hours after starting work plus 2 hours before ending work.
	Providing breast-feeding time	• For female employees with infants under 1 year old, a paid lactation break of 120 minutes per day is provided
	In-house daycare centers	• Offering married employees and the children of single-parent families access to in-house daycare centers – available at five locations: Headquarters, Ulsan Plant, Asan Plant, Jeonju Plant, and Namyang Technology Research Center
Employee health	Workplace stress management	• Operation of the Talk Talk Center (a psychological counselling center) and the Employee Mindfulness Class (offering psychological counseling and emotional well-being programs that address childcare, job-related stress management, and conflict resolution within the workplace) • Operation of an International SOS service for employees stationed overseas or GEP employees, as well as their accompanying family members (support for stress management)
	Sports and health initiatives	• Operation of dedicated fitness centers (gymnasiums) and exercise programs for employees at our headquarters, the Ulsan, Asan and Jeonju plants, and the Namyang Research Center
Family care	Family care leave	• Offering up to 90 days of family care leave per year to employees whose parents, children, spouses, or spouses' parents need care due to illness, accident, or old age

Retirement Pension Asset under Management (Unit: KRW million)

Classification	As of 2021 year-end	As of 2022 year-end
Insurance products	5,840,100	5,985,348
Others	3,235	2,572
Total	**5,843,335**	**5,987,920**

Retirement Planning Programs in 2022

Targets	Managers or below (Union members)		Senior employees	
Course	Future planning 57-60	Counseling	Basic course in planning for life after retirement	Intensive course in planning for life after retirement
Age	57-60	57-60	59	60
Participants	2,716	775	351	390
Type	Lectures, experiential learning, etc.	Counseling	Lectures and counseling (online)	Lectures and counseling (online)
Curricula	• Self-examination for awareness of changes and happiness in old age • Customized education and consulting according to retirement plans	• One-on-one customized career counseling • Re-employment, farming, self-development, lifetime design, business start, etc.	• Channing perception about retirement and exploration of careers/interests • Financial diagnosis and planning	• Career analysis and decisions according to individuals' desired paths

Sustainable Supply Chain

With "Win-win Growth Agreement" leading supplier collaboration in the automotive industry, Hyundai enhances the foundation for win-win growth, through operating the Transparent Purchase Practices Center, Foundation of Korea Automotive Parts Industry Promotion, and Global Partnership Center. Based on a "Win-win growth agreement" aimed at leading win-win cooperation in the automotive industry, Hyundai operates the Transparent Purchase Practices Center, Foundation of Korea Automotive Parts Industry Promotion, and Global Partnership Center, thereby strengthening the foundation for win-win growth. We are also establishing a systematic cooperation system with suppliers, the government, and relevant organizations for a successful transition to a future of mobility, including electrification and autonomous driving. In our efforts to promote automobile industry, we run capability-building programs for quality, technology, and overall management of suppliers; increase joint R&D activities and patent applications; provide financial and tax support, and facilitate business diversification. Going forward, we will establish a win-win growth model that goes beyond fair trade between large companies and SMEs, and thus develop competitiveness, productivity, and technological capabilities of the entire automotive industry.

Composition of the Transparent Purchase Practices Center Website

- Supplier Code of Conduct
- Guidelines on implementing carbon neutrality
- Four major measures about subcontracting
- Guidelines on retaliation prohibition
- Suggestion box for transparency and ethical practices
- Suggestion box for tier-2 and tier-3 suppliers

Transparent Purchase Practices Center

Establishing a Win-win Growth Ecosystem

EXPANDING A CULTURE OF WIN-WIN GROWTH

Fair Trade Agreement Hyundai signs "fair trade agreement" to eliminate unreasonable practices that may arise in supplier trade relations and to fully establish fair trade between Hyundai and suppliers. We share four major measures about subcontracting and the Supplier Code of Conduct, while also operating corruption and irregularity report channels, in order to prevent such unfair conduct as delayed payments. We strive to enhance the competitiveness of an industrial ecosystem by providing training, technology, and fund support to suppliers, and we are also improving payment conditions for tier-1 as well as tier-2 suppliers. Since signing the first agreement in 2008, we have concluded the 14th agreement with our suppliers in 2022.

Signing of a New Win-win Growth Agreement In October 2022, Hyundai Motor Group entered a Win-win Growth Agreement in pursuit of "support for win-win in the automotive industry and enhanced competitiveness in the future mobility" with the Ministry of SMEs and Startups and Foundation of Korea Automotive Parts Industry Promotion. The agreement's main content includes contributing funds to stabilize the supply chain of parts suppliers, spreading the payment linkage system, supporting the construction and advancement of smart factories, establishing joint investment-type R&D funds, matching startups with suppliers and supporting their technological cooperation, and providing consulting for suppliers' business diversification and facilitating commercialization.

Building Long-term Cooperation System Hyundai pursues win-win growth with tier-1 suppliers that supply parts to it directly, tier-2 suppliers that supply parts to tier-1 suppliers, and general suppliers that deliver general raw and subsidiary materials. Through a long-term cooperation system with suppliers, we actively support them not only in production technologies but also in R&D efforts.

Outcome of Long-term Cooperation System

Average duration of business relationship	35 years (the average lifespan of small and medium-sized Korean manufacturers is 13 years)
Size of corporate growth	Sales volume increased by 4.4 times from 2001
Joint entries into overseas markets	730 suppliers have entered overseas markets with Hyundai

* As of 2022

Supplier Training in 2022 (Unit: Persons)

Classification		No. of Participants	Remarks
Foundation of Korea Automotive Parts Industry Promotion	Quality and Technology School	2,869	13 customized training courses
	General training, etc.	1,697	General training, on-site training, etc.
GPC	Training by industry, etc.	63,082	510 courses
Total		**67,648**	

STRENGTHENING THE FOUNDATION FOR WIN-WIN GROWTH

Supplier Grievance Handling

Transparent Purchase Practices Center It is important for Hyundai to provide suppliers with guidelines on ethical conduct and carbon neutrality in order to establish a fair and transparent win-win partnership. To this end, Hyundai Motor Group operates the Transparent Purchase Practices Center on its win-win growth website while operating a "suggestion box for transparency and ethical practices" and "suggestion box for tier-2 and tier-3 suppliers" so that its suppliers can voice their difficulties and propose various system improvements. We are making utmost efforts to establish fair trade practices and strengthen transparency throughout the supply chain, such as implementing a "retaliation prohibition policy" so that even when a supplier reports Hyundai's fair trade law violation to a relevant organization or raises an objection with content in a contract with Hyundai, we do not suspend trade with the supplier or restrict traded products and quantity.

Supplier Competency Building

Global Partnership Center Global Partnership Center (GPC) is helping suppliers enhance their competencies and competitiveness in the world's automotive industry based on the principle of "establishing a virtuous cycle in which Hyundai Motor Group and our suppliers can grow together." In addition to providing training programs targeting tier-1·tier-2 suppliers, the Center provides training facilities and instructors to suppliers in need of their own training. It also offers 18 tracks and some 437 training programs in five categories – future competitiveness, global competency, leadership, nurturing automotive industry experts, and basic job training – for tier-1·tier-2 suppliers.

Foundation of Korea Automotive Parts Industry Promotion Hyundai operates the Foundation of Korea Automotive Parts Industry Promotion together with Kia and Hyundai MOBIS to strengthen automotive parts suppliers' overall capabilities in the areas of quality, technology, and management. We run various programs, including field instruction activities and training, as a way to contribute to improving quality and technological competencies as well as to nurture talent in the automotive parts industry.

Technical Training for Suppliers Hyundai provides technical training through the Foundation of Korea Automotive Parts Industry Promotion to help both metal suppliers (presses, heat treatments, welding, metal plating, forging) and non-metal suppliers (rubber, painting, electrical & electronics, IT) improve their parts quality and productivity. We anticipate these efforts will lead to improve suppliers' quality defects, reduce raw material purchase costs, and increase productivity.

Management Consulting for Suppliers Hyundai offers management consulting to suppliers, free of charge, through which we share professional experiences and know-how so that suppliers can strengthen their management capabilities in the areas of R&D, production, quality, logistics, cost, and management activities.

No. of Suppliers Received Technical Training or Management Consulting (Unit: No. of companies)

Sustainable Supply Chain

ENHANCING QUALITY COMPETITIVENESS

5-Star System Hyundai sets in place the "5-Star System" which quantitatively evaluates suppliers' level of quality, technology, and delivery level to provide the evaluation results so that suppliers can set detailed improvement goals and achieve them. We provide incentives to 5-star-certified suppliers, such as giving advantageous payment conditions and priority for new car development. Through the 5-Star System, suppliers can expect such effects as curtailing quality control costs and developing independent export capabilities, in addition to enhancing their competitiveness in quality, technology, and delivery.

Quality Evaluation of Tier-2·Tier-3 Suppliers (SQ Mark) Hyundai operates the "Supplier-Quality Mark" program with an aim to identify professional business types that have a major impact on automotive parts quality and improve the quality of tier-2·tier-3 suppliers in the respective business areas. We evaluate tier-2·tier-3 suppliers based on process management activities, such as raw and subsidiary material inspection criteria, facility preservation and daily inspection activities, and creation and improvement of operation standards, as well as quality management activities, including finished product inspections, corrective measures, and continuous field improvements. The SQ Mark is provided to outstanding suppliers.

Activities to Improve Durability Hyundai shares its know-how in enhancing durability with suppliers in order to help them effectively address their chronic issues (customer inconveniences and economic losses, such as claims and recalls). We have a technology meeting three times a year to improve dependability issues that occur at suppliers. In addition, we are collaborating with around 100 tier-1 suppliers to resolve dependability issues.

Quality Education for Suppliers Hyundai holds the "monthly supplier quality meeting" that is participated in by all local supplier representatives at all plants in Korea and abroad every month to secure and enhance suppliers' quality reliability. At this meeting, we share best practices and matters that require improvement concerning delivery quality. We also monitor the progress and effectiveness of implemented improvement measures. In addition, once mass production of a new vehicle is finalized, the head office dispatches an employee in charge of quality to the overseas plant to support supplier education, thus taking measures so that suppliers' delivery level is in line with our quality standards.

Quality Management Seminars for Suppliers Hyundai holds quality management seminars every year for the CEOs and employees of all its tier-1 suppliers. At the 2022 quality management seminar, we introduced cases of responding to quality issues in the US and explained about the quality management items that suppliers needed to manage in the country through a lecture by a third-party auditor (TPA). The Quality Division introduced Hyundai's key quality assurance promotion strategies while the Procurement Division guided the roles of suppliers in strengthening the quality capabilities for new vehicle development and securing the quality competitiveness of mass-produced vehicle parts. Suppliers introduced examples and effects of improving qualitative quality and shared difficulties in responding to the transition to electrification and the knowledge they have gathered to overcome them.

5-Star Evaluation Items

Quality 5-Star	Technology 5-Star	Delivery 5-Star
• Quality management system • Defect rate • Claim reimbursement ratio • Quality management performance, etc.	• Technology development personnel, investment • New technology development, patent • Parts development work system (planning/design/evaluation), etc.	• Production line stoppage cases, time, reimbursement amount (ratio) • A/S parts delivery rate • CKD parts delivery rate

2022 Quality & Safety Training Programs (Suppliers)

Quality related training	Target	Cycle	No. of suppliers
Quality management seminar (face-to-face)	All suppliers in Korea	Once a year	345
Quality management training (Monthly quality meeting)	All suppliers	Once a month	1,680

IMPROVING TECHNOLOGY DEVELOPMENT CAPABILITIES

R&D Technical Support for Suppliers Hyundai runs a win-win growth program whereby it shares its R&D and technology development know-how with suppliers, and thus helps suppliers strengthen their capabilities in areas which need improvements. The supplier R&D technical support program consists of case studies and function/design concept training to enhance their quality mindset; customized technical support that conducts prior analysis of areas for R&D improvements and helps suppliers improve key pending matters; and R&D competency-building support that improves product development capabilities by using new technologies and methods. We look into supplier requests in the process of quality improvement, customized technology, and R&D capability-building support, and then reflect them in improving the technical support program. We also run consultative bodies and exchange meetings among suppliers in the same industry to continue mutual communication and cooperation.

Sharing Technology Patents Hyundai shares patent, free of charge, with suppliers, and transfers patents that suppliers need. When a supplier requests for a patent transfer, we conduct on-site investigations and consultations regarding the supplier's major business areas; technologies that the supplier owns and is developing; supplier's patents; and patent that the supplier hopes to be transferred. By having discussions with the supplier, we finalize the patent transfer and sign a patent agreement. We also hold New Technology Exhibitions after patent transfers to share information on cases of patent application to advance R&D and patent application to products.

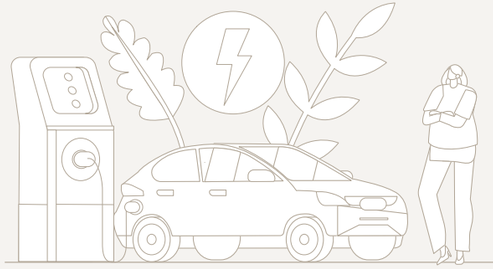
Building Smart Factories Hyundai implements a smart factory-building project for SME tier-1·tier-2 suppliers. The project uses ICT to integrate the entire production process, ranging from product planning to sales, to produce customer-tailored products at minimal costs and time. A total of KRW 15 billion was contributed to the project from 2019 to 2021 to provide consulting and facility investments required for building a smart factory to 660 suppliers so that they can switch to a smart factory. The smart factory-building project is categorized into different levels in consideration of the status of production facilities of tier-1·tier-2 suppliers. They include the basic level which enables partial standardization, data management, and real-time production information monitoring; mid-level which supports collected information-based control and optimization of decision-making through simulations; and advanced level where monitoring to control-optimization takes place autonomously.

Guest Engineer System Hyundai sets in place a guest engineer system, through which parts suppliers' research staff in charge of design/evaluation take part in our new car development process. We provide a free office space where supplier researchers can stay, as well as the facilities, equipment, and test sites needed for parts performance evaluation. We also transfer our parts design and performance development know-how. Through new car parts design and performance development collaboration, Hyundai and suppliers anticipate to raise parts and performance development efficiency, develop quality in advance, and nurture technical experts at suppliers.

Benchmarking Advanced Technologies Hyundai operates the technical material escrow system for safe storage of suppliers' key technical materials and trade secrets, and proof of technology development in the event of leakage of a supplier's key technology or a dispute. We develop technologies jointly with suppliers and then make patent applications together to prevent the possibility of infringement upon small- to mid-sized suppliers' technologies and patents. We also strive to protect supplies' technology directory or indirectly by providing online patent education on patent application and patent search methods and helping them reduce their patent cost.

R&D Supplier Tech Day

In October 2022, Hyundai held the "2022 R&D Supplier Tech Day", where suppliers with outstanding new technologies were awarded and suppliers' technologies were mutually exchanged, to strengthen suppliers' R&D capabilities and promote joint growth based on mutual cooperation. We chose and rewarded four suppliers with significant R&D achievements, including a dual power supply controller for autonomous driving systems; coolant and refrigerant system parts modularization; integrated vehicle body-battery underbody structure; and high-voltage battery packs. In addition, a total of 32 suppliers participated in a video exhibition to introduce new technology and share 60 R&D cases. Useful information was also shared on ways of cooperation to develop global R&D competitiveness based on win-win growth.



Sustainable Supply Chain

STRENGTHENING A FOUNDATION FOR SUSTAINABLE GROWTH

Making Cash Payments and Adjusting Raw Material Prices Since 2006, Hyundai has been making payments in cash to MEs and SMEs with sales less than KRW 500 billion and in promissory notes (60 days) to large companies and MEs with sales more than KRW 500 billion. Also, we make payments on a weekly basis. For large companies, MEs, and SMEs that supply parts for exports, we make payments fully in cash once a month. In addition, to ease the burden on suppliers that is caused by raw material price increases, Hyundai absorbs the impact from raw material price changes. In case of steel plates and precious metal, we operate a system whereby we directly purchase the items at international prices and supply them to suppliers. In case of aluminum and plastics, we adjust payments made to suppliers according to international prices.

Joint Entries into Overseas Markets and Support for Increased Exports Hyundai is jointly entering overseas markets with suppliers to support their continued growth and globalization. As of the end of 2022, we expanded to global markets with a total of 730 suppliers, including 341 tier-1 suppliers and 389 tier-2 suppliers, through which suppliers have harnessed opportunities to receive orders from overseas OEMs. To help Korean parts suppliers increase overseas exports, we are supporting the establishment of joint logistics and proof-of-origin systems. We identify difficulties experienced by suppliers in the export process and continue to explore activities that make actual improvements.

Support to Shift to Future Vehicle Parts Business Internal combustion engine parts business faces a range of challenges due to the expansion of electrification and shift to autonomous driving. In our effort to help our suppliers preemptively respond to the future vehicle market by moving forward with business diversification, we built a comprehensive support system together with the Korea Automotive Technology Institute and Foundation of Korea Automotive Parts Industry Promotion. In addition, we operate the "automotive parts company innovation support" program that provides analysis of R&D capabilities and consulting on future direction, support for discovery and selection of new business items in relation to future vehicles, and support for patent analysis and business reorganization for SMEs that are preparing for expansion of the future vehicle parts business. We also have the "business reorganization partnership selection and support" program that provides necessary support for SMEs that are expanding their business in future vehicle parts to receive government approval on business reorganization. Incentives are provided to companies approved for business reorganization, including tax benefits, loan interest discounts, and application of additional points when applying to build a smart factory.

Support for Innovation of Automotive Parts Company in 2022
- Consulting to 20 companies making preparations

Business Reorganization Partnership and Support Program in 2022
- Identified 27 support companies
- Supported business reorganization approval for 27 companies

Major Fund Support Programs for Suppliers

Future Growth Mutual Fund	• **Deposited KRW 37.4 billion, provided KRW 93.5 billion** - Provide investment funds at low interest rates for quality and productivity improvements of tier-1 and tier-2 suppliers (Industrial Bank of Korea)
Future Growth Win-Win Fund	• **Deposited KRW 100 billion, provided KRW 150 billion** - Provide investment funds at low interest rates for quality and productivity improvements of tier-1 and tier-2 suppliers (Hyundai Commercial)
Win-win Mold Equipment Fund	• **Deposited KRW 50 billion, provided KRW 75 billion** - Support suppliers' financing based on new model mold and equipment collateral value and their interest rate stability
Win-win Cooperation Fund	• **Provided KRW 50 billion** - Support labor costs of tier-2 and tier-3 supplier workers with funds raised by Hyundai
Dedicated Loan for Tier-2 and Tier-3 Suppliers	• **Provided KRW 200 billion** - Provide investment funds intended to improve the management environment of tier-2 and tier-3 suppliers and operating funds at low interest rates

STRENGTHENING THE TIER-2 AND TIER-3 COOPERATION NETWORK

5-Star System for Win-Win Cooperation In our efforts to build win-win relationship between tier-1 suppliers and tier-2 suppliers and to establish a culture of win-win growth, we operate the "5-Star Win-win Cooperation" system, which evaluates tier-1 suppliers' win-win efforts toward tier-2 suppliers and reflects the results in the bidding process. We evaluate tier-1 suppliers' win-win activities toward tier-2 suppliers, and evaluation items include payment terms; including cash payment ratio and payment period; contractual fairness, such as use of a standard subcontract; and win-win support, including management fund, R&D, and productivity support. We also conduct qualitative evaluations on tier-2 suppliers' subjective evaluation about tier-1 suppliers' win-win activities. Survey items include transaction relationship, including fair trade and transaction conditions; cooperation relationship, such as for management fund, R&D, and productivity; and overall operations, such as vision-sharing and implementation system.

5-Star System for Win-win Cooperation

Goal	Win-win cooperation and joint growth between tier-1 and tier-2 suppliers
Outline	Evaluate tier-1 suppliers' win-win cooperation efforts toward tier-2 suppliers and reflect the results in the supplier selection (bidding) process (Evaluate once a year)

Tier-1 suppliers' win-win cooperation activity performance (Quantitative evaluation: 50%)	Tier-2 suppliers' subjective evaluation about win-win cooperation (Qualitative survey: 50%)
• Payment terms (cash payment ratio, payment period, etc.) • Fair contract (use of a standard contract, etc.) • Win-win support (financial, R&D, productivity support, etc.)	• Transaction relationship (fair trade, transaction conditions) • Cooperation relationship (financial, R&D, productivity support, etc.) • Operational systems (vision-sharing, implementation system, etc.)

Improving Quality and Technology of Tier-2·Tier-3 Suppliers Hyundai has been making continued efforts to improve quality, technology, and productivity of tier-2 and tier-3 suppliers by dispatching experts with automobile-related expert skills and know-how to tier-2 and tier-3 suppliers.

Win-Win Payment System Hyundai has set in place a win-win payment system that enables tier-2·tier-3 suppliers to be paid in cash on the payment date and cash in their payments in advance. Within the limit of the accounts receivable bond (payment) issued by Hyundai, a tier-1 supplier issues a bond to a tier-2 supplier and a tier-2 supplier issues a bond to a tier-3 supplier for settlement.

This system ensures tier-2 and tier-3 suppliers to receive payment on the payment date. Tier-1 and tier-2 suppliers that make payment can receive financial benefits, including interest income from the win-win payment deposit account and commission income from early encashment of win-win payment.

Technical Training (Quality and Technology)

Composition	Technical experts in various production areas
Duration & Frequency	3 to 12 months per year, providing guidance on shortcoming related to manufacturing technologies free of charge
Areas	Listen to supplier opinions on key quality/technology-related difficulties and supports improvements; and provide focused instruction on quality management system operation to improve suppliers' ability to respond to the Supplier-Quality Mark system

Quality and Management Consulting (Supplier Support Group)

Composition	Professionals with experience in the automobile industry as senior executives
Duration & Frequency	3 to 12 months per year, providing consultation on overall management, free of charge
Areas	Consulting on overall management, including managing production, managing quality, and pioneering overseas markets

Sustainable Supply Chain

Supply Chain ESG Management

SPREADING ESG IN THE SUPPLY CHAIN

Enactment and Amendment of the Supplier Code of Conduct Hyundai's Supplier Code of Conduct stipulates basic matters in the areas of ethics, environment, labor and human rights, safety and health, and management systems that should be observed by all suppliers that provide goods and services or signed a contract for other transactions. All suppliers that signed a contract with Hyundai must comply with the Supplier Code of Conduct and also recommend compliance with matters specified in the Code of Conduct to the overall supply chain, including companies they trade with (lower suppliers).

Suppliers must consider the matters presented in the Code of Conduct in their management decision-making and business operation processes, and actively respond to an ESG risk diagnosis and due diligence that Hyundai carries out directly or through a third-party organization. In addition, in accordance with Hyundai's risk improvement recommendations, suppliers must establish a risk mitigation plan and implement measures based on mutual discussion. The BOD supervises and reviews important matters related to supply chain ESG management plans and programs.

Implementing ESG in Supplier Selection Process Hyundai distributes standard guidelines on safety, health, and environmental management and examines the status of suppliers' safety and environment accidents through ESG risk diagnosis and due diligence. We apply a penalty during supplier selection to suppliers that had an accident. When choosing a new supplier, we evaluate the supplier's quality management system, financial structure, and management capabilities while also evaluating its ESG including safety and health, after which evaluation results are reflected in trade conditions.

Even suppliers we have been trading with can be subject to a penalty, such as bidding restrictions, according to evaluation results. In addition, we strengthened supply chain due diligence regulations and adopted the regulations to our website and basic contracts, thus demanding suppliers to comply with supply chain ESG-related standards.

Receiving ESG Documents for Supplier Registration If we determine that a supplier is qualified for trade as a result of a supplier evaluation, we receive from the supplier its evaluation report, survey on actual conditions, financial statements, as well as pledges on improving sustainability, including a written ethics pledge, a written agreement on supplying eco-friendly parts, a written quality pledge, and a written information protection pledge.

Current Status of Hyundai Suppliers Hyundai's suppliers are in various regions across the globe, including Korea, US, China, Europe, India, Latin America, Southeast Asia, etc. Of these suppliers, those that supply core parts (hydrogen fuel cell parts, battery parts, control parts, electrification parts, etc.), have a low level of replaceability, or have a large trade volume are chosen and managed as significant (key) suppliers.

Tier-1 suppliers registered and managed in 2022 totaled 1,680 (purchase percentage of 100%), consisting of 380 suppliers in Korea and 1,300 suppliers overseas. Of the tier-1 suppliers, there are 47 core suppliers (purchase percentage of 65%). In addition to tier-1 suppliers, we identify tier-2 suppliers that have a significant impact on business operations. Number of core suppliers among tier-2 and lower suppliers stands at 24.

Spreading and Disseminating ESG Among Suppliers

Win-win Growth Newsletter Hyundai produces the "win-win growth newsletter" to provide information on programs that we operate for win-win growth with suppliers and to share major policies and activities in the fields of occupational safety, information security, and sustainability management. The newsletter is issued every other month and distributed to all tier-1 suppliers through notices, the win-win growth portal (http://winwin.hyundai.com), and the website of Hyundai Kia Automotive Suppliers Association.

Briefings and Online Training We hold briefings and run training courses for suppliers to prevent ESG risks throughout the supply chain and improve suppliers' ESG capabilities. We operate online training courses that can be taken by all suppliers. We also hold various briefings for working-level ESG employees of suppliers and share information on index that should be managed in major ESG areas, including ethics, environment, labor and human rights, and safety and health, major trends, and best practices.

Supplier ESG Improvement Roadmap Hyundai created the "Supplier ESG Improvement Roadmap" to support suppliers' sustainable development and socially responsible activities. In accordance with the ESG improvement roadmap, we strengthened supplier ESG risk evaluation criteria and expanded ESG risk diagnosis and due diligence targets to include suppliers that entered overseas markets. In addition, we shared information with suppliers so that they can secure ESG capabilities and adopt major ESG regulations and policies, while also sharing a data management template.

Key Supply Chain Sustainability Management in 2022

- February Made key plan on supplier ESG improvements in 2022
- May Made notice of guidelines on supplier execution of carbon neutrality
- October Shared the progress of supplier ESG evaluation and improvement in 2022

Supplier ESG Improvement Roadmap

2021
- ESG briefing
  - Provide a seminar on ESG evaluation and conflict minerals, send a win-win cooperation letter
- Evaluation and feedback
  - Self-diagnosis, written evaluation, on-site evaluation
  - Distribute an evaluation results report to each supplier

2022
- Support for establishing an ESG management system
  - Share guidelines, including a data template
  - Create an online ESG training course
- Expand ESG evaluation targets
  - Increase the evaluation scope to include suppliers that entered overseas markets

2023
- Advance ESG evaluation
  - Increase the evaluation scope to include overseas suppliers
  - Continue to upgrade the index
- Increase ESG evaluation and consulting support
  - Online evaluation, on-site inspection, on-site improvement consulting, etc.

Basic Principles of the Supplier Code of Conduct

Hyundai Motor Company Supplier Code of Conduct

Ethics
- Transparent management and anti-corruption
- Prevention of unfair trade, etc.

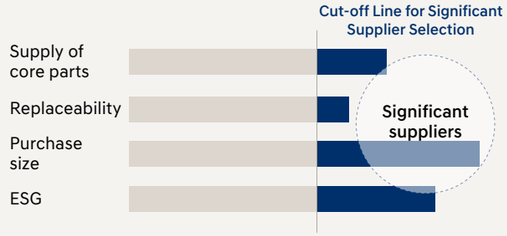
Environment
- Establishment of an environmental management system
- GHG and energy management, biodiversity, etc.

Labor and Human rights
- Guarantee of freedom of association
- Prohibition of child and forced labor, etc.

Safety and Health
- Establishment of an occupational health and safety management system
- Response to emergency situations, etc.

Management Systems
- Transparent management and anti-corruption
- Prevention of unfair trade, etc.

Criteria to Select Significant Suppliers



Supplier ESG Capability-Building Training in 2022

Total hours

609 hours

No. of participating suppliers/ No. of staff who received training

303 suppliers / 1,123 persons

Sustainable Supply Chain

SUPPLY CHAIN ESG DIAGNOSIS AND DUE DILIGENCE

Risk Diagnosis and Due Diligence Process Hyundai's supply chain ESG risk evaluation management consists of document-based assessment, on-site due diligence, high-risk supplier selection, and improvement and monitoring. We continue to improve diagnostic indicators in accordance with global trends to effectively identify potential ESG risks in the supply chain.

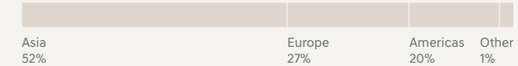
Composition of Risk Diagnostic Indicators Hyundai established its unique supply chain ESG risk diagnostic indicators by using laws related to fair trade/environment/labor/safety and health/supply chain due diligence, the OECD Guidelines for Multinational Enterprises, EcoVadis, Responsible Business Alliance (RBA), Drive Sustainability, and other indices and standards. The supply chain ESG risk diagnostic indicators consist of ethics, environment, labor and human rights, and safety and health areas. In consideration of a supplier's size and whether it satisfies key indicators, we reflect the evaluation results in supply chain operation strategies.

Steps of Risk Diagnosis and Due Diligence

Risk filter	Analyze expected ESG risks by country where suppliers are located, affiliated industry, and supplied product
Document-based assessment	A supplier accesses an online system (IT), and conducts a self-diagnosis (checklist) on its ESG risk level and provides documentary evidence
On-site due diligence	A visit is made to a supplier together with an outside expert to check the on-site situation or confirm authenticity of documentary evidence
Improvement measure	Request for immediate improvement or recommend to make an improvement plan for high-risk factors identified in the document-based assessment or on-site due diligence process,
Support for execution	Provide such financial and non-financial support as training, consulting, and guidance, to suppliers to help them implement improvement measures

Risk Filter Before a risk diagnosis and due diligence, Hyundai identifies, in advance, risks that it expects or are occurring in the supply chain. Hyundai chose 47 tier-1 core(significant) suppliers and 24 tier-2 core(significant) suppliers in 2022 after going through the prior identification process.

Global presence of suppliers	Hyundai's suppliers are located across the globe, and continue cooperation to build a stable supply chain, including ESG.
Identification of risks by country, business type, part and raw and subsidiary material	We identify and manage risks by country where our suppliers are located, business type, supplied part, and raw and subsidiary material. To this end, we use materials disclosed by each country's government and research organizations as well as various media and social network materials.
Analysis of supply chain ESG risk diagnosis	Confirmed risks are managed by categorizing them based on each ESG area, including ethics, environment, labor and human rights, and safety and health. They are reflected in deriving supply chain risk improvement measures and amending diagnostic indicators.



Document-based Assessment Hyundai diagnoses supply chain ESG risks based on its unique, distinctive indicators and criteria. A document-based assessment is conducted using an online evaluation system that can be accessed by all suppliers in Korea and abroad. Suppliers respond to evaluation indicators by means of a self-diagnosis and attach documentary evidence. Supplier document-based assessment results serve as basic data for checking suppliers' ESG risks, choosing suppliers subject to on-site due diligence, and categorizing high-risk suppliers.

On-site Hyundai chooses suppliers that are subject to on-site due diligence by comprehensively considering countries where suppliers are located, business type, supplied parts and raw and subsidiary materials, and document-based assessment results. Primary on-site due diligence targets include suppliers that submitted insufficient responses and documentary evidence for the document-based assessment and suppliers that have been confirmed to have potential or actual ESG risks based on document-based assessment results. On-site due diligence and evaluations are conducted by ESG consulting and diagnosis and due diligence experts, in close collaboration with Hyundai's purchase sector.

During the on-site due diligence process, we checked the relevant supplier's systems and regulations to confirm measures regarding code of ethics, legitimate handling of wastes and pollutants, management of working hours and payment of salaries based on a working hour management system, hazard evaluations, and establishment of emergency situation response plans. We plan to review and apply ways to effectively identify concerning ESG risks at work sites during on-site visits.

Diagnosis and Due Diligence Aligned with Supply Chain Management Strategies Hyundai established top five strategic directions of supply chain management for suppliers' quality competitiveness, technological competitiveness, supply stability, compliance with fair trade, and establishment of an eco-friendly production system. To achieve the top five strategic directions, we established major performance indicators (delivery defect rate, reliability testing capabilities, KD parts delivery rate, payment terms, energy consumption, etc.) for each direction and monitor the execution status on a regular basis. In addition, we designed "management indicators aligned with strategy" and "ESG risk diagnostic indicators" to identify whether suppliers are participating in and executing our supply chain management strategies. Based on these indicators, we are conducting a diagnosis and due diligence (evaluation) of supplier levels.

Supply Chain Management Strategies

	Strategic Directions	Performance Indicators
Top five strategic directions of supply chain management	Quality competitiveness	Delivery defect rate, claim reimbursement ratio, quality management, onsite evaluation of manufacturing processes, outsourcing management
	Technological competitiveness	Basic competencies, performance competencies, capabilities for the future, reliability testing capabilities, S/W verification capabilities
	Supply stability	Smooth supply of parts (prevention of production line stoppage), A/S parts delivery rate, KD parts delivery rate
	Fair trade	Payment terms, contractual fairness, law/regulation compliance, win-win cooperation (support for win-win growth)
	Eco-friendly production system	Environmental management system, energy consumption, air pollutant, waste, hazardous chemicals management

Supply Chain ESG Risk Diagnostic Indicators

	Ethics	Environment	Labor and human rights	Safety and health	Management system
ESG risk diagnostic indicators	• Prohibition of corruption • Prevention of unfair trade • Prevention of counterfeit parts • Compliance with export restrictions • Information protection • Responsible purchase	• Environmental management system • Energy and GHG • Water resources • Air pollutants • Wastes • Chemical substances	• Non-discrimination • Wage and welfare • Working hours • Humane treatment • Freedom of association • Prohibition of child labor • Prohibition of forced labor	• Safety and health management system • Machine/instrument/facility safety • Emergency response • Accident management • Safety diagnosis • Health management	• Disclosure of corporate statement • Appointment of a person in charge • Risk checks • Education and communication • Information management • Grievance system • Business partner management, etc.

Sustainable Supply Chain

Results of Supply Chain ESG Risk Diagnosis and Due Diligence (Unit: Companies)

Classification			No. of companies	Remarks
Document-based assessment of ESG risks	Tier-1 suppliers		1,680	Purchase percentage of 100%
		Tier-1 core suppliers	47	65% of tier-1 purchase percentage
	Tier-2 core suppliers		24	
Identification of high-risk suppliers based on document-based assessment	Tier-1 suppliers		13	Goal: Complete the written assessment of all core suppliers
		Tier-1 core suppliers	-	
	Tier-2 core suppliers		1	
On-site due diligence of ESG risks	Tier-1 suppliers		36	Including 13 high-risk suppliers identified through the document-based assessment
		Tier-1 core suppliers	1	Goal: Complete the onsite assessment of all high-risk suppliers
	Tier-2 core suppliers		2	
Improvement measures for high-risk suppliers	Suppliers with negative impacts identified		14	Identified 1 core supplier among tier-1·tier-2 suppliers
	Suppliers with established improvement plans agreed upon		14	Including the 1 core supplier
	Suppliers that completed implementation of improvement plans		14	Including the 1 core supplier

Key Areas of Improvement Hyundai conducted the on-site due diligence (evaluation) and thus identified key areas which need improvement as follows. We share evaluation result report with the average score of benchmark companies and the top score in addition to areas of weakness and areas for improvement for each company, thereby inducing them to make improvement.

Areas	Improvement required
Ethics	Have a responsible raw and subsidiary material procurement policy, track and manage conflict minerals
Environment	Environmental data index management, environmental management communication
Labor and human rights	Have a human rights charter, adopt a child labor prohibition policy
Safety and health	Establish safety and health governance, manage serious accident index

Finalization of Risks and Establishment of an Improvement Plan We are deriving improvement points to ease suppliers' ESG risks through on-site due diligence (evaluation). Immediate corrective measures are taken for matters that can be improved right away during an on-site due diligence. For other confirmed risks, we hold discussions with the respective supplier on the time and method of implementation and expected issues, and establish improvement tasks. In addition to conducting a supply chain ESG risk diagnosis and due diligence, we monitor whether suppliers implement improvement measures. We also actively provide support in case suppliers do not have enough ability to make improvements themselves.

Supply Chain Sustainability Goals Hyundai has been making continued effort to expand the scope of the supplier ESG risk diagnosis and due diligence to improve its supply chain sustainability. In 2022, we conducted a supply chain ESG evaluation on all tier-1 suppliers around the world, and encouraged them to acquire environmental management system (ISO 14001) and safety and health management system (ISO 45001) certifications. In addition, we are providing a program that supports the establishment of safety facilities and security systems and the reduction of carbon emissions by 2025 to help suppliers improve their ESG capabilities.

Performance in 2022

- Increase the scope of ESG evaluation targets (all tier-1 suppliers)
- Environment, health, and safety management system certification (all tier-1 suppliers)

Supply Chain Sustainability Goals

Classification	Support provided to	Support duration
Establish safety facilities	Tier-1 and tier-2 suppliers	2023-2025 (3 years)
Establish security systems	Tier-1 and tier-2 suppliers	
Support for carbon emission reduction	Tier-1 suppliers	

* Support target: Choose from tier-1·tier-2 suppliers by taking company size, business type, and other factors into consideration

Support Cases of Improving Risk Management

Support to strengthen ESG diagnosis/evaluation response capabilities

We shared improvement guidelines and best practices of ESG management so that suppliers can establish ESG risk improvement plans and take measures. In particular, we have been strengthening support needed for on-site improvement consulting since 2023 so that suppliers can develop the capabilities needed to manage and improve ESG risks.

Training to enhance capabilities in relation to carbon neutrality in the supply chain

Through the Global Partnership Center and Global Learning Center, Hyundai is providing training to around 360 suppliers on the outline of carbon neutrality, trends in Korea and abroad, method of calculating GHG emissions, and response measures regarding carbon information disclosure. We also run a program that supports equipment purchasing when a supplier replaces a carbon reduction facility that is needed at a business site as well as a consulting program that helps improve business site energy efficiency and curtail costs. We will continue to develop diverse carbon reduction programs and provide support so that they can be applied to suppliers, helping suppliers continually raise their carbon management levels to achieve carbon neutrality.

Global Supplier Day

In March 2023, we held the "Global Supplier Day" in Montgomery, US for suppliers in the region, semiconductor companies, facility suppliers, and others. This program has enabled us to strengthen cooperation with global suppliers and to share trend information on ESG risks that can arise in the supply chain. In particular, we shared cases related to supply chain ESG, including child labor issues in North America, thereby emphasizing the importance of supply chain ESG management.

ESG online training portal

To raise suppliers' ESG awareness and strengthen their ESG capabilities, we operate the "ESG online training portal" that employees of all suppliers can use anytime. It provides content (ESG concept, trends in Korea and abroad, best practices, etc.) that is connected to our supply chain ESG risk diagnosis and due diligence items, including ethics, environment, labor and human rights, and safety and health.

Labor and human rights management training for the supply chain in North America

In partnership with the US Department of Labor, we offered a training program to the overall supply chain in North America with regards to compliance with worker employment-related regulations. Through this training program, we informed participants of Hyundai's zero tolerance principle on unfair employment, and explained ways to check identity in the worker employment process, Supplier Code of Conduct compliance requirements, opening of an anonymous channel for grievance counseling, and prohibition of employment through a third-party employment broker.

Distribution of safety and health management guides

We have developed and distributed the "safety and health management guides" to help suppliers establish a systematic safety and health management system, such as creating an organization dedicated to safety and health; establishing a management system; increasing training and investments; identifying and addressing risks; and analyzing disaster factors and establishing reduction measures. We also create online safety and health training materials, which can be viewed by any of supplier employees.

Sustainable Supply Chain

RESPONSIBLE MINERALS MANAGEMENT

Conflict Minerals Management Governance Hyundai understands the significant seriousness of human rights violations and environmental destruction caused by mineral mining in conflict and high-risk areas. We are therefore striving to eradicate human rights violations, including exploitation of child labor, and environmental destruction that take place in the process of mining minerals, and to protect worker health and safety.

To this end, we have established management governance to operate a management process for compliance with policies and execution of social responsibilities in relation to conflict minerals. The Procurement Division's Win-Win Cooperation & Safety Promotion Team supervises the operation of the conflict minerals-related management process and continually examines responsible mineral risks of each Purchase Division and supplier. In addition, it closely collaborates with relevant departments, including the Sustainability Management Team that manages company-wide ESG risks. Important matters related to conflict minerals are supervised and reviewed by Sustainability Management Committee under BOD, and are also included in the KPIs for CEO as a way to ensure active management of the matters.

Conflict Minerals (Responsible Minerals) Policy

Conflict Minerals Management Policy Hyundai recognizes that there are conflict minerals that are unethically mined and distributed, including human rights violations and environmental destruction, in conflict zones, and prohibits use of conflict minerals (tin, tantalum, tungsten, gold) that are unethically mined in conflict areas. Based on the basic policy of "providing products to consumers that went through a legitimate and ethical distribution process", we operate a conflict minerals management process jointly with suppliers and strictly investigate inclusion of conflict minerals in products. In addition, we are continually monitoring the cobalt supply chain in accordance with the OECD Due Diligence Guidance to manage the issue of child labor in cobalt mines of the Democratic Republic of Congo. We provide suppliers with conflict minerals management guidelines and hold relevant briefing sessions to help raise their awareness of conflict minerals. In addition, we will make continued efforts to expand the mineral purchase policy that calls for non-use of conflict minerals and fulfillment of social responsibilities to include suppliers' clients.

Conflict Minerals Management Process Hyundai has established a process by reviewing and analyzing the OECD Due Diligence Guidance, the US Dodd-Frank Regulatory Reform Act, and US Securities and Exchange Commission's requirements, based on which it is striving for responsible mineral supply chain management. Based on the Conflict Minerals Reporting Template (CMRT) and Extended Mineral Reporting Template (EMRT) for supplier information collection that are provided by the Responsible Mineral Initiative (RMI), we are tracking the supply chain (mine-smelter-tier-1 supplier, etc.) for tin, tantalum, tungsten, gold, and cobalt. In cases where we identify and recognize human rights and environmental risks in the mineral supply chain, we strive to mitigate or prevent them. In addition, we recommend suppliers to monitor whether they are trading with a smelter located in a high-risk area or did not receive Responsible Minerals Assurance Process (RMAP) certification. We assess whether our suppliers are trading with smelters that obtained RMAP certification on an annual basis.

Selection of High-Risk (Risk Management) Areas Hyundai has classified 10 African countries (Democratic Republic of the Congo, Rwanda, Burundi, Sudan, Angola, Uganda, Zambia, Central African Republic, Congo, Tanzania) and other conflict areas as Conflict Affected and High Risk Areas (CAHRAs). We continue to monitor suppliers' use of conflict minerals and cobalt that are illegally or unethically mined/distributed in these areas. We have also established a process for cases in which we inevitably source minerals from conflicted areas, we confirm that there is no issue through an internal review before use.

Investigating the Conflict Mineral Status of Suppliers and Checking Risks We investigated the status of suppliers that use tin, tantalum, tungsten, gold, and cobalt. For tier-1 suppliers and electric vehicle battery suppliers (43 suppliers), we received CMRT/EMRT materials from lower-level suppliers that supply parts that used conflict minerals and cobalt. We listened to difficulties experienced by suppliers that were having difficulty in creating CMRT/EMRT materials or whose materials were insufficient. We also explained on several occasions the need to actively respond to the conflict minerals management process and recommended all suppliers subject to investigation to submit materials.

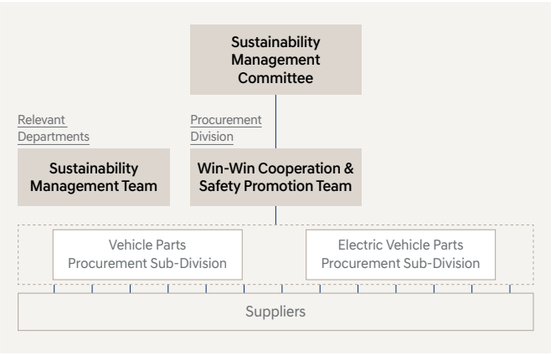
Based on the CMRT/EMRT data submitted by our suppliers, we conducted an analysis to determine if the suppliers were engaged in trade with RMAP-certified smelters. In cases where suppliers were not trading with certified smelters, we proactively requested that they implement a mineral purchasing policy that aligns with social responsibilities and to engage exclusively with certified smelters. We also approached tier-1 suppliers sourcing conflict minerals from uncertified smelters, requesting a comprehensive improvement plan outlining their mid to long-term intentions to transition to certified smelters. These measures included all suppliers in our conflict minerals management program, allowing us to fulfill our social responsibilities and address risks effectively.

Despite our efforts, we explore alternative procurement options and take decisive actions, such as suspending relationships with suppliers who show reluctance to improve their practices. These endeavors exemplify our commitment to responsible sourcing and minimizing the impact of conflict minerals in our supply chain.

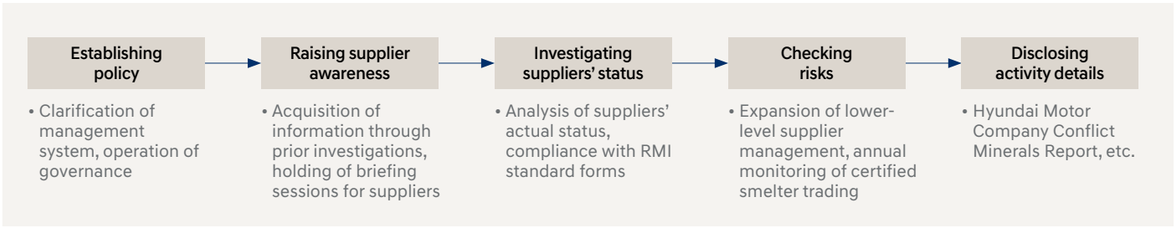
Disclosing Conflict Mineral Activity Details Hyundai established a conflict minerals management policy and disclose it through its website, while also issuing an annual Conflict Minerals Report. We are striving to create greater corporate value by communicating and identifying with all stakeholders, including customers, employees, and shareholders, and by continuing change and innovation. We will continue our efforts to strengthen communication by issuing reports in accordance with standards required by the international community.

Raising Supplier Awareness of Conflict Minerals Beginning with the establishment of criteria and finalization of a schedule to investigate the conflict mineral status of suppliers in March 2022, we identified in advance, whether items that are used for major electric model production use conflict minerals or cobalt. In addition, we held briefing sessions and provided training to tier-1 and tier-2 suppliers that use conflict minerals, electric vehicle battery suppliers, and Hyundai employees in charge of purchasing with regard to the background of conflict minerals management, conflict minerals regulation trends in major countries, Hyundai's conflict minerals management policy, CMRT/EMRT outline and investigation plan, and trading with RMAP-certified smelters as part of our activities aimed at raising overall awareness of conflict minerals management.

Conflict Minerals Management Governance



Conflict Minerals Management Process



Customer Experience Innovation

Hyundai is striving to achieve its quality philosophy of "producing defect-free vehicles without breakdowns" and develop new safety technologies that protect drivers, passengers, and pedestrians. To this end, we continue upgrading overall quality and safety systems not only by promoting preemptive quality and safety measures from the vehicle development stage but also by preventing any significant problems afterward through early detection, early improvement, and early after-sales actions. In particular, we are focused on building a sustainable safety management system by developing training programs, operating quality and safety reporting centers, analyzing safety information, and establishing safety test sites to strengthen our quality verification capabilities, which in turn will enable us to maximize customer satisfaction and build trust.

Status of Quality Management System (ISO 9001) Certification

No. of business sites subject to acquisition

14

Third-party certification rate

100%

Product Responsibility

PRODUCT QUALITY MANAGEMENT

Establishing Quality Management System Hyundai operates a quality management process for preemptive quality management of new car development, quality management of mass-produced vehicles, response to customer complaints, and quality assurance. We achieve systematic quality management by sharing quality risks, quality defects, and consumer complaints identified through our quality management system with all our business sites as well as our suppliers to produce improvement plans. Prior to mass production, the Pilot Center at the Namyang R&D Center measures and verifies quality, such as body strength and function, with a test vehicle, and we opened the Global Quality Control Center to inspect the quality of leading mass-produced vehicles from the customer's point of view.

Establishing an Integrated Quality Management System We have established a company-wide integrated quality management system to satisfy our customers' diverse quality and safety requirements, while each of our production sites operates their own quality management system to promote thorough quality management in all processes, including automobile design, parts development, process operation, pre-mass production, and mass production. Both domestic and overseas production sites have acquired ISO 9001 (quality management system) or automotive industry quality management system standard certification based on it. We convert and update certifications in line with the conversion of quality management system standards.

Quality Management Techniques Hyundai has introduced and applied quality management techniques to strengthen its market competitiveness on the basis of "defect-free quality". The techniques consist of "the best experts in each field (Man)"; "optimal equipment (Machine)"; "thorough verification (Measurement)"; and "commitment to defect-free quality (Moral)." Based on the merits, we provide customers with the highest quality vehicles in all areas, including R&D, production, sales, and services.

Quality Management Standards for Electrified Vehicles Hyundai has established quality management standards and criteria designed for each type of electrified vehicles, such as hybrid vehicles, EVs and FCEVs, in its efforts to actively respond to the global paradigm shift towards electrification. We manage our quality risks through continuous quality checks, case analysis, and improvement activities while continuously revising our quality management standards and criteria based on the data collected and analyzed.

Preemptive Management of Quality Risks From the early stage of new vehicle development, such as vehicle design, Hyundai conducts pre-verification of parts suppliers and inspects the quality of our own production processes to eliminate quality risks and related production process impediments in advance. Based on product drawings, we inspect the function, structure, reliability, and durability of parts. We issue the final approval through the inspection of supplier processes, self-inspection of production processes, etc. In addition to our own verification of test vehicles, the test-drive opinions of customers and professional quality organizations are utilized as guidelines to identify major issues and carry out improvement activities in parallel. Moreover, Hyundai holds quality inspection meetings on a regular basis, and reports the quality risk assessment results and taken measures to the highest level of management on the verge of new car models' mass production.

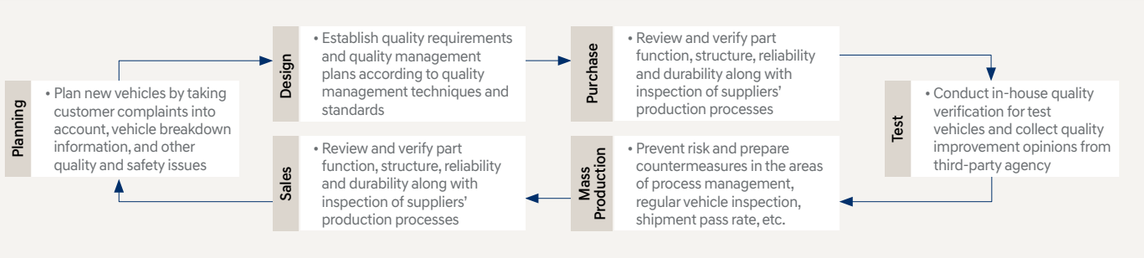
Prevention of Mass Production Quality Risks When a quality risk is detected from information acquired through statistical process control, periodic inspections, and shipment pass rates, we conduct joint investigations and take necessary countermeasures for quality improvement. Also, in order to prevent quality risks from occurring in the vehicle production process, we take thorough preventive measures, such as suppliers' process management, assessment of quality prevention activities, validation of quality inspection equipment, and reliability testing of parts. We have established a control tower devoted to the management of vehicle quality risks in the production process.

Prior Verification of Quality Risks with the Participation of Employees Hyundai runs an experiential program in which its employees experience its products and services from the customer's point of view, aimed at product perfection with higher standards while they feel rewarded and immerse themselves in their work. In 2022, our employees in a variety of sectors participated in the final quality inspection of new cars ahead of mass production as test drivers, for a total of six new models and full-change models (IONIQ 6, The all-new Grandeur, The all-new Kona ICE, G90, ELECTRIFIED GV70, and G70 SHOOTING BRAKE). They meticulously checked even the smallest details from the customer's point of view and strived to procure the highest level of quality.

Quality Mindset Campaign Through the Quality Mindset Campaign, Hyundai continues striving to internalize the quality-first mindset among its employees and build a quality culture throughout the entire process from vehicle development, production, sales and beyond. In order to minimize inconvenience through casual communication with customers, we conduct customers' quality diagnosis and employees' input; meetings between customers and employees; and on-site meetings between customers and production quality officers.

Strengthening Quality Verification Capabilities We enhance our verification capabilities throughout our quality value chain by regularly conducting training on roles and major tasks in the areas of pre-manufacturing quality, manufacturing quality, and market quality. Each course includes not only basic theoretical education but also practical and experience-oriented education if necessary. Furthermore, we offer expert courses on quality verification in collaboration with external educational institutions to verify new technologies following the transition to electrification and to strengthen the verification of quality issues from the customer's point of view.

Quality Management Process



2022 Quality & Safety Training Programs (Employees)

Quality related training	Target	Cycle	No. of trainees
Regular training (group training, e-learning, etc.)	All quality related organizations	Once a year	11,412
Continuous learning (videos, digital textbooks, etc.)		Constant basis	23,131
Quality-related certifications			82

Customer Experience Innovation

QUALITY ASSURANCE AND MANAGEMENT

Hyundai has expanded the scope of its quality assurance and management from quality control and vehicle development and production to include after-sales customer safety and protection.

Warranty for Free Repairs Hyundai applies the free repair warranty period in consideration of the average life cycle, durability, and sustainability of each type of vehicle, such as passenger cars, SUVs, and commercial vehicles (trucks and buses). In particular, we expand the sustainability of eco-friendly vehicles by extending the warranty period for engines and main power transmission parts applied to hybrids, EVs and FCEVs. Regarding older high-emitting models, we strive to minimize their air pollutant emissions with guarantees for catalyst devices, electric control devices, and other exhaust gas parts.

Voluntary Recall Hyundai voluntarily implements vehicle recalls to preemptively protect customers. When we identify a manufacturing defect likely to cause accidents through our constant monitoring of customer complaints, we determine a vehicle recall and inform our customers of the defect, corrective actions, and compensation such as free service. In addition, warranty provisions are set aside as a way to proactively manage our financial risks caused by recalls and quality assurance.

Blue Basic Inspection Hyundai provides its Bluemembers customers with a basic inspection service free of charge to enable them to maintain their vehicles in top condition (8 times in 8 years for passenger vehicles, 7 times in 3 years for commercial vehicles).

Emergency Roadside Service Hyundai offers emergency roadside services to help with on-site first aid, simple maintenance, and transportation to a designated maintenance shop in the event of vehicle breakdown. The services are provided free of charge within a warranty period of up to six years after a vehicle leaves the factory.

Warranty for Eco-friendly Car Engines and Power Transmission Parts

Classification	Model name	Warranty period
Hybrid	Grandeur, Sonata, IONIQ, AVANTE (Elantra), Tucson, KONA Hybrid, IONIQ Plug-in	10 years / 200,000 km
EV	KONA Electric, IONIQ Electric, IONIQ 5, IONIQ 6	10 years / 160,000 km

* Based on passenger vehicles and SUVs

Response to Quality VOCs Hyundai continues to promote business innovation based on voice of customers (VOCs) to establish a company-wide customer complaint response system. In addition, we operate the VOC Improvement Council participated by the Quality Division and R&D Center, and other related divisions, to diversify quality improvement agendas and respond to urgent VOCs in our efforts to focus on quality improvement based on customer opinions. We operate a variety of techniques and systems to connect, integrate, and analyze VOC data while passing on customer complaints to each service center for improvement measures. As an extension of our efforts to prioritize customer safety and satisfaction, we reflect and manage the quality index, which is linked to the number of claims that occur within three months of customer use after vehicle sales, as 5% of the CEO's KPI.

AI-based Quality Control Hyundai operates smart factories using AI and big data to create the best products. We collect and analyze external information as well as data from all our systems in the factory, such as product quality management, production facilities, and logistics. Then, we turn it into big data so that AI can operate the factories based on the information. We increase the accuracy and efficiency of our production processes by securing accurate data and eliminating unnecessary processes. We are accelerating the construction of a complete smart factory following the completion of the Hyundai Mobility Global Innovation Center in Singapore (HMGICS) in April 2023. HMGICS serves as a test bed to develop and verify intelligent manufacturing platforms that incorporate AI and the IoT while the data obtained by the center is used to build E-FOREST, a smart factory ecosystem.

Voluntary Recall Status

(Unit: 10,000 units, KRW million)

Classification	2019	2020	2021	2022
No. of recalled vehicles	196	623	272	389
Costs of recalls	78,000	305,200	1,442,300	320,900

Warranty Provisions

(Unit: KRW million)

Classification	2019	2020	2021	2022
Provision warranty balance at the beginning of the period	5,177,128	5,447,307	8,514,173	9,048,185
Warranty costs during the period	2,261,010	1,963,782	2,551,716	3,133,544

Scanning & Deep-Learning of Paint Inspection Sheets The scanning & deep-learning of paint inspection sheets developed by AIRS Company, an in-house organization dedicated to AI, has incorporated AI technology into the automotive paintwork inspection process. The technology builds big data by quickly extracting information written on the checklists (inspection time, vehicle model, type of abnormality, location of abnormality). This helps to improve quality by quickly identifying problems that frequently occur in the painting process or errors that repeatedly appear in certain vehicle models without human intervention. Going forward, we plan to expand the application of this technology to other production processes and factories, such as under-vehicle inspection and vision inspection of finished vehicles.

Automatic Wheel Alignment Adjustment Technology Hyundai is improving driving stability by incorporating AI technology into the wheel alignment adjustment process. Wheel alignment is the process of aligning the angles of the wheels of a vehicle. If it is not properly adjusted, the wheels will pull to one side or the steering will not be smooth, causing problems with normal driving. The automatic wheel alignment adjustment technology improves adjustment accuracy by utilizing deep learning in the process. AI learns past wheel alignment data and works with the predicted adjustment value. Through iterative learning, which is the process of passing data back to the computer, the technology can predict the optimal adjustment value even when given a new wheel angle.

Key Case of Quality VOC Response

In June 2022, following the proliferation of TikTok videos of Hyundai vehicle thefts in the U.S., victims filed a class action lawsuit in response to a series of thefts of older models without engine immobilizers. In response, we provided free software upgrades for anti-theft, subsidized the purchase of anti-theft devices to some vehicle owners who were unable to upgrade the software, and distribute over 65,000wheel locks. In addition, we plan to provide cash compensation for damages not covered by insurance, while providing a variety of insurance options in collaboration with American Automobile Association to customers who have difficulties purchasing and maintaining insurance. All vehicles sold by Hyundai Motor America comply with the laws and regulations required by the US authorities, with the subsidiary doing its best to ensure customer safety and compensate for damages based on our corporate philosophy of putting customers first.

VOC Filings in 2022

Classification	No. of cases	Ratio
1 Inquiry	1,731,538	93.2%
2 Complaint	107,119	5.8%
3 Suggestion	13,537	0.7%
4 Compliment	5,381	0.3%

2022 VOCs by Type

Type	No. of cases	Ratio
1 Service	495,996	26.7%
2 Sales	420,204	22.6%
3 Quality	385,991	20.8%
4 Membership	200,359	10.8%
5 Support	159,284	8.6%
6 Others	104,089	5.6%
7 Reservation	91,652	4.9%

Customer Experience Innovation

PRODUCT SAFETY TECHNOLOGY

Determination of Safety Specifications (Crash Test) In order to ensure optimal crash safety, Hyundai established a 40,000-square-meter Safety Test Building at its Namyang R&D Center in 2005 and has since conducted approximately 650 crash tests per year. The Crash Test Site with an area of 2,900 square meters can perform tests required to tow vehicles weighing up to 5 tons at speeds of up to 100 kilometers per hour. In addition to achieving the highest level of passenger safety, the site is equipped with various test environments to respond to major crash safety assessments around the world. More than 500 collision analysis processes are performed to determine the safety specifications of a test vehicle while upwards of 100 tests are carried out until the vehicle is mass-produced. We conduct vehicle-to-vehicle crash tests and vehicle-to-structure crash tests in parallel. We also conduct crash tests that simulate a variety of accident situations, such as collisions on ramps, collisions with pedestrians, and collisions in diagonal directions.

After the crash test, we systematically verify the safety of the vehicle. The verification process is divided into the verification process immediately after the collision and the analysis process after the crash test. First, immediately after a collision, we focus on the speed of the vehicle and the area of impact to ensure that the vehicle meets the safety performance requirements. Subsequent analytical verification measures collision more accurately. Sensors applied to the dummy are used to calculate injury measurement data and measure the degree of body deformation to analyze overall vehicle safety. If an item is found that fails to meet the target requirements, the data is analyzed to identify the cause and an improvement plan is established accordingly. Depending on the collision part, close consultations are carried out with the relevant divisions while verification is repeated until the actual vehicle reflecting the improved specifications meets the final safety standards.

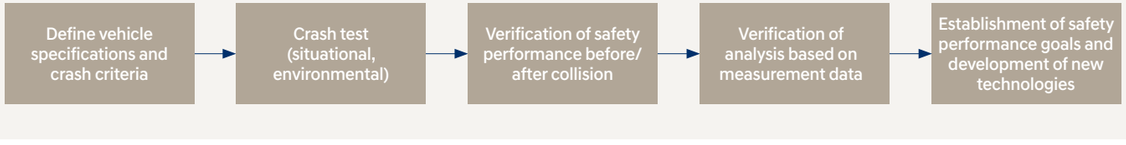
Collision Preparedness (Structural and Construction Methods) Hyundai enhances safety against collisions with a body structure that is divided into an annular structure and a sequential structure as well as a rigid body completed with the hot stamping method. The annular structure connects the horizontal and vertical parts of the body like a loop and weaves them like a skein of thread, allowing the vehicle to have solid rigidity and reduced weight.

The sequential structure allows the car body to sequentially absorb the energy of a high-speed car colliding with another object. In the event of a head-on collision, the side member is first distorted to absorb energy, then the impact is transmitted to the fender apron, and at the same time, it is also transmitted to the top of the A-pillar to distribute the rest of the energy evenly. Furthermore, to ensure the even distribution of impact energy during side-impact collisions, bulkheads (partitions) are installed in areas where the impact is most likely to occur.

The hot stamping method technology increases the rigidity of the car body while reducing development costs. The material heated at a high temperature is pressed and cooled rapidly at the same time to ensure that the car body is quenched firmly. The body becomes 3-5 times stronger than before processing, so the passenger compartment is safely protected in the event of a collision.

Collision Shock Dispersion (3rd-Generation Platform) Hyundai's third-generation platform is designed to minimize the final energy received by passengers by efficiently dispersing collision energy in the engine compartment. We have developed a multi-skeleton engine compartment to minimize the impact transmitted to passengers in frontal and small-overlap collision situations and to reduce the impact energy to the other vehicle. We have increased the initial collision energy absorption rate by newly applying a "#"-shaped subframe to the front wide crash box and have ensured that not only the side members that support both sides of the engine room, but also the subframe and fender apron are organically woven together to allow the impact energy to be absorbed or dispersed in multiple paths. Furthermore, we have increased the dispersion effect by widening the subframe and strengthening the connection between the side members and the surrounding skeletal members. In particular, the additional application of the slide away behavior technology, which moves the wheels slightly outside the body in the event of a small overlap collision, has further reduced the possibility of occupant injury. It can significantly reduce secondary accidents as it maintains the driving direction while minimizing the impact energy transmitted to passengers.

Crash Test Procedures



Prevention of Accidents

Multi-Collision Brake Hyundai uses a multi-collision braking (MCB) system to prevent secondary accidents. When a vehicle airbag deploys as a result of an initial crash, the system activates the appropriate braking function in the vehicle to mitigate multiple collisions. All of this is done in a fraction of the time, thanks to a third-generation CAN network with speeds of up to 200 MB per second. While the purpose of traditional safety technologies was to avoid or prevent accidents, the MCB plays an expanded role in determining the aftermath of an accident and protecting not only the occupants but also the surroundings of the accident vehicle.

Advanced Driver Assistance System Equipped with advanced driver assistance systems (ADAS), Hyundai analyzes risk factors and prevents accidents in advance. ADAS accurately recognizes objects and movements around the vehicle using a front camera mounted on the windshield, front and rear radars. It warns the driver or controls the vehicle when a collision risk is detected. ADAS has advanced to the level where vehicles drive at a distance from the vehicles in front of them in their own lane while the camera recognizes traffic signs and slows down to meet the prescribed speed.

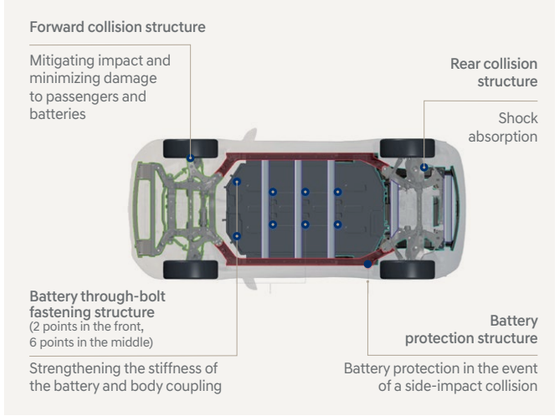
Key Features of ADAS

Forward Collision-Avoidance Assist (FCA)	Warns and automatically assists with braking when a risk of collision is detected, such as when the preceding vehicle rapidly decelerates or a stopped vehicle or pedestrian appears in front
Lane Keeping Assist (LKA)	Warns and automatically assists steering if the driver leaves the lane without operating the turn signal switch while driving above a certain speed
Blind-Spot Collision-Avoidance Assist (BCA)	Gives an alert when there is a risk of collision with a vehicle behind while driving, and automatically assists with braking when there is a risk of collision with a vehicle nearby while reversing out of a parking space

Safety Features for the EV-dedicated Platform "E-GMP", Hyundai's EV-dedicated platform, features Hyundai's commitment to passenger safety. The platform uses the battery pack as a structure increasing body rigidity while aluminum extrusions applied inside the side sills distribute impact in the event of a side collision to ensure safety. In addition, the rear member is deliberately deformed to absorb shocks in order to prevent accidents caused by battery damage in a rear-end collision, and at the same time, the lower member is reinforced with hot-stamped steel plates to prevent deformation of the safety zone. A lattice-structured battery case and a protective lower cover are also added to perfectly cope with any collision energy that may occur in driving situations.

Redundancy System As driver intervention is being reduced according to the development of autonomous driving technology, it is essential to secure precise safety technology in preparation for emergency situations. Hyundai has developed an autonomous driving redundancy system that ensures the safety of passengers by safely driving and stopping the vehicle when a system failure is detected during autonomous driving. Redundancy refers to a dual configuration of steering, braking, power, and communication. When a function does not work properly, the redundancy system helps the vehicle to run safely by replacing it with an assistive device. We plan to speed up the development of level 4 autonomous driving element technologies, including redundancy systems, with the goal of internalizing autonomous driving technology by 2025.

E-GMP Safety Features



Customer Experience Innovation

Driver Protection Devices that protect drivers and passengers in the event of an accident are just as important as multi-collision prevention automatic braking, advanced driver assistance, and autonomous driving redundancy systems that prevent accidents while driving. Hyundai ensures the safety of drivers and passengers by researching and developing devices that strengthen/utilize vehicle platform functions, apply collision prevention/mitigation technology, and reduce the rate of injury in the event of an accident. To help drivers make safe driving a habit, we run various programs such as the Safe Driving Habit Guide Broadcast, School Bus Safe Driving Campaign, and Connected Car Safe Driving Insurance Discount.

Pedestrian Protection The active hood system unveiled by Hyundai uses a hood multi-cone structure that allows the vehicle to detect a collision with a pedestrian and lift the bonnet to protect the pedestrian. When a pedestrian collides with a vehicle, the actuator under the bonnet moves, raising the bonnet by about 6 cm. The shock-absorbing space between the bonnet and the engine compartment can significantly reduce the risk of injury to the pedestrian's head. Preventing a pedestrian's head injury is a critical factor influencing a pedestrian's survival. In addition, the lower leg form and lower stiffener features increase safety by minimizing the bending of the pedestrian's knees in the event of a collision while preventing the pedestrian from entering under the vehicle after the collision, preventing the first impact followed by the second impact. They lower the possibility of a secondary accident in which, in a collision with a vehicle, the pedestrian will fall into the road in the direction the vehicle was traveling and be hit again by the vehicle.

VEHICLE SAFETY ASSESSMENT

Crash Safety Assessment Hyundai responds to more complex types of accidents by utilizing actual accident data disclosed by the NHTSA (National Highway Traffic Safety Administration) and GIDAS (German In Depth Accident Study), and a variety of information provided by the company's after-sales service network and quality divisions in our research, which is reflected in the product development process. As a result of these studies, in 2019, we developed the world's first "multi-collision airbag" to prevent secondary accidents. In addition, we have 170 sets of 27 types of manikins (dummies) that take over the role of occupants in real vehicle crash tests. This is the largest in the industry, enabling us to precisely measure even minute injuries in a variety of collision situations, contributing greatly to improving passenger safety performance. For your reference, when Hyundai develops a new vehicle model, it invests an average of 4,000 hours in evaluation and testing and KRW 10 billion in costs to ensure the highest level of crash safety.

2022 National Camp Accreditation Program In 2022, IONIQ 6, Hyundai's dedicated EV model, and Genesis GV70 proved their excellent safety by obtaining the highest safety rating of 5 stars from Euro European New Car Assessment Program (NCAP), Europe's leading vehicle safety assessment agency. Euro NCAP evaluates four main categories: adult occupant safety, child occupant safety, pedestrian collision safety, and safety assistance systems. Both the IONIQ 6 and GV70 received high marks for adult occupant safety and safety assistance systems, demonstrating their superior occupant protection features.

Winners of the 2022 NACP

Region	Ratio[1)]	5-star (top rating)
Korea	100%	IONIQ 6, GV70
Europe	100%	IONIQ 6, GV70
U.S.	69.2%	18 models including Kona, Santa Fe, Elantra, Sonata, Tucson, Palisade, IONIQ 5, G80, GV80

[1)] Ratio: The number of vehicle models rated by the NCAP with a 5-star (top rating) divided by the total number of vehicle models rated by the Program

Main Functions of the Occupant Protection Airbag

Multi-collision Airbag	Hyundai's world-first multi-collision airbag precisely calculates a variety of conditions such as the occupants' unstable posture and speed when the impact is so weak that the airbag does not deploy in the first collision. In subsequent collisions, the reference impact strength is lowered or the timing of activation is adjusted to make the airbag easier and faster to operate.
Center Side Airbag	The center side airbag is mainly deployed between the driver and the passenger in the event of a side-impact collision to prevent the passenger from crossing to the other side, thereby preventing collisions between people as well as collisions with interior materials. Hyundai has applied the "thermal compression folding" method to achieve the world's smallest and lightest form while maintaining safety and obtained domestic and international patents for the related technology.
Hug Airbag	Developed by Hyundai to compensate for the limitations of fixed airbags for self-driving cars, the Hug airbag consists of three chambers that perform their respective roles. As if they were one body, the six chambers on the left and right protect the occupants. Going forward, we plan to refine the technology so that it can be applied to autonomous vehicles in the 4-5 stage.

Crash test site of Hyundai Motor Group (Safety Test Building at Namyang R&D Center)

Scale

Test building 40,000 m²

Collision test site 2,900 m²

No. of crash tests

About 650 times per year

Performance

Maximum speed 100 km/h

Maximum weight 5 tons

Customer Experience Innovation

Maximizing Customer Satisfaction

SERVICES BOOSTING CUSTOMER SATISFACTION

Customer Service Standard Guide Hyundai produces and distributes the "Customer Service Standard Guide" based on customer experience in the process of purchasing and maintaining vehicles. This guide distinctly presents the direction of individual customer service and focuses on the key response elements for each customer contact point so that customers can receive uniform and excellent service. In addition, overseas regional headquarters and sales subsidiaries have established customer service strategic directions to carry out customer response activities that comprehensively consider the market characteristics and customer expectations of each region.

Reinforcing Customer Service Capabilities Hyundai sets in place a "service convergence education system" to strengthen the CS capabilities of its employees in customer contact channels such as vehicle sales and service. In the ICT-based CS learning environment, our employees receive training related to customer service skills along with knowledge of vehicles. Most notably, Hyundai's Domestic Business Division improves the company's customer service capabilities by disseminating specific and practical customer service solutions called "CS Way" to the business sites.

Moreover, we introduce service trends and ways to improve Bluehands CS to those representatives who operate Hyundai's official service suppliers "Bluehands" while sharing best practices in customer service and customized service plans according to various situations as part of training to improve customer service capabilities.

H-Ear – Customer Communication Channel Hyundai operates "H-ear" (https://hear.hyundai.com), an open customer communication channel, to listen to customer opinions and suggestions online and develop products and services jointly with customers. Those who sign up for the H-ear website can freely write and discuss ideas and suggestions for various fields such as customer service, maintenance services, sales channels, markets and trends, as well as opinions on vehicle marketability, new technology, and eco-friendliness. Hyundai actively listens to customer opinions from the development stage of vehicles and services as part of its efforts to design the future together with customers through honest communication.

Bluelink – Connected Car Service Hyundai provides "Bluelink," connected car services that enable vehicle control and vehicle management based on the in-vehicle infotainment system and smart applications by converging information and communications technology (ICT) with vehicles. Customers who subscribe to Bluelink can access services such as remote control, safety and security, vehicle management, route search, and simple payment.

My Hyundai – Mobile Service We offer our customers an integrated customer service app, "my Hyundai," which conveniently provides all the services we provide, from Hyundai Motor membership to vehicle management and life of the car. When customers access the "my Hyundai" app, they can view the same model and color as their vehicle on the home screen, and can also view vehicle contract information, breakdown information, and related recall information. In addition, it is equipped with simple reservation and payment, use of Blue Members points, various coupon benefits, and non-face-to-face service functions, through which customers can use door-to-door car wash, hand wash, chauffeur service, vehicle transfer (consignment), and EV pick-up and charging services.

CS Training Programs in 2022

Educational Programs	No. of Attendees / Target
H-Map (service skills for visiting customers)	330
A stroke of genius (overcoming objections)	89
Skill of articulation	121
CS master (CS philosophy, responding to dissatisfied customers)	169
First meet with commercial vehicle customers	8
Customer service standards	35
On-site coaching by customer experience champion	85
Master's explanation skills	141
Hole-in-one approach to handling of customer dissatisfaction	44
CS Way	58
Service skills for dissatisfied customers	58
Business manners	58
One-line Counseling Center	All employees in sales and service divisions
CS Way	

Major Services Related to Connected Car

Remote Control	• Remotely controls air conditioning, charging, locking the vehicle, checking parking location, transmitting destinations, home-to-car and car-to-home services, voice recognition to adjust various devices and functions in the vehicle, among others.
Safety & Security	• Emergency rescue and accident handling support in the event of an airbag deployment accident, SOS emergency dispatch, theft tracking, burglar alarm notification, driver attention notification, rear passenger notification, among others.
Vehicle Management	• A/S linkage measures according to the vehicle diagnosis results, navigation software wireless update, automatic notification of battery discharge, driving habit analysis results and safety score guidance, among others.
Directions	• Fast and accurate directions using traffic condition and forecast information, real-time traffic situation information, search for destinations through portal sites, sharing the current location of the vehicle, among others.
Music Streaming	• Streaming service of music content platforms
Digital Key 2	• Door locking/unlocking, starting the vehicle using a smartphone and an NFC card key or a smartphone with UWB function

"Genesis Space" providing unique differentiated experience for the luxury brand

The "Genesis Space" provides a unique customer experience with the Genesis brand philosophy. It features a design where customers can experience the unique elegance and sensibility of Genesis. "Genesis House New York", unveiled in 2021, is a complex brand base that includes not only a car showroom, but also a restaurant, a library, a concert hall, and a terrace garden, with an aim to be a "cultural oasis" that satisfies the need for daily relaxation and artistic inspiration. Visitors can experience a variety of vehicles, including the entire Genesis lineup and concept cars that embody the future brand vision. The Genesis Space extents the Genesis brand spirit to customers while providing a differentiated experience unique to Genesis with superior customer service.

Genesis House New York

Bluelink Fleet

Hyundai's customers who own commercial vehicles (trucks and buses) can use connected services such as vehicle control, breakdown notification SMS, and maintenance requests through the specialized control system "Bluelink Fleet". By harnessing the driving analysis data of a vehicle, along with real-time monitoring of vehicle control parameters such as speed, battery status, and voltage, it enables to enhance both safe driving practices and optimize vehicle operation efficiency. In particular, green house gas (GHG) emissions from vehicle operation are measured in real time while GHG emissions reduced when operating eco-friendly vehicles are provided as tree planting results. If the vehicle operating customer is a company subject to carbon credit allocation or is participating in an external reduction project, the estimated revenue and cost are also provided by comparing the GHG reduction estimate with the target value.

Customer Experience Innovation

Building Service Bases Hyundai does its utmost to ensure that customers can enjoy the best "CAR-LIFE" anytime, anywhere through a service base that instills trust and confidence in its customers. We have strengthened our after-sales service accessibility by establishing 1,200 Bluehands, official service suppliers nationwide, in addition to the numerous directly-run high-tech service centers. Furthermore, for the ever-increasing number of EV owners, we have expanded the number of "Bluehands" dedicated to EVs to approximately 500 while increasing the number of those dedicated to FCEVs to over 70.

Service Brands

Bluehands	• **Hyundai's official service suppliers** - This network of Hyundai's official service suppliers is dedicated to improving the environment for the safety and convenience of customers, as well as providing services closest to customers.
Bluemembers	• **Services for Hyundai vehicle owners** - Launched in 2007, these services for Hyundai vehicle owners provide various members-specific programs as well as vehicle management services to support customers' fun and convenient CAR-LIFE.
Bluelink	• **Hyundai Connected Car Service** - Hyundai's connected car service taps into the latest IT and communication technology to provide remote control, safety security, vehicle management, and navigation services.

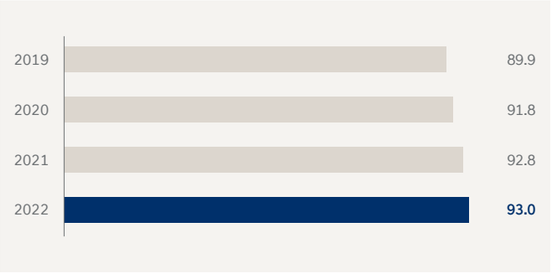
Major Services

Visiting Before Service	• Visit a location designated by a customer and provides vehicle maintenance and advice and assistance
Emergency Charging Service	• Provide 7 kWh worth of free EV charging for stranded drivers, enough for 22-44 km of driving
Home-to-Home Service	• Pick up vehicles where and when designated by customers and deliver them after repairs are made
Car Rental Service	• Provide car rental service for customer convenience when repairs are needed during the warranty period

External Customer Satisfaction Evaluation On the back of its efforts to provide products and services that satisfy its customers, Hyundai has achieved outstanding results in the National Customer Satisfaction Index (NCSI), Korea Customer Satisfaction Index (KCSI), Korean Standard Quality Satisfaction Index (KS-QEI), and Korean-Standard Service Quality Index (KS-SQI), among others.

Customer Satisfaction in the Passenger Vehicle Category (Korea Customer Satisfaction Index)

(Unit: Points)



Differentiation of Customized Services Based on the CS philosophy of "Connecting People with Quality Time," Hyundai provides customized services for each customer. We provide optimized, customized services by digitizing the after-sales service required for vehicle maintenance. In addition to customized services for customers in overseas regional headquarters and sales subsidiaries, we also provide services for each vehicle model, such as vehicle management, charging, and battery repair optimization for customers who purchase Hyundai EVs. Hyundai will do its best to enhance customer satisfaction by providing tailored services during all stages following vehicle purchase.

Special Services for Genesis Car Owners

Genesis Visiting Auto Care Service	• Visit any location that customers desire and provide a replacement service for engine oil and other consumables
Genesis Airport Service	• Provide Genesis customers using Gimpo International Airport with free car valet services, consumables replacement services while traveling
Genesis Home-to-Home Service	• A home-to-home service, free of charge, as part of Genesis Mobility Care service

IMPROVING THE QUALITY OF TECHNICAL AND MAINTENANCE SERVICES

Strengthening Engineers' Technical and Maintenance Capabilities Hyundai strives to improve the quality of technical and maintenance services provided by its directly managed service centers and "Bluehands" engineers. We train the best engineers who can comprehensively deal with problems that may occur in vehicles, in addition to training engineers to enhance their basic competencies in maintenance. We also continue to upgrade maintenance manuals and vehicle manuals according to technology development and new vehicle launches while running workshops to share relevant knowledge.

Hyundai Master Certification Program (HMCP) Since 2012, Hyundai has been running "HMCP (Hyundai Master Certification Program)," an independent technology certification system, to offer maintenance services of top-notch quality through the cultivation of exceptional engineers. Technical certification consists of four levels according to engineer competency – Level 1-2 (Technician), Level 3 (Master), and Level 4 (Grand Master). In 2022, a total of 26 people obtained Level 4 (Grand Master) following the evaluation of expertise in a total of seven categories, including EVs, FCEVs, engines, vehicle networks, and advanced driver assistance systems, during the practical test.

Excessive Maintenance Prevention Program In 2012, Hyundai launched an excessive maintenance prevention program to provide responsible maintenance services. If any suspicious repairs or excessive maintenance activities are detected during the maintenance process, we offer compensation up to tenfold based on the findings of an investigation conducted by an external insurance company. We strive to prevent recurrence by imposing penalties on excessive maintenance suppliers, thereby striving to provide our customers a sense of security about our transparent customer service.

Training Support for Bluehands Maintenance Personnel Hyundai nurtures outstanding engineers through mutual exchange of information and human and material resources necessary for maintenance education with various specialized institutions such as the Ministry of Employment and Labor, universities, and vocational schools while hiring highly qualified engineers who have completed professional training. In addition, we have signed an MOU with the Ministry of Employment and Labor to train eco-friendly vehicle maintenance personnel and are working hard to cultivate excellent talent.

Hyundai Master Certification Program Electrified (HMCPe) Hyundai operates the Hyundai Master Certification Program Electrified (HMCPe), a technology certification program, to nurture maintenance personnel specializing in vehicle electrification. Bluehands engineers complete courses such as electrification basics, electrification customer response skill-up, and diagnostic convocation training according to their competencies. The e-Technician certification is given to engineers who understand the electrification function and the overall system and can respond to customers smoothly whereas the e-Master certification is given to engineers who understand the entire field of electrification and are capable of independent diagnosis, high-level repairs, and high-tech work.

Maintenance Manuals and Vehicle Manuals Hyundai offers online access to vehicle maintenance information. We provide maintenance manuals and electronic circuit diagrams to customers who purchase vehicles, directly-managed service centers, and Bluehands engineers through our domestic technical information website (gsw.Hyundai.com). After a simple membership registration, customers can access information necessary for vehicle maintenance and search for necessary (genuine) parts, which has helped improve the convenience of self-maintenance.

Directions for Improving the Quality of Technical and Maintenance Services

Customer Experience Innovation

Sustainable Brand

BRAND MANAGEMENT

Brand Management System Hyundai's brand management system (BMS) supports the effective operation of its Brand Strategy System, Brand Architecture, and Brand Image Guidelines. The Brand Strategy System guides the company-wide direction for consistent external communication. The "Brand Architecture" defines the brand and trademark system (usage method, etc.) of vehicles, technologies, and services. We suggest how to visually implement the brand in detail by developing and distributing the Brand Image Guidelines as a manual.

Brand Tracking Study We conduct a Brand Tracking Study (BTS) to check customers' brand awareness, purchase intention, satisfaction, etc. based on price, performance, quality, and eco-friendliness for each brand. Most notably, in terms of brand preference, we examine not only the reliability, competitiveness, service, and affordability of our brands, but also their eco-friendliness, social responsibility, and authenticity factors. Additionally, we identify the market competitiveness of our brands by evaluating the market value of our brand vehicles to our customers. The results of the brand tracking study are used as basic data for establishing a brand strategy for each sales region. We also reflect them in the marketing process, such as deriving customer communication messages.

Tracking Study of Eco-friendly Brand Hyundai conducts surveys on customer purchase intentions, awareness, preference, and attribute information (innovativeness, convenience, eco-friendliness, etc.) for eco-friendly vehicle (HEV, PHEV, EV) brands (IONIQ, Nexo). In addition, we conduct global brand monitoring through which we inspect the application and utilization of brands and trademark images on a regular basis, which enables us to manage whether brand strategies, systems, and guidelines are being applied correctly in the field. We also operate an in-house portal "Brand Home" and a help desk "Brand Desk" to conduct brand quality management activities such as reviewing the use of brands in promotional materials produced by each business division and support division. Hyundai aims to continually enhance its brand management system, with a focus on enhancing the value of its corporate brands and products, and implementing systematic management practices.

Analysis of Brand Tracking Study Results Through a brand tracking study, we identify reasons why customers do not prefer our brands, the reasons for dissatisfaction at each stage of the customer experience, and negative experiences in online and offline channels. Based on the results, we identify and redefine the attributes that a brand should have to improve customer perception while seeking ways to manage content and improve sales channel operation in an effort to innovate customer experience.

BRAND ENHANCEMENT ACTIVITIES

Sustainability-based Brand Campaign Hyundai conducts marketing activities to enhance its brand value in line with its determination to transform itself into a smart mobility solution company. Additionally, we are strengthening the efficiency of our sales network with a focus on high-quality dealers while promoting various CSV activities to overcome problems such as environmental pollution and climate change that mankind is experiencing. Following the implementation of sustainability-focused initiatives to enhance our brand image, with an emphasis on eco-friendliness and public benefits, we assess the impact of these activities on key business metrics, including vehicle sales growth, customer satisfaction improvement, and enhanced corporate value.

"for Tomorrow" Global Project "for Tomorrow" is a global sustainability campaign powered by Hyundai and the United Nations Development Program (UNDP). Launched in 2020, the "for Tomorrow" campaign aims to increase the world's capacity to accelerate the achievement of the 2030 Sustainable Development Goals agreed upon by the United Nations. To commemorate the second anniversary of the "for Tomorrow" platform in 2022, we joined forces with local teams from many countries including Vietnam, Sierra Leone, Peru, India, the U.S. Together, we created a documentary with an inspiring story on grassroots innovation to combat the sustainability challenges we all face, and presented it at the Lincoln Center's Walter Reade Theater in New York, in celebration of the 77th United Nations General Assembly.

HMG Driving Experience Program Hyundai is operating the "HMG Driving Experience" program to give customers first-hand experience of various brands of Hyundai Motor Group, including Kia and Genesis. Opened in 2022, the "HMG Driving Experience Center" is the largest driving experience center in Korea and has eight experience courses including a braking course, a high-speed main circuit, an off-road, a round-turning course, and a kick plate course. Starting from the 2023 season, we plan to expand opportunities to experience Hyundai Motor Group's EVs by adding IONIQ 6 and EV6 GT vehicles to the EV Experience Program.

N Brand's Electrification Vision Since its launch as a high-performance sub-brand of Hyundai Motor Company, the N brand has consistently pursued pure driving pleasure from the customer's perspective. Hyundai has established a vision to reflect the three core elements of N vehicles (cornering maneuvers, everyday sports cars, and racetrack driving ability) that can maximize the fun of driving pursued by the N brand in the EV era. In 2023, the N brand plans to launch its first electric high-performance car, the IONIQ 5 N. Starting with the launch, it will continue to conduct research and development aiming to realize high-performance sensibilities in a hydrogen society beyond the electrification era.

Brand Tracking Study Items

Price	• Customer acceptance of Hyundai vehicle prices compared to competitors' (based on a price perception survey)
Performance	• Score analysis of warranty level, after-sales service quality, reliability, etc. (based on the market average of 100 points)
Quality	• Score analysis of warranty level, after-sales service quality, reliability, etc. (based on the market average of 100 points)
Brand	• Score analysis of brand reputation, authenticity, tradition, awareness, etc. (based on the market average of 100 points)
Sustainability	• Score analysis of eco-friendliness, social responsibility, mobility vision, innovativeness, prospects, etc. (based on the market average of 100 points) • Separate analysis of the impact of eco-friendly vehicle models on aided awareness, brand perception, etc.

"for Tomorrow" campaign

N Vision 74– high-performance hydrogen fuel cell-hybrid "Rolling Lab"

Customer Experience Innovation

HYDROGEN CAMPAIGN

"H_2U" Campaign for a Hydrogen Society Hyundai is running the "H_2U (Hydrogen to You) Campaign" mainly in Europe to promote the value of FCEVs and hydrogen energy, and to emphasize the urgency of transitioning to a hydrogen society and the importance of creating a hydrogen ecosystem. Influencers from various fields such as science YouTuber and researcher Jacob Beautemps, German fashion model Toni Dreher-Adenuga, future mobility journalist Don Dahlmann and Mobile Geeks co-founder Nicole Scott are at the forefront of promoting the infinite value of hydrogen through the H_2U campaign.

"Dear My Hero" – Hydrogen Cleaning Truck "Dear My Hero" is an integral component of the Big Idea Campaign by Hyundai Motor Group, dedicated to advancing new technologies that seek to revolutionize the challenging working conditions faced by sanitation workers, promoting a safer and healthier environment for them. A hydrogen cleaning truck is an eco-friendly vehicle that runs on electricity by combining hydrogen and oxygen. It produces less noise and vibration than conventional internal combustion engine cleaning trucks while emitting less heat and dust. Hyundai will continue to strive to contribute to creating a more comfortable and safe life through hydrogen, an eco-friendly energy.

Hydrogen Commercial Vehicle Unveiled at "H2 MEET 2022" At the "H2 Meet 2022", Kores's premier hydrogen industry exhibition held in August 2022, Hyundai showcased hydrogen energy solutions designed for universal applicability, emphasizing their potential to benefit "Everyone, Everything, Everywhere". Moreover, we unveiled a cutting-edge hydrogen commercial vehicle that showcased the company's advancements in hydrogen-based future technologies. To showcase Hyundai's technology for hydrogen-powered commercial vehicles, we exhibited hydrogen fuel cell buses, police buses, cleaning trucks, sprinkler trucks, and multicopter drones. In addition, we introduced our hydrogen fuel cell-based M. Vision Tug vehicles, and hydrogen-based carbon-neutral steelmaking process. We also spared no effort to discover new sources of demand for hydrogen-based mobility with governments, and domestic and foreign hydrogen industry-related organizations.

H_2U (Hydrogen to You) Campaign

Dear My Hero Campaign

Hyundai's hydrogen-powered commercial vehicles unveiled at the H2 MEET 2022

ETHICAL MARKETING

Advertising & Marketing Ethics Declaration Hyundai announced its "Advertising & Marketing Ethics Declaration" to induce customers to make the right decision to purchase products and services and to create a healthy advertising and marketing environment. Accordingly, Hyundai prohibits misrepresentation or omission of product/service information, exaggeration or reduction of product and service utility, unfair comparison of competitors or products, deceiving consumers, and advertising and marketing activities that do not protect the information vulnerable. We also encourage outsourcing companies that are entrusted with advertising and marketing by Hyundai to respect the Declaration.

Hyundai Motor Company Advertising & Marketing Ethics Declaration

Labeling of Product Environment and Safety Information Hyundai transparently discloses not only environment-related information, such as GHG emissions and the amount of water used during the entire vehicle manufacturing process, but also safety-related information such as seat belts, occupant detection systems, and car seat attachment devices. We strictly prohibit the dissemination of false, exaggerated, or understated information on the environmental and social impacts of our products and services while striving to ensure the right to know of our customers by labeling relevant information.

Product Information Labeling in Major Markets

Korea	Product	ID labeling (type and model of car, vehicle identification number, vehicle weight, year of production, tire, etc.)
	Environment	Fuel efficiency labeling, exhaust gas warning labeling
	Safety	Airbag warning labeling, etc.
China	Product	ID labeling, vehicle identification number (W/screen), anti-theft warning labeling
	Environment	Fuel efficiency labeling
	Safety	CCC labeling, child restraint system (CRS) warning airbag labeling
Europe	Product	ID labeling, E-marks certifying various items (lights, safety belts, horn, mirrors, window glass, etc.)
	Environment	Diesel engine labeling, battery recycling labeling, fuel labeling, refrigerant labeling
	Safety	Airbag warning labeling, Airbag warning labeling, ISOFIX CRS anchor labeling
North America	Product	Manufacturer's suggested retail price (MSRP) labeling
	Environment	VECI labeling (certified exhaust emissions data), refrigerant labeling
	Safety	Tire pressure information labeling, safety certification labeling, airbag warning labeling

Creating Shared Value

Hyundai aims to expand its positive social impact and build a sustainable corporate ecosystem by creating shared value (CSV). To this end, we launched the "Hyundai Continue" initiative which represents our commitment to a sustainable future. We will grow together with local communities by creating social value and solving social problems in connection with mobility business. We will also continue our efforts to promote harmonious coexistence with the planet, provide freedom in mobility and connections, and deliver hope for future generations. Moving forward, Hyundai will strive to create a virtuous cycle of connection by thinking and working together with various global partners as well as our employees, customers, and local communities.

CSV Strategy System

CSV Initiative

CSV IMPLEMENTATION SYSTEM

Implementation of CSV Strategy In 2022, Hyundai unveiled "Hyundai Continue", a global CSV initiative for sustainable management focused on three main areas – earth, mobility, and hope – based on which various activities are being carried out as part of this initiative at business sites in Korea and overseas.

Creating Shared Value

Earth

CSV Activities

Marine Waste Collection and Upcycling

Hyundai has been carrying out upcycling projects such as collecting marine wastes and recycling them to make textile products since 2021, aimed at preserving marine ecosystems in Europe, Africa, and Korea. Together with our cooperative partner, Healthy Seas, we are working to restore the marine ecosystem by collecting lost fishing nets, one of the many kinds of waste that threaten the marine ecosystem. The collected ghost nets are regenerated into a nylon fiber called ECONYL® by the textile producer Aquafil. ECONYL® is used as a floor mat material for IONIQ 5 and IONIQ 6 vehicles sold in Europe, as well as in the production of various other products such as socks, swimwear, sportswear, and carpets. Leveraging our experiences and know-how in launching and operating these projects, we will continue to expand eco-friendly activities and take the lead in building a global circular economy.

2022 Key Achievements Since 2021, we have collected more than 100 tons of waste in eight European countries as well as Korea over some 20 occasions. We have also worked with major broadcasters such as the Discovery Channel to produce documentaries about the subject.

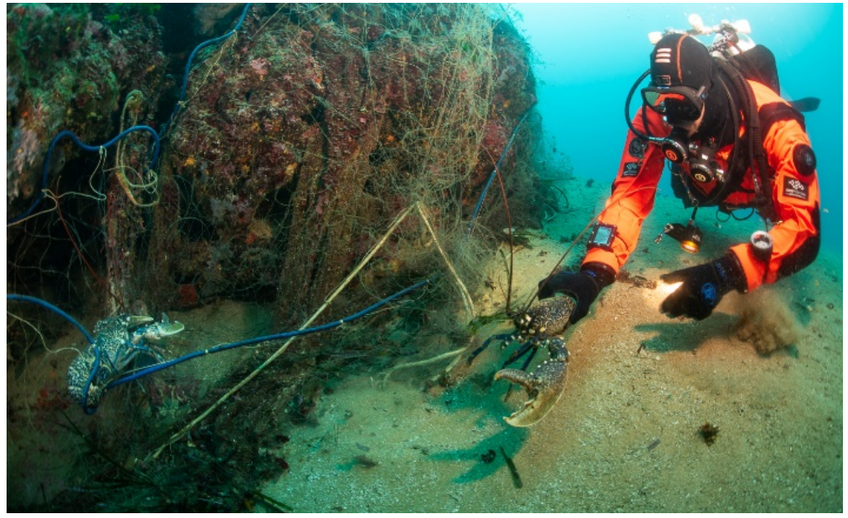
Future Plans Together with the HMG Materials Research & Engineering Center, we plan to expand the application of materials recycled from marine waste. To minimize carbon emissions, we will strengthen our prior search of suitable areas for collection activities while considering introducing drones and electric boats for our collection activities.

Waste Plastic Collection and Upcycling

Hyundai has been carrying out waste plastic collection and upcycling projects in Indonesia since August 2022, with the goal of addressing environmental problems in the nation which produces tones of plastic waste every. In partnership with Save the Children and Plasticpay, we have offered environmental education and installed collection bins at 10 middle and high schools in Jakarta, Indonesia, as well as two RPTRAs which are child-friendly integrated public spaces. We also plan to produce and provide upcycling goods using the collected waste plastic. In addition, we have been operating a waste recycling center in Bekasi, Indonesia since October 2022. In this way, Hyundai is helping Indonesian communities to build a circular economy by reducing waste in their villages and using it as a valuable resource.

2022 Key Achievements We have installed 15 plastic collection bins in major schools and public spaces in Jakarta, and provided environmental education to 8,300 children. We also have established a waste recycling center in Bekasi which was recognized as the best case of CSR in West Java in 2022.

Future Plans In 2023, we will expand the installation of plastic collection bins while continuing to provide children with environmental education related to plastic collection.



IONIQ Forest

Hyundai launched the IONIQ Forest project in 2016 and has been creating eco-friendly forests around the world to absorb carbon and conserve biodiversity. In 2022, we planted a total of 8,000 trees in Hongcheon, Gangwon-do to create a new eco-friendly forest of 16,000m2 also while creating a natural garden covering 300m2 at the National Sinsido Recreation Forest in Gunsan, Jeollabuk-do. In the IONIQ Forest Hongcheon, we planted Korean fir trees, which have been designated as an endangered species by the International Union for Conservation of Nature (IUCN); black locust trees, which are a source of pollen for honey bees whose population has declined dramatically in recent years; and ash trees, a fire-resistant species.

We are creating the IONIQ Forest project not only in Korea but also in North America, Brazil, Mexico, Germany, Serbia, Turkey, and the Czech Republic. IONIQ Forest North America is conducting activities using IONIQ 5 and IONIQ 6, as well as employee volunteering. IONIQ Forest Brazil aims to restore the Atlantic Forest by planting 100,000 trees, and operates a research forest near our Brazilian plant with the aim of developing a methodology for restoring rainforests in cooperation with Sao Paulo's de Queiroz College of Agriculture. Meanwhile, IONIQ Forest Czech Republic is providing regular care of typical mountain meadow by planting seedlings, hay raking and monitoring rare species to preserve the biodiversity of the Beskydy Mountains.

Through its global IONIQ Forest project, Hyundai has planted approximately 210,000 trees as of 2022. Going forward, we will continue to carry out various eco-friendly activities – such as restoring ecosystems, responding to climate change, and conserving biodiversity – with various partners around the world to promote coexistence between the Earth and humanity.

2022 Key Achievements With the creation and expansion of the IONIQ Forests in Hongcheon-gun and in Sinsido of Jeollabuk-do, some 12,000 trees have been planted in a total area of 36,000m2, absorbing about 85 tons of carbon dioxide and 250kg of fine dust, while producing additional oxygen that can be consumed by some 6,000 people every year. Over the past three years, Hyundai has planted a total of 215,923 trees not only in Korea and overseas, including the US, Mexico, and Germany.

Future Plans We aim to plant one million trees worldwide by 2024. To this end, we will plant 314,929 trees in Korea, North America, Brazil, Mexico, and Serbia by 2023. In April 2023, we promoted the IONIQ Forest North American project at the New York Motor Show. Going forward, we will expand our contribution areas and induce stakeholders' participation through active publicity.

Creating Shared Value

Mobility

CSV Activities

Rehabilitation Support Using a Wearable Robot (X-ble MEX)

Hyundai is taking the lead in overcoming the physical limitations and improving the mobility of people with reduced mobility by offering rehabilitation support for patients with paraplegia, using robotics technology. HMG Robotics Lab has developed a medical wearable robot called “X-ble MEX” that assists lower muscle reconstruction and joint movement for people with limited mobility. In January 2023, we obtained permission for medical devices from the Ministry of Food and Drug Safety, and also completed the certification of batteries as a power source for walking assistance. In April 2023, we signed an MOU with Asan Medical Center and the National Rehabilitation Center to cooperate in conducting rehabilitation treatment and related research for paraplegic patients using X-ble MEX. Moving forward, Hyundai will promote activities designed to support the mobility of people with reduced mobility by actively incorporating not only wearable robots but also other future mobility solutions with the goal of improving human life.

2022 Key Achievements We plan to deliver two wearable robots each to the Asan Medical Center and the National Rehabilitation Center for the rehabilitation treatment of paraplegic patients and related research.

Driving Rehabilitation Support Using Virtual Driving Simulators

Hyundai has been running a virtual reality driving experience social contribution program since February 2019, designed to help drivers overcome their fear of driving and build their self-confidence. The driving simulators used in the program are designed to enable driving practice in various environments and situations, including city centers, highways, national roads, and alleyways. Since 2021, in cooperation with the National Rehabilitation Center, we have used the simulators in the rehabilitation of victims of traffic accidents. In 2022, we expanded the cooperative relationship to Chungnam National University Hospital and Pusan National University Hospital. In 2023, we plan to promote rehabilitation support activities by providing simulators to Seoul Rehabilitation Hospital.

2022 Key Achievements We have signed agreements with Chungnam National University Hospital and Pusan National University Hospital to operate rehabilitation training programs for traffic accident patients.

Future Plans In the first half of 2023, we plan to donate a new simulator to the Seoul Rehabilitation Hospital where it will be used to treat patients who need rehabilitation.

Supporting Underprivileged Areas, Using Mobility

Leveraging our mobility to help Foodbank, aimed at resolving the imbalance in the supply of food ingredients due to income inequality in downtown and suburban areas in the Middle East. Using Hyundai STARIA, in partnership with local Foodbank and colleges, we have supplied food ingredients and nutritional kits to marginalized areas with low accessibility from March to April 2022 in five cities – two in the UAE (Ajman in March and Sharjah in April) and three in Saudi Arabia (Riyadh, Jeddah, and Dammam in April). In particular, we donated STARIA to NGOs in those cities to assist their donation activities during Ramadan, when Muslims practice coexistence and sharing.

2022 Key Achievements Using four STARIA vehicles, we delivered a total of 2,000 boxes of food ingredients in partnership with four universities and local volunteer groups in the regions.

Future Plans In 2023, we plan to deliver a total of 2,800 boxes of food ingredients, a 40% increase from the previous year, and donate four Hyundai Mighty vehicles for NGO activities.

H-Special Movement Project

Hyundai donates eco-friendly vehicles and provides customized mobility solutions to local governments that operate welfare vehicles for the disabled to improve the mobility of the vulnerable. In November 2022, we donated an electric vehicle (EV), specialized for the visually impaired, to the daily mobility support center for the disabled in Chungcheongbuk-do. The donated vehicle was developed by applying Braille and voice guidance convenience specifications to the IONIQ 5, an eco-friendly EV, to help visually impaired people move about more safely and conveniently. It is expected that this eco-friendly welfare vehicle for the visually impaired using IONIQ 5 will contribute to promoting the mobility rights of the disabled in the province.

2022 Key Achievements We donated three IONIQ 5 vehicles specialized for the visually impaired to the daily mobility support centers for the disabled in Chungju City, Jecheon City, and Boeun-gun. The donation was particularly meaningful in that it was the first ever donation of environmentally-friendly welfare vehicles for the visually impaired in Korea.

Future Plans We plan to expand the IONIQ 5 EV supply project to local governments that operate welfare vehicles for the visually impaired.

Creating Shared Value

Hope

CSV Activities

H-Mobility Class

Since 2020, Hyundai has been operating the H-Mobility Class to nurture science and engineering college (graduate) students in Korea into future talents, with the goal of enhancing national competitiveness. The H-Mobility class consists of three courses of future strategic technologies such as vehicle electrification, autonomous driving, and robotics, with each course being composed of basic education and advanced education. Launched in 2022, the robotics course includes a hackathon as one of its in-depth education programs designed to provide trainees with project experience and opportunities to improve their practical capabilities. We provide recruitment benefits (exemption from application review) to trainees who are selected as excellent learners after completing advanced education.

2022 Key Achievements In 2022, we opened a new robotics course and operated an H-mobility class for a total of 2,805 trainees.

Future Plans In 2023, we plan to open software (SW) lecture in addition to autonomous driving course to contribute to strengthening the trainees' SW capabilities and fostering their mobility skills.

H.I.R.E.

H.I.R.E. stands for Hyundai Initiative for Robotics Excellence, a robotics talent training program that Hyundai Motor Manufacturing Alabama has been promoting since 2020. The H.I.R.E. program is run in conjunction with the Montgomery public education system to provide education on robotics to middle and high school students, with the goal of creating a pool of future talents for the growing technology-based industries in Montgomery and the River Region. H.I.R.E. enables students to move beyond learning the scientific principles related to engineering design to develop their teamwork, leadership, coding, and literacy skills, while supporting them in their dream of forging a career in a robotics-based industry by helping them to get into robotics at an early age.

2022 Key Achievements All 10 middle schools in Montgomery participated in the program held in January 2022, and a total of 90 students received robotics education. In August, the program was expanded to include a total of eight high schools in Montgomery, and in November of the same year a total of 17 teams participated in the H.I.R.E. Robotics Competition.

Future Plans Hyundai Motor Manufacturing Alabama (HMMA) plan to expand the H.I.R.E. program in collaboration with the education system in central Alabama.

Future Mobility School

Hyundai signed an MOU with the Ministry of Education to launch the Future Mobility School in 2016. It is a free-semester middle school providing specialized career education based on theory, practice, and experience, with the aim of allowing young people to understand the automobile industry and explore the related occupations. The curriculum is composed of content on eco-friendly mobility and sustainability to enhance the students' understanding of mobility-related industries. In order to resolve inequality in career education opportunities, priority is given to schools in rural areas, special schools, and alternative schools. In 2022, we organized a creative experiential learning for elementary school students as regular program in order to make education fun and easy from the perspective of children.

2022 Key Achievements In 2022, we expanded the target over the previous year to provide education to 14,000 students in 350 schools. In addition, we launched creative experiential learning for elementary school students as a regular program.

Future Plans In 2023, we plan to start a mobility-related career experiential learning support project for students in ASEAN countries in collaboration with the Asia-Pacific Center of Education for International Understanding under the auspices of UNESCO (APCEIU).

Hyundai Hope on Wheels & Help for Kids

Hyundai Motor America (HMA) conducts the Hope on Wheels campaign to support pediatric oncology research and raise awareness about childhood cancer with its dealers participating in the campaign. Launched in 1998 with the aim of creating a happy future in which children do not suffer from cancer, this campaign is currently being carried out across the United States.

Hyundai Motor Company Australia (HMCA), together with its dealers, is running the Help for Kids program, which provides financial and vehicle support to children's charities. The program has been ongoing since 2014, providing children and families in Australia with a range of activities beyond essential funding, including transportation and education.

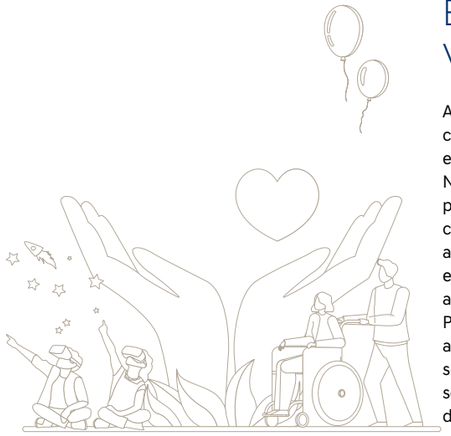
2022 Key Achievements In 2022, the Hope on Wheels campaign donated USD 15 million and supported the research of 1,100 pediatric oncologists, while the Help for Kids program raised funds from donations over AUD 11 million between 2014 and 2022.

Future Plans In 2023, the dealer networks participating in Hope on Wheels increased their fund-raising from USD 14 to USD 22 per vehicle sold, while the network of Australian dealers participating in Help for Kids decided to increase their fund-raising from AUD 7.5 per vehicle sale to AUD 10 in August 2022, which is expected to lead to an increase in the donation amount.

Creating Shared Value

Community

CSV Activities



Employee Volunteering

As social distancing was eased in 2022, various volunteer activities were conducted in which our employees could actively participate. Leading example includes H-pop-up trucks operated at our headquarters, Namyang R&D Center, and Ulsan Plant. H-pop-up trucks is designed to promote development rights and participation rights for children in local children's centers nationwide. 55 employees who participated in the activity set up a play experience booth where children could enjoy VR experiences and traditional games, as well as conducting creative craft activities such as making wooden cars. In June 2022, Hyundai's Ulsan Plant resumed its various face-to-face volunteer activities such as balloon art instruction at a local children's center and hand and foot massage service for people with intellectual disabilities, as well as volunteering at soup kitchens. In addition, they conducted various volunteer activities and delivered donations as part of H-Local Partner, a community-based social contribution activity.

2022 Key Achievements In 2022, 5,592 Hyundai employees participated in 627 volunteer activities for a cumulative total of 15,016 hours.

Art for Hope

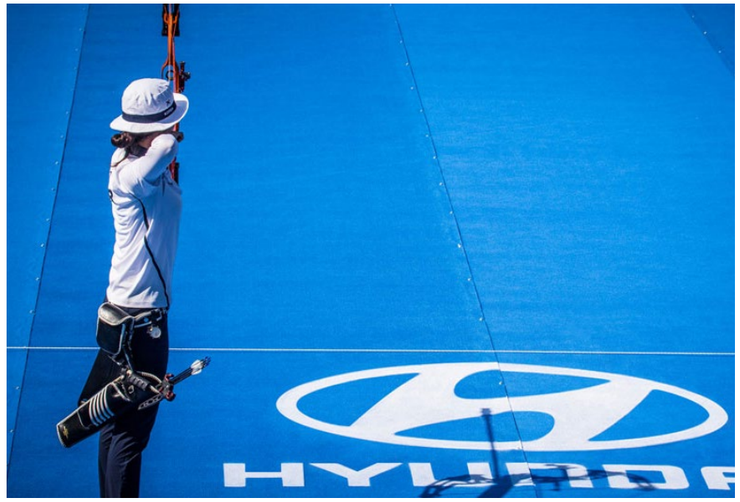
Art for Hope is an art revival program operated by Hyundai Motor India. It was launched to provide financial support to artists who had lost their livelihood after ceasing their creative activities due to the COVID-19 pandemic, and to increase access to the arts by building a platform for youth, women, and local artists. It has developed into a flourishing artist support program that grants a total of INR 4 million to 35 teams of artists who are active in various arts fields across the 17 states of India, based on proposals for community art projects on the theme of "Hope, Solidarity, Gratitude". It currently supports traditional Indian arts, crafts, and performances. In particular, it is developing into a platform for young artists belonging to the underprivileged classes.

2022 Key Achievements As of the end of 2022, the program supported five types of traditional arts and four archive projects in India, providing financial support for a total of 60 teams (120 artists), and attracting more than 3,700 exhibition visitors. In parrel with the program, we made 12 environmental and social issues to be the subject of public deliberation in local communities, while inducing people to be aware of social issues through art. It was well received for it enabled persons with visual impairment or development disorders to enjoy the exhibition and provided audiences with interactive workshop and guided tours.

Korea Archery Association

Since 1985, Hyundai has been supporting the operating expenses of the Korea Archery Association while providing various awards to the national team when it achieves outstanding results in international competitions. Moreover, Hyundai has used the technological resources of its research institute to develop a shooting machine that can not only sort out bad arrows but can also apply a precision-analysis technology to identify abnormal or defective parts, thus enabling the national squad to achieve a very high level of skill and continue beating their personal records. We also sponsor a number of leading archery tournaments, including the World Archery Championships.

Future Plans While continuing to support the Korea Archery Association, Hyundai intends to establish a sponsorship with the World Archery Association and support it until 2025. Based on this, we will contribute to improving the competitiveness of archery in Korea by expanding the archery base and fostering promising archers.



Disaster Relief

Hyundai fulfills its social responsibility by taking active part in supporting damage recovery in the event of disasters or accidents globally. In Korea, we donated funds to assist the recover from the Uljin-Samcheok wildfire in March 2022, the heavy rains in central Korea in August 2022, and the Gangneung wildfire in April 2023. Overseas, we provided help through donations for the recovery from the Indonesian earthquake in November 2022 and the devastating earthquake in Turkey in February 2023. These are good examples to show that we make continued efforts to support recovery from disasters both in Korea and abroad. In addition, if disasters or accidents occur near our business sites and subsidiaries, Hyundai employees work hard to help the affected local communities recover from the damages by conducting fundraising activities on their own or by providing relief goods at the discretion of each business site.

2022 Key Achievements In March 2022, Hyundai donated about KRW 2.3 billion to assist the recovery from wildfire in Uljin and Samcheok, and provided KRW 900 million each to help the victims of heavy rainfall in the central region in August 2022 and the wildfire in Gangneung in April 2023. Overseas, we donated IDR 2 billion in November 2022 for earthquake relief in Indonesia. In February 2023, we helped victims affected by the earthquakes in Turkey by donating USD 1 million and supporting life-saving equipment, daily necessities, and other goods, worth EUR 0.5 million total.

Creating Shared Value

Global Partnership for Arts and Culture

Hyundai supports a wide range of exhibitions and programs in partnership with art institutions around the globe to offer a greater number of audiences the opportunity to enjoy and experience art.

National Museum of Modern and Contemporary Art, Korea

In partnership with the National Museum of Modern and Contemporary Art, Korea (MMCA), Hyundai has been holding the "MMCA Hyundai Motor Series" since 2014 to expand the boundaries of Korean art. Every year, we support a large-scale solo exhibition by an esteemed Korean artist as well as related seminars and publication activities. In 2022, the *MMCA Hyundai Motor Series 2022: Choe U-Ram - Little Ark* exhibition was held, and various programs were conducted during the exhibition period, including critic and artist talks, collaborative performances with choreographers and musicians, to communicate with the audience.

Hyundai has also been supporting "PROJECT HASHTAG" since 2019 to discover next-generation creators in Korea and support their experimental and creative activities. Two teams are chosen every year to be provided with a grant of KRW 30 million, a studio, and exhibition opportunities. In 2022, the *PROJECT HASHTAG 2022* presented a showcase of the geopolitical significance of underground party spaces and cultural and social issues in virtual ecosystems from the perspective of young creators.

Tate

The "Hyundai Commission," made possible by the long-term partnership between Tate and Hyundai, is a series of site-specific installations by international artists for Tate Modern's Turbine Hall. In 2022, artist and poet Cecilia Vicuña created two monumental new sculptures for *Hyundai Commission: Cecilia Vicuña: Brain Forest Quipu*. Continuing her long-standing work with the Andean tradition of the quipu, quipu sculptures hung 27 meters from the ceiling at opposite ends of the Turbine Hall combined with audio and digital installations. This multi-part installation was an act of mourning for the destruction of the forests, the subsequent impact of climate change, and the violence against Indigenous people, and also an opportunity to create a space for new voices.

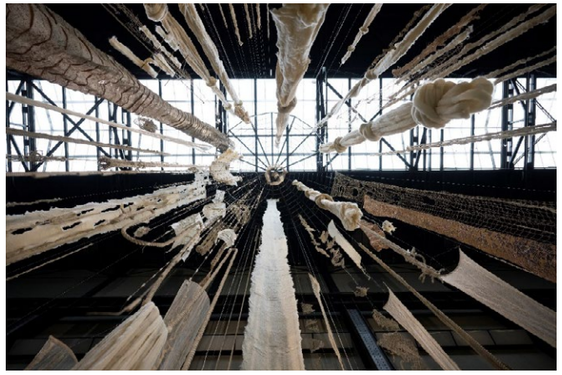
The "Hyundai Tate Research Centre: Transnational" continues to encourage new perspectives on global art histories and critical research to highlight global exchanges of artists and ideas. Including an annual symposium, the "Hyundai Tate Research Centre: Transnational" hosts research events to facilitate collective research and intellectual exchange.

Los Angeles County Museum of Art

Since 2015, in partnership with Los Angeles County Museum of Art (LACMA), "The Hyundai Project at LACMA" has been supporting exhibitions and lab projects, aimed at promoting the convergence of technology and art, as well as research activities in Korean art history. As part of this partnership, the *The Space Between: The Modern in Korean Art exhibition* was held in September 2022. This exhibition featured about 150 works of art that reflect the historical uniqueness of Korea's modern era and was based on long-term research and planning through our partnership program. By showcasing modern art works reinterpreted by Korean artists influenced by foreign cultures and contemporary works by overseas artists, the exhibition presented an integrated perspective on modern Korean art.

We also support innovative exhibitions and creative activities that converge art and technology through the "Art + Technology exhibition" and the "Art + Technology Lab." The selected artists for the "Art + Technology Lab" have been working on activities that incorporate rapidly growing new technologies such as blockchain, metaverse, and NFTs. In addition, many artists have been implementing various ideas into their works with the help of technology consultations from companies such as Hyundai Motor Company, Google, SpaceX, and Snapchat.

MMCA Hyundai Motor Series 2022: Choe U-Ram — Little Ark, Little Ark, 2022, recycled cardboard boxes, metallic material, machinery, electronic device (CPU board, motor), 210 x 230 x 1272cm. Image provided by MMCA



Hyundai Commission: Cecilia Vicuña: Brain Forest Quipu © Cecilia Vicuña, Installation View at Tate Modern 2022. Photo © Tate (Ben Fisher)

The Space Between: The Modern in Korean Art, Installation photograph, Los Angeles County Museum of Art, Sep 11, 2022-Feb 19, 2023. Photo © Museum Associates/LACMA

Governance

The “G” in ESG refers to the governance factors – the fundamental basis for creating ESG value. The establishment of a strong corporate governance coupled with responsible corporate behaviors can increase corporate value and achieve sustainable growth by responding to various risks and seizing business opportunities appropriately. Hyundai therefore spares no efforts in growing in an economically, socially and environmentally right way based on the advanced governance structure befitting its status as a global company.

Board-centered Management System

Hyundai strives to appoint directors with diversity, expertise and independence, aimed at establishing a sound and transparent governance structure, while also doing its utmost to maximize shareholder rights and interests as well as corporate value based on the understanding of its diverse stakeholders, including shareholders and customers. As Hyundai's highest decision-making body, the BOD is operated with the goal of achieving sustainable and balanced growth based on the company's Articles of Incorporation by faithfully supervising the activities of management. We have established independence and diversity policies for our independent directors, appointed directors with expertise, and enacted the Corporate Governance Charter in an effort to build a better governance system.

Composition of the BOD

BOARD COMPOSITION

Hyundai's BOD is composed of 13 members for effective and prudent decision-making, with independent directors making up more than half of its members (seven) in order to ensure its independence in accordance with the Commercial Act. The Board consists of experts in such various fields as management, accounting, finance, law, governance and future technology, and respects diversity without discrimination on the grounds of gender, race, religion, etc.

DIRECTOR TENURE

As of the end of March 2023, the average tenure of the 13 board members is about two years and seven months. In accordance with the Commercial Act, the term of office of independent directors cannot exceed six years. Those appointed in March 2023 include two internal directors (one re-appointed, one newly appointed) and two independent directors (all newly appointed).

APPOINTMENT OF DIRECTORS

All of Hyundai's directors are appointed through a resolution of the general shareholder's meeting (GSM). The independent directors are selected from among the candidates recommended by the Recommendation Committee on Candidates for Outside Directors to appoint competent and responsible personnel armed with expertise who can make substantial contributions to corporate management in a balanced way. We seek to respond flexibly to changes in the business environment by appointing independent directors with diverse perspectives and experiences.

INDEPENDENCE OF DIRECTORS AND RESTRICTIONS ON CONCURRENT POSITIONS

Hyundai has put in place strict independence guidelines, meeting the legal standards required by the Korean Commercial Act, based on the international standards. Independent directors must not only comply with them, but also represent the rights and interests of stakeholders with exemplary ethics and professionalism. Hyundai therefore only appoints persons with no significant stake in the company as independent directors, and they maintain independency from top management, monitor the efficient operation of the company, and play a role in enhancing corporate value. In addition, the independent directors must devote sufficient time and effort to the faithful performance of their duties, and according to the Commercial Act, they cannot be appointed as directors, executive members, and/or auditors of two or more companies other than the company itself. In order to be permitted to hold concurrent positions in other companies, they must report the details of the duties they wish to hold concurrently to the Board in advance and obtain its approval.

BOD Composition

Classification	Name	Title	Career	Date of Appointment	Gender	Nationality
Internal Directors	Euisun Chung	Executive Chair	Currently Executive Chairman of Hyundai Motor Group	March 12, 2010	Male	Korea
	Jaehoon Chang	President & CEO	Currently President & CEO of HMC	March 24, 2021	Male	Korea
	Chung Kook Park	Executive President	Currently President and Head of HMC R&D Division	March 24, 2022	Male	Korea
	Dong Seock Lee	CEO	Currently Executive Vice President and CSO of Domestic Productions	March 24, 2022	Male	Korea
	Jose Munoz	President & GCOO	Currently Global COO of HMC and CEO of Hyundai and Genesis Motor North America Former Chief Performance Officer of Nissan and Chairman China, Nissan	March 23, 2023	Male	US, Spain
	Gang Hyun Seo	Executive Vice President	Currently Executive Vice President of HMC Planning & Finance Division	March 24, 2021	Male	Korea
Independent Directors	Chi-Won Yoon	Independent Director	Former Chairman of EQONEX Former Vice Chairman of UBS Wealth Management	March 22, 2019	Male	Korea
	Eugene M. Ohr	Independent Director	Former Partner of Capital International Inc.1	March 22, 2019	Male	US
	Sang-Seung Yi	Independent Director	Currently Dean and Professor of Economics, Seoul National University Former Chairman of Korea Academic Society of Industrial Organization	March 22, 2019	Male	Korea
	Dal Hoon Shim	Independent Director	Currently Representative of Woorin Tax Partners Former Head of NTS Jungbu Regional Office	March 24, 2021	Male	Korea
	Ji Yun Lee	Independent Director	Currently Professor, Department of Aerospace Engineering of KAIST Former Director of American Society of Navigation	March 24, 2021	Female	Korea
	Seung-Hwa Chang	Independent Director	Currently Professor of Graduate Law School, Seoul National University Currently Arbitrator of the International Court of Arbitration (ICC)	March 23, 2023	Male	Korea
	Yoon-Hee Choi	Independent Director	Currently Professor of Graduate Law School, Konkuk University Former Member of National Election Commission	March 23, 2023	Female	Korea

* As of March 31, 2023
** Executive President & Standing Director Chung Kook Park resigned before end of term in April 2023

Concurrent Positions of Independent Directors

Name	Date of Initial Appointment	Date of Term Expiration	Details of Concurrent Positions (Institution / Position)
Chi-Won Yoon	March 22, 2019	March 23, 2025	
Sang-Seung Yi	March 22, 2019	March 23, 2025	Samsung C&T / Independent Director
Eugene M. Ohr	March 22, 2019	March 23, 2025	-
Dal Hoon Shim	March 24, 2021	March 23, 2024	Samhwa Paints Industrial / Independent Director
Ji Yun Lee	March 24, 2021	March 23, 2024	-
Seung-Hwa Chang	March 23, 2023	March 22, 2026	-
Yoon-Hee Choi	March 23, 2023	March 22, 2026	Hanjin KAL / Independent Director

DIVERSITY OF THE BOD

Hyundai appoints directors based on the principle of diversity, such as gender, nationality, race and religion. As of the end of March 2023, the Board has two directors with foreign nationality (Jose Munoz and Eugene M. Ohr) and two female directors (Ji Yun Lee, Yoon-Hee Choi).

As Global Chief Operating Officer (COO), director Jose Munoz has greatly contributed to improving Hyundai's performance in the global market and will continue to play an important role in securing global market competitiveness. Eugene M. Ohr, an independent director who is an expert in global business and asset management, was appointed to contribute to improving our business transparency. Ji Yun Lee, independent director, is a professor at the Department of Aerospace Engineering at KAIST. As a world-recognized authority on ensuring the safety of intelligent transportation and autonomous driving systems, she contributes to innovation in future core technologies and future mobility by advising on mid- to long-term business plans for autonomous driving technology and urban air mobility (UAM). Professor Yoon-Hee Choi is a legal expert and has abundant expertise in labor-management relations, including activities at the National Labor Relations Commission and the National Human Rights Commission of Korea.

Board-centered Management System

Operation of the BOD

BOD MEETING

Board meetings are convened by its chair or another member appointed by the Board. At the time of convening the BOD, each director is notified of the convocation in writing or orally seven days prior to the date of the meeting. However, the convocation process may be omitted when all directors agree. A BOD resolution must be made with the attendance of a majority of the directors and the consent of a majority of the directors in attendance. Should the relevant laws and regulations stipulate otherwise, they shall apply.

The BOD agenda is proposed by the chairperson, and if the other directors wish to propose an item, the summary must be submitted to the chairperson. The Board must prepare the minutes, in which the agenda of the meeting, its progress and results, any opponents to the agenda and the reasons for their opposition must be entered, and the chairperson and the directors present must seal or sign the minutes.

BOD Activities in 2022

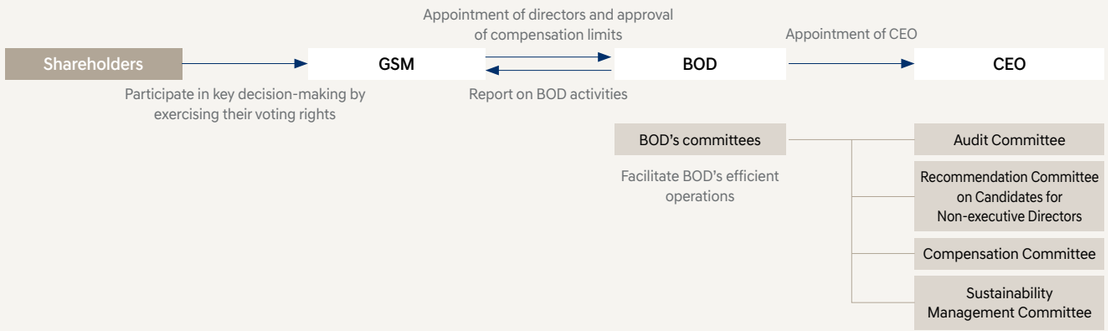
Number of meetings	9
Number of agenda items for resolution	23
Number of agenda items for report	12

BOD Participation in 2022

Board of Directors

Average participation rate	98%
Participation rate of internal directors	96%
Participation rate of independent directors	100%

Decision-making Process of the BOD



Board Meetings in 2022

Classification	Date	Contents	Whether Approved	Attendance Rate	Approval Rate
1st General Meeting	Jan.25	Approval of financial statements for the 54th fiscal year	Approved	100%	100%
		Re-approval of the 47th-53rd separate financial statements	Approved	100%	
		Approval of the 54th annual report	Approved	100%	
		Approval of the business plan for 2022	Approved	100%	
		Approval of the health and safety plan	Approved	100%	
		Approval of the limit on corporate bond issuance	Approved	100%	
		Appointment of the manager	Approved	100%	
		Assessment of the 2021 internal accounting management system, compliance management activities and plan, and geopolitical risks related to Russia and China	Reported	-	
Extraordinary Meeting	Feb.23	Approval of the convocation and agenda to be submitted to the 54th GSM	Approved	100%	100%
		Results of the 2021 internal accounting management system	Reported	-	
Extraordinary Meeting	Mar.24	Appointment of the Chief Executive Officer	Approved	100%	100%
		Appointment of the chairperson of the BOD	Approved	100%	
		Appointment of Committee members (Sustainability Management Committee, Recommendation Committee on Candidates for Outside Directors, Compensation Committee)	Approved	100%	
		Approval of dual-directorship (Euisun Chung –Kia and Hyundai MOBIS; Sang-Seung Yi – Samsung C&T; and Dal Hoon Shim – Samhwa Paints Industrial)	Approved	100%	
2nd General Meeting	Apr.25	Approval of capital increase for an overseas sales subsidiary	Approved	100%	100%
		Business results of Q1 2022, business status and investment plan of Supernal, occurrence of major health and safety issues	Reported	-	
Extraordinary Meeting	Jun.30	Approval of transaction between directors, etc. and the company	Approved	100%	91%
		Approval of the amendment of regulations for the Sustainability Management Committee	Approved	100%	
		Approval of the establishment of an overseas affiliate	Approved	100%	
		Participation in overseas subsidiary capital increase, establishment status of an EV company in the US	Reported	-	
3rd General Meeting	Jul.21	Approval of the 55th fiscal year interim dividend payment	Approved	100%	91%
		Approval of liquidity support for suppliers	Approved	100%	
		Business results of Q2 2022	Reported	-	
Extraordinary Meeting	Aug.11	Approval of equity investment in another corporation	Approved	100%	100%
		Approval of the establishment of an AI research institute in North America	Approved	100%	
Extraordinary Meeting	Sep.07	Approval of treasury stock exchange with another corporation	Approved	100%	100%
4th General Meeting	Oct.24	Approval of transaction between directors, etc. and the company	Approved	100%	100%
		Approval of disposition of treasury stocks	Approved	100%	
		Business results of Q3 2022, Hyundai's response to the US IRA	Reported	-	

Board-centered Management System

DIRECTOR'S RESPONSIBILITIES

Hyundai's directors must faithfully perform their duties to the company in accordance with the provisions of the relevant laws and the Articles of Incorporation. Hyundai compensates directors for litigation expenses, other losses, damages, and liabilities incurred in connection with the performance of their duties. However, we do not compensate the losses, damages and liabilities which arise due to the malicious or gross negligence of the directors concerned, or if compensation by the company is not permitted by law.

In addition, directors are liable to the company and third parties in accordance with the Commercial Act and other laws in case of neglect of duties, etc. A director's liability to the company is limited to an amount equal to six times the amount of remuneration he or she has received in the last one year (three times in the case of an independent director), but this does not apply if the director causes damages either intentionally or by gross negligence, or if the law does not allow directors' responsibilities to be reduced.

CHAIRPERSON OF THE BOARD

Hyundai's BOD appoints its chairperson at the first board meeting after a GSM, and the chairperson's term of office is three years. The chairperson convenes and presides over the BOD and ensures that the Board plays its role effectively in all respects. The chairperson determines the order of priority in which directors will act as interim chairperson in the event that he or she is unable to attend the board meeting in person, and appoints a temporary chairperson from among the directors to act as the chairperson. If no chairperson is appointed, the duties of the chairperson of the Board are assumed in the order designated in advance.

EVALUATION OF BOD OPERATIONS AND ACTIVITIES

At Hyundai, the independent directors conduct an annual evaluation of the BOD's operations every year, with the results discussed at Board meetings as a way to improve the efficiency of its operations. In 2022, a third-party evaluation was conducted by an independent evaluation agency to ensure objectivity, and thus identified the current status of the composition and operation of the BOD in terms of expertise, efficiency and effectiveness, with the result that there was neither inappropriateness of the Board composition nor ineffectiveness in its operations. In addition, we derive improvement plans for the BOD by benchmarking best practices at home and abroad in the same industry and, going forward, based on the final opinion of the third-party, we will reflect the ideas for the improvement of the BOD composition and operations.

EXPERTISE OF THE BOD

Hyundai appoints directors with expertise in various fields such as global business, R&D, accounting, finance, legal affairs, and future technology. In addition, we make sure that our independent directors' ability to fulfill their duties faithfully is being strengthened through regular visits to factories and research institutes at home and abroad and meetings with executives in key sectors.

BOARD MEMBER TRAINING

Hyundai conducts training seminars on various topics such as business status, ESG risks, diversity, and new businesses in order to enhance the business understanding of its independent directors, and supports the strengthening of their professional competency to help them fulfill their roles as independent directors.

Board Member Training in 2022

Date of Training	Participants	Training Content
Apr. 25	Eun Soo Choi, Chi-Won Yoon, Eugene M. Ohr, Sang-Seung Yi, Dal Hoon Shim, Ji Yun Lee	Overview and business status of Hyundai Capital
Apr. 25		Follow-up progress of Hyundai's future business investment (Boston Dynamics, Motional)
Apr. 25		Strategic direction for Hyundai's charging infrastructure
Apr. 25		Development progress and schedule Hyundai Global Business Center (GBC)
Apr. 25		Overview and progress of overseas plant investment
Jul. 18	Eun Soo Choi, Chi-Won Yoon, Eugene M. Ohr, Sang-Seung Yi, Dal Hoon Shim, Ji Yun Lee	ESG trends and future directions
Jul. 18		Current status of Hyundai's female workforce and response to the aging society
Oct. 24		ESG risks and the BOD monitoring obligations
Oct. 24		Hyundai's design heritage

Profile of the BOD Members

Classification	Name	Profile	
Internal Directors	Euisun Chung	• CEO of Kia (2005-2008) • Vice-chairman of HMC (2009-2018)	• Senior Vice-Chairman of HMC (2018-2020) • Chairman of HMC (2020-present)
	Jaehoon Chang	• Head of the Management Support Division & Head of the Domestic Business Division (2019-2020), Head of the Genesis Business Division of HMC (2019-2022)	• President & CEO of HMC (2021-present)
	Chung Kook Park	• CEO and President of Hyundai KEFICO (2015-2018) • CEO and President of Hyundai MOBIS (2018-20)	• Deputy Head of HMC R&D Division (2020-2021) • President and Head of HMC R&D Division (2022-Apr. 2023)
	Dong Seock Lee	• Head of HMC General Production Management Division (2017-2018) • Head of HMC Engine Transmission Business Division (2018-2020)	• Production Support Director of HMC (2021) • Executive Vice President and CSO of Domestic Productions (2022-present)
	Jose Munoz	• Chief Performance Officer of Nissan and Chairman North America, Nissan (2016-2018) • Chief Performance Officer of Nissan and Chairman China, Nissan (2018-2019)	• Global COO of HMC and CEO of Hyundai and Genesis Motor North America Division (2019-present)
	Gang Hyun Seo	• Head of HMC Accounting Office (2015-2019) • Head of Finance Division, Hyundai Steel (2019-2020)	• Executive Vice President of HMC Planning & Finance Division (2021-present)
Independent Directors	Chi-Won Yoon	• Chairman and CEO of UBS Asia Pacific (2009-2015) • Vice Chairman of UBS Wealth Management (2016-2019)	• Chairman of EQONEX (2020-2022)
	Eugene M. Ohr	• Member of BOD, Capital International Research Inc. (2004-2009)	• Partner of Capital International Inc. (2010-2017)
	Sang-Seung Yi	• External Expert of Governance Committee, Samsung C&T (2015-2020) • Professor of Economics, Seoul National University (2001-present)	• Dean of Economics, Seoul National University (2020-present)
	Dal Hoon Shim	• Director of the Corporate Taxation Bureau and Director of Taxation and Legal Affairs, National Tax Service (2013-2015)	• Head of NTS Jungbu Regional Office (2015-2017) • Representative of Woorin Tax Partners (2017-present)
	Ji Yun Lee	• Director of American Society of Navigation (2019-Jan. 2021)	• Professor, Department of Aerospace Engineering of KAIST (2009-present)
	Seung-Hwa Chang	• Chairman of the Trade Committee, Ministry of Trade, Industry and Energy (2019-2022) • Arbitrator of the International Court of Arbitration (ICC) (2000-present)	• Professor of Graduate Law School, Seoul National University (1995-present)
	Yoon-Hee Choi	• Adjudication Committee Member of National Labor Relations Commission (2005-2014) • Member of National Election Commission (2014-2020)	• Professor of Graduate Law School, Konkuk University (2005-present)

* Internal Director Chung Kook Park resigned before the expiry of the term in April 2023.

Board-centered Management System

Functions of the BOD

RISK MANAGEMENT

Hyundai's BOD is upgrading its management system to respond more effectively to risks that may arise from rapid changes in automotive industry trends, energy conversion to electric energy, and accelerated value consumption by customers. In April 2022, Hyundai established the Cross Functional Team, an organization directly under the CEO, to respond promptly to internal and external risks and opportunity factors occurring in the entire process of development, production, and sales of finished vehicles, including the supply chain.

COMPLIANCE MANAGEMENT

Hyundai's BOD has established a compliance management system to review and manage its legal risks. To this end, we have designated independent director Yoon-Hee Choi, who has considerable legal expertise, as the person in charge of compliance management as a way to expand our compliance management and strengthen the BOD's compliance monitoring function, and to play an active supervisory role in the company's compliance management. In addition, we are striving to spread a company-wide culture of compliance by conducting compliance inspections and compliance training for employees.

ETHICAL MANAGEMENT

Under the supervision of the Sustainability Management Committee within the Board, Hyundai closely reviews the protection of shareholder rights and interests, transparency in insider transactions, and the promotion of ethical management. Moreover, we continuously reflect improvements in the company's Ethics Charter through resolutions and deliberation on ethics management-related policies and the establishment and/or revision of ethical standards.

INTERNAL ACCOUNTING MANAGEMENT

Hyundai's BOD has developed and launched an internal accounting control system with the aim of providing reasonable assurance that the company's financial statements are prepared and disclosed in accordance with the generally accepted accounting standards. The evaluation of the operational status of the internal accounting management system, the progress, and the approval of the evaluation plan are reported to the Audit Committee. At the Audit Committee meeting held in February 2023, Hyundai's internal accounting management system was evaluated based on the Internal Accounting Management System Design and Operation Concept System, and it was determined that the system had been designed and operated effectively. The external auditor also expressed the opinion that the company's internal accounting control system has been effectively designed and operated from the viewpoint of materiality in accordance with the Internal Accounting Management System Design and Operation Concept System. In addition to the Audit Committee, the results of the evaluation of the internal accounting control system's operational status are reported to the Board and the GSM every business year.

MANAGEMENT OF CLIMATE CHANGE

Firm in the belief that it must assume its responsibility to actively respond to climate change, Hyundai has established environmental management to strengthen its ability to respond to global environmental issues and regulations in a comprehensive fashion. To this end, we have established a strategy for converting to electrified vehicles and developed a roadmap to achieve RE100. All our sustainability management strategies and climate change issues are discussed and monitored in detail by the Sustainability Management Committee.

HEALTH AND SAFETY MANAGEMENT

Government regulations on automobile safety at home and abroad are tightening every year. Reflecting this trend, Hyundai establishes a health and safety plan every year and reports it to the Board for its approval. In order to manage its health and safety issues comprehensively, Hyundai has newly appointed an internal director with expertise in health and safety, and is systematically managing major health and safety plans and progress inspections through discussions at the Sustainability Management Committee.

BOD Remuneration

CRITERIA FOR BOD REMUNERATION

Remuneration for directors is executed within the limits determined at a GSM and is determined through deliberation by the Remuneration Committee. The salaries of internal directors are calculated by reflecting such evaluation factors as job function, position, leadership, contribution to the company, talent development, etc. based on the internal executive salary table. Bonuses are paid based on financial performance (sales, operating profit, etc.) and contribution to the company based on performance incentives. In the case of independent directors and members of the Audit Committee, fixed amounts are paid to ensure their independence and transparency, but no separate performance bonus is paid.

CRITERIA FOR EXECUTIVE REMUNERATION

Hyundai determines the remuneration of its executives based on internal standards such as the executive salary table and the executive wage setting standards. Management's salaries are determined based on a comprehensive performance evaluation that takes into consideration their leadership, expertise, contribution to the company, length of service, and talent development. In addition, bonuses are paid based on executive remuneration standards (performance incentives) – the amount of bonus is determined by their business performance, such as sales and operating profit, achievement of business goals and contributions as members of the management, as well as their internal and external management activities.

CEO PERFORMANCE EVALUATION AND REMUNERATION

When evaluating and rewarding the CEO's performance, Hyundai reflects the results of financial evaluations relating to sales, profit ratios, net cash liquidity, debt ratios, and market shares, as well as the results of comparative evaluations among peers with regard to stock prices, ESG, and brand power. As of 2022, the CEO's remuneration amounted to KRW 2,932 million, consisting of a basic salary of KRW 1,116 million, bonuses of KRW 1,805 million, and other wage and salary incomes of KRW 11 million.

Criteria for BOD Remuneration

Classification	Payment Criteria
Internal Directors (CEO and management)	• Salary: Paid within the limit of directors' remuneration set by the GSM resolution based on internal criteria, such as Hyundai's executive salary table and executive wage setting standards, job title, tenure, leadership, professionalism, contribution to the company, and human resource development, etc. • Bonus: Paid based on performance incentives, according to both quantitative and non-quantitative indicators – the former includes business performance, such as sales and operating profit; degree of achievement of business goals; ESG-related indicators; and brand power, and the latter includes management performance, contribution to the company, and internal/external business environment • Other earned income: Paid according to the company regulations on welfare support and long-term service rewards
Independent Directors	• Fixed amounts are paid to ensure their independence and transparency within the limit of remuneration for directors determined by the GSM resolution, with no separate performance bonus paid.

BOD Remuneration

(Unit: KRW million)

Classification	CEO[1)]	Board member	Independent director	Employee[2)]	CEO-to-employee pay ratio
Average compensation per person	2,932	1,221	108	105	28 x

* For further details, please refer to the 2022 business report published on the electronic disclosure system of the Financial Supervisory Service

1) CEO: Based on remuneration for Jaehoon Chang, President & CEO of Hyundai Motor Company

2) Employees: Excluding registered executives (unregistered executives and employees)

Board-centered Management System

BOD Subcommittees

AUDIT COMMITTEE

Composition of the Audit Committee The Commercial Act stipulates strict criteria for appointing and forming the committee member aimed at securing the transparency and independence of the Audit Committee, and thus the Audit Committee must be composed of at least three directors appointed at a GSM, and at least two-thirds of them should be independent directors. It should also contain at least one member who is a specialist in accounting and finance. All five members of Hyundai's Audit Committee are independent directors, with three (Chi-Won Yoon, Sang-Seung Yi, Dal Hoon Shim) of whom are experts in accounting and finance. In particular, director Dal Hoon Shim, who has accumulated a wealth of experience as a tax expert while serving as the head of NTS's Jungbu Regional Office among other posts, supports the company's overall risk management from a different perspective to the company's internal audit organization.

Roles of the Audit Committee Hyundai's Audit Committee is composed of five independent directors with expertise in various areas including legal, finance, accounting, and future technology. The Committee verifies the legality of the business activities of the directors and management and supervises the soundness and propriety of corporate financial activities and the accuracy of its financial reporting, and also reviews matters stipulated by the GSM related to the selection, change, and dismissal of external auditors, other laws and the Articles of Incorporation, and the operating regulations of the Committee.

Approval of Non-audit Services Hyundai regularly monitors the independence of its external auditors, and only allows them to conduct non-audit services to the extent that they do not affect their independence. We report any important matters identified during their activities to the Audit Committee and disclose them through quarterly reports. In order to further strengthen the independence of the external auditors, prior approval from the Audit Committee is required as of 2023 when signing a non-audit service contract with an external auditor.

Audit Committee Composition

Name	Chi-Won Yoon	Sang-Seung Yi	Dal Hoon Shim	Ji Yun Lee	Seung-Hwa Chang
Classification	Independent director	Independent director	Independent director	Independent director	Independent director
Expertise	Management, financial service	Business, governance	Finance, accounting, tax service	Future/industrial technology	International trade /legal affairs

Non-audit Service Contracts with External Auditors

Business Year	Date of Contract	Service Offered	Contract Period	Service Fee (KRW million)
55th	Mar. 25, 2020	Support for renewal of the US APA	Mar. 2020 - Mar. 2022	250
	Mar. 02, 2021	Refund request for the local tax assessed	Mar. 2021 – Contract termination	10% of the refund amount
	Apr. 12, 2021	Refund request for the local tax paid	Apr. 2021 – Contract termination	10 + 10% of the refund amount
	Dec. 21, 2021	Support for renewal of the APA of Germany (HMD)	Jan. 2022 – Contract termination	180
	Dec. 17, 2021	Support for renewal of the APA of the Czech Republic	Jan. 2022 – Contract termination	180
	Jan. 26, 2022	Development of the next-generation contact cente data analysis model	Jan. 2022 – Jul. 2022	489
	Mar. 18, 2022	Determination of the origin of automated facilities	Mar. 2022 – Mar. 2023	35
	May 23, 2022	Support for renewal of the APA of Germany (HME)	May 2022 – Contract termination	180
	Jul. 25, 2022	Inspection of laboratory processes	Jul. 2022 – Aug. 2022	250
	Oct. 30, 2022	Review of claims for rectification	Nov. 2022 – Mar. 2023	400
	Dec. 22, 2022	Consulting on FTA training for overseas subsidiaries	Dec. 2022 – Mar. 2023	10

COMPENSATION COMMITTEE

Composition of the Compensation Committee Following the amendment to the Articles of Incorporation for the establishment of the Compensation Committee at the 2019 GSM, Hyundai enacted the Compensation Committee regulations at the 4th General BOD Meeting. According to the BOD's rules, independent directors must constitute a majority of the members of the Committee, which consists of two independent directors and one internal director.

Roles of the Compensation Committee Hyundai's Compensation Committee helps the company to ensure objectivity and transparency in the remuneration decision-making process for registered directors. It also deliberates and make decisions on matters related to the limit on remuneration for registered directors and the remuneration system for internal directors.

Compensation Committee Composition

Name	Chi-Won Yoon	Dal Hoon Shim	Gang Hyun Seo
Classification	Independent director	Independent director	Internal director
Expertise	Management, financial service	Finance, accounting, tax service	Finance and economy, strategy

RECOMMENDATION COMMITTEE ON CANDIDATES FOR OUTSIDE DIRECTORS

Composition of the Recommendation Committee on Candidates for Outside Directors Hyundai's Recommendation Committee on Candidates for Outside Directors recommends independent director candidates in accordance with the relevant laws, the Articles of Incorporation, and the BOD regulations. The Committee is composed of three independent directors and two internal directors, with independent directors making up a majority of the total number of directors, according to the laws and regulations.

Roles of the Recommendation Committee on Candidates for Outside Directors The Recommendation Committee on Candidates for Outside Directors plays the role of recommending candidates for independent directors prior to a GSM. The Committee recommends candidates who can make substantial contributions to corporate management after carefully examining whether the candidates' professionalism and personal capabilities are in line with the interests of the shareholders, and whether there is a history of their causing damages to corporate value or infringing shareholders' rights.

Recommendation Committee on Candidates for Outside Directors Composition

Name	Eugene M. Ohr	Sang-Seung Yi	Yoon-Hee Choi	Euisun Chung	Jaehoon Chang
Classification	Independent director	Independent director	Independent director	Internal director	Internal director
Expertise	Global business	Business, governance	Legal affairs	Overall management	Overall management

Board-centered Management System

Sustainability Management Committee

Composition of the Sustainability Management Committee In 2021, Hyundai established the Sustainability Management Committee by expanding and reorganizing the Corporate Governance & Communication Committee. The Committee is composed of seven independent directors and one internal director, as the functions of the former Corporate Governance & Communication Committee with four members have been expanded. In particular, director Chi-Won Yoon provides expert insights on Hyundai's shareholder return value and capital allocation policy as a global financial expert who has worked for UBS Wealth Management.

Roles of the Sustainability Management Committee Hyundai's Sustainability Management Committee serves as a practical control tower for its ESG management, with the responsibility and obligation to deliberate and decide on its ESG policies, plans, and major activities. In addition, going beyond the role of the former Corporate Governance and Communication Committee, it discusses major health and safety-related plans and implementation inspections, and the protection of shareholders' rights and interests, which are gradually increasing in importance. The Committee also carries out a variety of activities to improve Hyundai's sustainability management practices internally and externally, such as strengthening the transparency of the Board, expanding communication with shareholders, and checking ethical issues related to employees.

Sustainability Management Committee Composition

Name	Chi-Won Yoon	Eugene M. Ohr	Sang-Seung Yi	Dal Hoon Shim
Classification	Independent director	Independent director	Independent director	Independent director
Expertise	Management, financial service	Global business	Business, governance	Finance, accounting, tax service

Name	Ji Yun Lee	Seung-Hwa Chang	Yoon-Hee Choi	Jaehoon Chang
Classification	Independent director	Independent director	Independent director	Internal director
Expertise	Future/ industrial technology	International trade/legal affairs	Legal affairs	Overall management

Sustainability Management Committee Activities in 2022

Classification	Date	Agenda items	Whether approved	Approval rate	Attendance rate
1st General Meeting	Jan. 25	Approval of financial transactions under the terms and conditions agreed with affiliated financial companies	Approved	100%	100%
		Approval of transaction limit with stakeholders	Approved	100%	100%
		Approval of the major social contribution plans for 2022	Approved	100%	100%
		Reports (6) – Social contribution activities, etc. (Q4 2021) – Inspection results of the implementation of the Employee Code of Ethics, etc. (2nd half of 2021)	Reported	-	-
Extraordinary Meeting	Feb. 23	Reports (2) – 2021 ESG evaluation results and 2022 improvement directions – Mid- to long-term business strategies and financial goals	Reported	-	-
2nd General Meeting	Apr. 25	Approval of financial transactions under the terms and conditions agreed with affiliated financial companies	Approved	100%	100%
		Reports (5) – Compliance support activities, etc. (Q1 2022) – ESG NDR promotion plan, etc. (2nd half of 2022)	Reported	-	-
Extraordinary Meeting	Jun. 30	Deliberation of transactions between directors, etc. and the company	Approved	100%	100%
		Appointment of an independent director in charge of compliance management	Approved	100%	100%
3rd General Meeting	Jul. 21	Approval of financial transactions under the terms and conditions agreed with affiliated financial companies	Approved	100%	100%
		Reports (7) – Inspection results of the implementation of the Employee Code of Ethics, etc. (1st half of 2022) – Implementation status and plan for the Compliance Program, etc. for Fair Trade Governance	Reported	-	-
Extraordinary Meeting	Aug. 09	Deliberation on equity investment in another corporation	Approved	100%	100%
		Deliberation on the establishment of an AI research institute in North America	Approved	100%	100%
Extraordinary Meeting	Sep. 05	Approval of treasury stock exchange with another corporation	Approved	100%	100%
4th General Meeting	Oct. 18	Approval of financial transactions under the terms and conditions agreed with affiliated financial companies	Approved	100%	100%
		Approval of transactions with affiliates (brand usage fee)	Approved	100%	100%
		Approval of transactions with an affiliate (lease of the office building in Gye-dong)	Approved	100%	100%
		Deliberation of transactions between directors, etc. and the company	Approved	100%	100%
		Reports (7) – Current status of Hyundai's carbon neutrality efforts, etc. – ESG NDR activities, etc. in 2022	Reported	-	-

Major matters approved at and reported to the Sustainability Management in 2022

- Approval of large-scale insider transactions under the Monopoly Regulation and Fair Trade Act — 11 cases
- Approval of transactions with stakeholders under the Commercial Act, etc. — 6 cases
- Reports related to ESG and health and safety — 6 cases
- Reports on governance activities, etc. — 13 cases
- Prior review of large-scale investments, etc. — 5 cases

Shareholder-friendly Management

Hyundai respects the legitimate demands and suggestions of its shareholders and strives to protect their values and interests. We maintain the soundness of our decision-making process and management so that our corporate value can be duly evaluated, while also doing our utmost to ensure that our shareholders' interests and rights are not infringed upon by making management decisions in consideration of the interests of all our shareholders. To this end, we guarantee their basic right to participate in profit distribution, attend GSMs and exercise voting rights, and receive information in a regular and timely manner as stipulated in the Commercial Act. Moreover, we make active efforts to communicate with our shareholders through various IR activities, including corporate briefings and NDRs, and thus provide them with information in a transparent manner.

General Shareholder's Meeting (GSM)

STATUS OF STOCK ISSUANCE

Hyundai's total number of issued shares is 274,169,670, consisting of 211,531,506 shares of common stock and 62,638,164 shares of preferred stock. According to the Articles of Incorporation, the total number of shares that can be issued is 600,000,000 shares (par value of one share: KRW 5,000), of which 150,000,000 shares of preferred stock without voting rights can be issued. As of march 31, 2023, three types of preferred stocks are issued in addition to common stocks, but the rights for the distribution of residual assets, redemption, conversion, etc. is not provided for preferred stocks. No preferred stockholder's meeting has been held for the past three years.

Stock Issuance Status

Classification		No. of shares that can be issued	No. of shares issued	Note
Common stocks		450,000,000	211,531,506	With voting rights
Preferred stocks	Preferred stocks	150,000,000	24,113,119	Without voting rights
	2 Preferred stocks		36,120,597	Without voting rights
	3 Preferred stocks		2,404,448	Without voting rights

* As of march 31, 2023

Share Ownership

Shareholder name	Type of stock	Ownership (%)	No. of shares
1 Hyundai MOBIS	Common stock	21.64	45,782,023
2 National Pension Service	Common stock	7.13	15,077,560
3 Mong-Koo Chung	Common stock	5.39	11,395,859
4 Euisun Chung	Common stock	2.65	5,598,478
5 Employee's Stock Ownership Association	Common stock	1.46	3,095,779
6 Others	Common stock	61.73	130,581,807

* As of march 31, 2023
** There are no golden shares possess by a government institution
*** The number of stocks owned by the National Pension Service is based on the latest register of holders (as of March 31, 2023), so it may differ from the actual stock ownership status as of now.

GSM CONVOCATION AND NOTICE

Hyundai convenes a regular shareholder's meeting within three months of the end of each accounting period. An extraordinary shareholder's meeting may be convened, if necessary, by the CEO pursuant to a BOD resolution. Unless all shareholders agree, no other resolutions can be made apart from those of which they are notified in advance. When convening a GSM, a notice or electronic document stating the purpose of the meeting must be sent to each shareholder two weeks prior to the date of the meeting. Hyundai has improved its work process in order to provide shareholders with information related to GSM within a sufficient period of time, and since 2020 it has issued each convocation notice four weeks before the GSM concerned.

GSM RESOLUTION (ONE SHARE, ONE VOTE)

In accordance with the Commercial Act and the Articles of Incorporation, Hyundai grants one equal voting right per share owned by its shareholders according to the type and number of stocks held by them. Unless otherwise provided by law, GSM resolutions are made by a majority of the voting rights of the shareholders present, who must hold at least a quarter of the total number of issued stocks. Shareholders may exercise their voting rights with other shareholders serving as their proxy, and the proxy must submit a document proving their proxy right to the company prior to the opening of a GSM.

EXERCISE OF SHAREHOLDERS' VOTING RIGHTS AND THEIR DELEGATION

At Hyundai's GSM, voting rights are exercised through the shareholders' direct participation or by proxy, or by solicitation of the proxy exercise of voting rights. In order to secure a quorum for GSM resolutions and facilitate the smooth operation of a GSM on the principle of 'one share, one vote', the power of attorney form is issued to the shareholders directly, posted on the Internet homepage, or sent by e-mail.

We introduced an electronic voting system at the 52nd GSM to facilitate our shareholders' voting rights. Furthermore, we are making efforts to disclose information in a transparent manner by disclosing the number of shares for and against each item of agenda at each GSM.

APPOINTMENT OF DIRECTORS AS AN INDIVIDUAL ITEM OF AGENDA

Hyundai proposes the appointment of directors as an individual item of agenda, and they are appointed with the consent of the majority of the shareholders present at a GSM.

The 55th GSM (March 2023)

Agenda Items			Whether approved
Agenda item No.1		Approval of the 55th financial statements	Approved as proposed
Amendments to the Articles of Incorporation	No. 2-1	Modification and addition of business purposes	Approved as proposed
	No. 2-2	Reflecting the implementation of the electronic securities system	Approved as proposed
	No. 2-3	Improvement of governance	Approved as proposed
	No. 2-4	Expansion of the directors' quota	Approved as proposed
	No. 2-5	Amendment to the ground rules for directors' severance pay (including approval of the rules).	Approved as proposed
	No. 2-6	Reflecting the improvement of the dividend procedures	Approved as proposed
	No. 2-7	Addendum (March 23, 2023)	Approved as proposed
Appointment of directors	No. 3-1-1	Appointment of an independent director (Seung-Hwa Chang)	Approved as proposed
	No. 3-1-2	Appointment of an independent director (Yoon-Hee Choi)	Approved as proposed
	No. 3-2-1	Appointment of an internal director (Jose Munoz)	Approved as proposed
	No. 3-2-2	Appointment of an internal director (Gang Hyun Seo)	Approved as proposed
Appointment of an Audit Committee member	No. 4	Appointment of an Audit Committee member (Seung-Hwa Chang)	Approved as proposed
Approval of director remuneration limit	No. 5	Approval of the limit on directors' remuneration	Approved as proposed

Shareholder-friendly Management

Communication with Shareholders

CORPORATE BRIEFINGS Investor Relations Events

Hyundai holds corporate briefings in January, April, July, and October to announce its annual, first quarter, first half, and third quarter business results, respectively. In March 2022, we held the first online corporate briefing session for individual shareholders on YouTube in order to share information and strengthen communication on shareholders' major concerns.

Since the announcement of our business results in the first quarter of 2020, we have been providing webcasts that anyone can listen to in real time to improve IR accessibility for all our shareholders. The non-deal roadshow (NDR), which is held once a year, also includes an independent director within the Sustainability Management Committee in charge of protecting the rights and interests of shareholders and communicating with them about Hyundai's sustainability management activities and goals. In addition, since 2019, Hyundai has held a CEO Investor Day to present its mid- to long-term management goals and to enhance investors' understanding of the company. Meanwhile, we also conduct meetings with domestic and foreign institutional investors and minority shareholders; and, when necessary, our top management participates and communicates directly with our shareholders.

TRANSPARENT INFORMATION DISCLOSURE

Information related to Hyundai can be found on its website and through various disclosure/inquiry systems such as DART and KIND. We operate a separate English-language website for foreign shareholders and stakeholders, and disclose key information in IR News on the website. We strive to provide diverse and in-depth IR materials to enhance our shareholders' understanding of the company, while continuously improving the level of information provided by reflecting the requests of our shareholders and stakeholders. In particular, since 2019, we have disclosed our mid- to long-term financial goals and strategies, while presenting our direction for ESG improvement in the Corporate Governance Charter and corporate briefing materials.

Going forward, we will make continuous efforts to and expand the disclosure of our English-language materials for overseas investors. To this end, we are improving our IR materials and the IR website.

Shareholder Interest Protection Systems

CONTROLS RELATED TO INSIDER TRADING AND SELF-DEALINGS

To enhance transparency regarding large-scale internal transactions under the Monopoly Regulation and Fair Trade Act and self-dealings under the Commercial Act, Hyundai's large-scale internal transactions are subject to deliberation and resolution by the Sustainability Management Committee, which is composed of a majority of independent directors. It is stipulated that self-dealings with the directors and major shareholders must be carried out after deliberation by the Sustainability Management Committee and resolution by the Board.

We comply with the large-scale insider trading regulations of the Monopoly Regulation and Fair Trade Act and the self-dealing regulations of the Commercial Act. Anticipated transactions with subsidiaries and major shareholders are subject to prior approval of their transaction details, including the period and amount, by the Sustainability Management Committee and the Board. Transactions with Hyundai MOBIS, the largest shareholder, are considered ordinary transactions under normal conditions, with their limit approved for a period of less than one year.

PROTECTION OF SHAREHOLDER INTERESTS FOLLOWING CHANGES IN THE OWNERSHIP STRUCTURE OR BUSINESS

Hyundai clarifies the basic principles of shareholder rights and fair treatment in the Corporate Governance Charter, while the Sustainability Management Committee deliberates and decides on the protection of shareholder rights and interests. As well as guaranteeing shareholders' basic rights to participate in profit distribution, attend GSMs and exercise their voting rights, and receive information in a regular and timely manner as stipulated in the Commercial Act, we do our utmost to establish transparent governance by communicating with our shareholders through various channels.

In 2019, we began operating a new shareholder-friendly system, in which independent director candidates in charge of protecting shareholder rights and interests are directly recommended by general shareholders at home and abroad, in a bid to further expand their rights and interests while strengthening the company's management transparency.

Shareholder Return

SHAREHOLDER RETURN POLICY

To enhance shareholder value, Hyundai has been paying dividends whose size is determined in consideration of the company's investment, business performance, and cash flow. On January 25, 2017, we announced the mid- to long-term dividend policy through public disclosure. Under this policy, we aim to return 30-50% of the annual free cash flow to our shareholders, achieve a mid- to long-term dividend payout ratio comparable to that of global competitors, and provide a reason for significant reduction or increase of the dividend in consideration of the business environment in the future.

Subsequently, we announced our Mid- to long-term shareholder return policy on April 25, 2023 to implement a more transparent shareholder return policy. In order to expand the visibility and stability of dividends, we will achieve a dividend ratio of more than 25% (including preferred shares) based on the annual consolidated net income of the controlling shareholders, while implementing quarterly dividends from the second quarter of 2023. In addition, we plan to enhance our shareholder value and build shareholder trust by implementing an aggressive stock retirement policy, such as stock retirement of 3% of the outstanding shares held by the company at a rate of 1% over the next three years.

On the day of the Board's decision to implement dividends, we disclose it to the stock exchange, issue periodic reports, and notify the shareholders of the relevant facts, including the payment of dividends. In line with the trend of improving performance in 2021, efforts were made to ensure that the rights of shareholders were respected by paying them an appropriate level of dividend, such as by raising the amount of dividend per share at the end of the year. The table below shows the details of the dividends issued for the past three years.

ONLINE DIVIDEND INQUIRY SYSTEM Online Dividend Inquiry System

In April 2022, Hyundai opened an online dividend inquiry system designed to enhance the convenience of shareholders and allow them to check the details of dividends easily and from anywhere. By providing an online inquiry service instead of the previous dividend notification sent by mail, we have reduced the use of paper for mailing purposes, as well as carbon emissions during the delivery process, thereby conserving resources and implementing eco-friendly management.

Shareholder Return Trend for the Past 3 years

Business Year	Stock Type	Stock Dividend	Cash Dividend			Payout Ratio	
			Dividend Per Share (KRW)	Total Dividend (KRW million)	Dividend Yield	Consolidated Basis	Separate Basis
2022	Common stock	-	7,000	1,412,321	4.5%	24.9%	49.4%
	Preferred stock	-	7,050	154,579	8.8%		
	2 Preferred stock	-	7,100	246,846	8.8%		
	3 Preferred stock	-	7,050	16,609	9.1%		
2021	Common stock	-	5,000	999,057	2.4%	26.3%	201.5%
	Preferred stock	-	5,050	111,365	5.0%		
	2 Preferred stock	-	5,100	178,275	4.9%		
	3 Preferred stock	-	5,050	11,961	5.2%		
2020	Common stock	-	3,000	601,730	1.6%	55.1%	149.1%
	Preferred stock	-	3,050	67,618	3.4%		
	2 Preferred stock	-	3,100	108,909	3.4%		
	3 Preferred stock	-	3,050	7,259	3.5%		

Ethics and Compliance Management

Hyundai strives to fulfill its economic and legal responsibilities to all of its stakeholders – including customers, shareholders, suppliers and local communities – by practicing and spreading ethical management activities and promoting fair trade compliance. We have enacted the Ethics Charter and the Employee Code of Conduct to help our employees conduct in an ethical and responsible way, while also setting a compliance support online system, self-assessments, guidelines and newsletters in place as a way to raise their compliance awareness. Moreover, we are spreading the management's determination to strengthen fair trade compliance throughout the company and conduct regular employee trainings.

Hyundai Motor Group's Ethics Charter

1. We shall perform our duties based on clear and transparent standards and do our utmost to fulfill our responsibilities with integrity.
2. We shall compete fairly in the market and conduct business ethically with all parties that engage in contractual relationships with us.
3. We shall provide safe products, exceptional services and accurate information, and we rigorously protect personal information to increase customer value.
4. We shall respect our members as independent individuals and, to this end, provide fair working conditions and safe working environments.
5. We shall contribute to sustainable development by fulfilling our social & environmental responsibilities as a member of society, so that diverse stakeholders may prosper together in harmony.

Spreading Ethical Management

ETHICS CHARTER

Hyundai has established the Ethics Management Charter with the aim of setting an example as a global leading company that conducts its business based on the principles of ethics and compliance. The following Five Guiding Principles of the Hyundai Motor Group Ethics Charter serve as the guidelines on ethical management which Hyundai employees must follow to when dealing with various stakeholders such as customers, shareholders, suppliers, and members of local communities.

CODE OF CONDUCT

Hyundai Motor Company Ethics Charter and Code of Conduct

Hyundai Motor Company Ethics Charter and Code of Conduct is designed to increase ethical awareness among its employees by providing them with specific procedures and measures related to the implementation of ethical management. The Code of Conduct specifically covers corruption and bribery, discrimination, information confidentiality, conflicts of interest, antitrust/anti-competitive practices, money laundering and insider trading, environment, health and safety, and whistleblowing.

ANTI-CORRUPTION/BRIBERY POLICY

Anti-Corruption/Bribery Policy of Hyundai Motor Company

Anti-Corruption/Bribery Policy of Hyundai Motor Company was enacted in June 2021 to prevent risks associated with corruption and bribery and guide its members towards upholding ethical and moral values. The policy includes such guidelines as the prohibition of all forms of bribery and solicitation, the eradication of facilitation payments, the prohibition of political donations and sponsorships, and rules on charitable donations and sponsorships in accordance with the company's standards and procedures. It also contains a clause which stipulates that the company shall establish a reporting system accessible to all employees and stakeholders to monitor corruption and bribery risks at all times and to take the necessary measures immediately in the event of violations.

INTERNALIZATION OF ETHICAL/COMPLIANCE MANAGEMENT

Employee Performance Management and Promotion (Ethics/Compliance)

Hyundai includes items related to workplace ethics in its employee competency evaluation. The core elements of the evaluation include respect for talent and compliance with the established norms, while the evaluation of leaders' competency also includes their principles and convictions. In addition, when reviewing employees' prospects for promotion, we exclude from promotion those who have received severe penalties related to ethics/compliance, which is a common deliberation item for promotion and a mandatory item that is applied equally to all our executives and employees.

Disciplinary System (Ethics/Compliance)

In accordance with Article 11 of the company's internal rules relating to workplace ethics, entitled "Disciplinary Actions for Violations of the Code of Ethics," violators of the Code are dealt with in accordance with the regulations of the Internal Disciplinary Committee, and may be subject to disciplinary measures such as dismissal, suspension, or a reduction of their salary.

ETHICS AUDIT AND REPORT

Hyundai strives to build an ethical culture and prevent risks related to business ethics and compliance. To this end, we have established the Compliance Support Advice Center within its compliance management system to ensure employee compliance and report violations of the law. Furthermore, with the goal of establishing and realizing transparent management, we operate various reporting channels including the Cyber Audit Office to handle reports of violations of ethical management, such as unfair trade practices, unreasonable demands for or provision of money, goods or entertainment, and misuses and abuses of authority and solicitation. If a violation of Hyundai Motor Company Ethics Charter and Code of Conduct is detected, the employee(s) in question may be subject to disciplinary action that could lead to the eventual termination of their employment, pursuant to Article 64 of the Employment Rules. In addition, we monitor our employees' implementation of the Code of Ethics throughout their performance in its semi-annual and ad hoc audits, and reports the results to the Sustainability Management Committee under the BOD.

PROTECTION OF WHISTLEBLOWERS

Hyundai guarantees the protection of whistleblowers related to employee business ethics and compliance in its Ethics Charter, Code of Conduct, and internal rules relating to workplace ethics regulations, while complying with the relevant laws. We have also put in place measures for protecting the confidentiality of whistleblowers, and posted the related information, and we strictly prohibit the imposition of any disadvantages or retaliatory acts against them. In the event that protection for a whistleblower is violated, such as cases of retaliation against internal whistleblowers, the company may impose aggravated punishment on the offenders in accordance with Article 9 of Chapter 3 (Handling of violations of the regulations) of the regulations on workplace ethics.

INTERNALIZATION OF CODE OF CONDUCT

Hyundai requires all its employees to pledge compliance and ethical management on a regular basis in an effort to help them internalize the company's Code of Conduct. In 2022, we used our online platform and in-house broadcasting system to conduct ethics education aimed at raising their awareness of major ethical issues such as anti-corruption, fair trade, and cyber security. The Sustainability Management Committee within the BOD, which was expanded and reorganized in March 2021, is in charge of overseeing the implementation of ethical management, as well as passing resolutions on the revision of our major policies and codes of practice related to ethical management.

CODE OF CONDUCT INVESTIGATION

In 2022, Hyundai took disciplinary action (such as dismissal, suspension, reduction of salary, reprimand, warning, etc.) in 12 cases related to corruption or bribery, discrimination and harassment, misuse of customer information, conflicts of interest, money laundering and insider trading.

Reporting Channels

Cyber Audit Office	By Phone +82-2-3464-3500
By Fax +82-2-3464-8813	By Mail Hyundai Motor Group Audit Office

Whistleblower Protections

1. **Confidentiality:** Personal information of the informant cannot be disclosed to the public without the informant's consent.
2. **Guarantee of status:** The employer or relevant department is prohibited from imposing any disadvantages or discriminating against the informant because of supplied information, statements and submission of evidence.
3. **Reduction or exemption of liabilities:** If any mistake or negligence of the informant are discovered during the investigation process, the liabilities of the information for such faults or negligence may be reduced or waived.

Hyundai Motor Company Cyber Audit Office

Ethics and Compliance Management

Compliance Management & Compliance Support System

HMC COMPLIANCE MANAGEMENT

Compliance management embodies the management spirit by which the company pursues transparent and fair business performance in order to comply with the established norms and uphold sound business ethics in its management and corporate activities. Hyundai established its compliance control standards for compliance management in 2012, and since then it has since introduced a compliance support system including the appointment of the Chief Compliance Officer under the Commercial Act, while carrying out various compliance support activities.

COMPLIANCE SUPPORT SYSTEM

Compliance Control Regulations and Policies The Compliance Control Standards prescribe the standards and procedures for compliance control with which the company's executives and employees must comply when performing their duties in order to ensure that the company complies with the laws and regulations and executes its corporate management practices properly. Hyundai conducts compliance support activities based on its own compliance control standards. In addition, through its own Ethics Charter and Code of Conduct, Hyundai presents the standards for the conduct of its executives and employees, while ensuring that they comply with the company's other compliance-related policies, such as the anti-corruption/bribery policy and the personal information protection policy.

Compliance Support Organization At Hyundai, the Chief Compliance Officer is in charge of compliance support activities to prevent legal risks and report the details and results of the effectiveness evaluation to the board of directors on a regular basis. Furthermore, we appoint each departmental head as the compliance officer of his or her respective department so that he or she can carry out compliance control activities within the department. In 2022, we appointed an independent director to take charge of compliance management and act as an advisor and supervisor throughout the compliance monitoring system.

Monitoring Hyundai conducts departmental compliance inspections in various legal areas, such as anti-corruption and personal information, so that each department can diagnose its own work-related legal risks. In addition, we encourage each department to improve its identified risks. In 2022, we launched an individual compliance self-checking system, and expanded the subjects of the inspection to include all senior employees in general, research, and legal positions.

PROVIDING INFORMATION FOR COMPLIANCE MANAGEMENT

Distribution of Compliance Guidelines Hyundai has published more than forty types of compliance guidelines for its different business areas in order to provide guidance on the main contents of the related laws and regulations that its employees should know when performing their duties. In 2022, we published the new NFT/Metaverse Guidelines and the guidelines on compliance with the Serious Accidents Punishment Act, while completely revising the Guidelines for Preventing Illegal Cartel Conduct specified in the Monopoly Regulation and Fair Trade Act. In addition, we have produced and distributed a compliance management handbook, which explains the necessity of compliance management and provides specific ways of implementing it, for our executives and employees. We also publish a compliance newsletter on a regular basis to introduce legal issues and regulatory trends related to the automotive industry to our employees.

Compliance Education Hyundai provides both regular and ad hoc compliance training for its executives and employees, including new recruits, newly promoted employees, key employees, and expatriates. Notably, in 2022, we conducted online compliance training on the Serious Accidents Punishment Act for employees in general, research, and legal positions along with online compliance training on the necessity of compliance management and major legal risks for new team leaders and senior-level employees in an effort to prevent the various types of legal risks that may arise in the course of business.

DIFFUSION OF A COMPLIANCE CULTURE

Hyundai aims to promote a culture of compliance by adopting diverse approaches and distributing the relevant contents. Through the online system, we provide legal advice, contract reviews, and compliance consultation to our employees at all times, while providing standard contracts (30 Korean contracts, 20 English contracts) for each business area to ensure that our employees can perform their duties in compliance with the law. In addition, to raise our employees' awareness of the importance of compliance and expand the culture of compliance, we encourage them to sign the pledge to practice compliance and ethical management, and offer them rewards for compliance.

EVALUATION OF THE EFFECTIVENESS OF THE COMPLIANCE CONTROL SYSTEM

Each year Hyundai has a third-party evaluate whether its compliance control standards and related systems are effectively designed and operated to prevent or detect legal risks in a timely manner, and undertakes improvement activities based on the results of the evaluation.

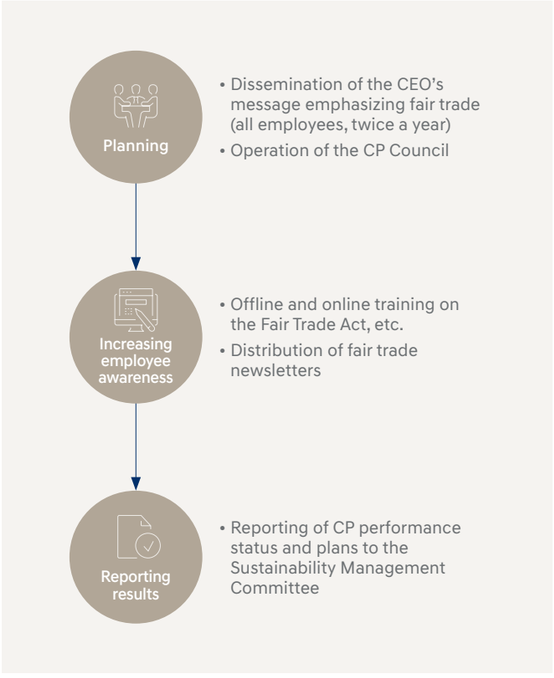
Compliance Program

IMPLEMENTING THE COMPLIANCE PROGRAM

Hyundai promotes fair and transparent management starting with its CEO's commitment to compliance program (CP) in the first and second half of every year. In this way, Hyundai spreads its top management's strong CP commitment to all of its employees in addition to getting its own Guidelines on CP, which are applied to their actual work performance.

In addition, we appoint a CP officer at a BOD meeting to manage and supervise the company's overall performance in terms of fair trade. In order to strengthen the responsibilities and obligations of each business site, we report the fair trade self-compliance operation performance and plans for the following year to the Sustainability Management Committee, a committee within the Board, on a semi-annual basis while fostering a CP culture by offering various fair trade training programs and newsletters company-wide.

CP Implementation Process



FAIR TRADING EDUCATION

Hyundai not only conducts fair trading education for its employees every year, but also informs new employees of the importance of complying with the Fair Trade Act from the moment they join the company. We also conduct annual CP training for all new executives and employees working in areas that are subject or closely related to the fair trade laws. In addition, we regularly send out fair trade newsletters so that our executives and employees can understand and practice fair trade-related precautions. In particular, in 2022, we continued our efforts to improve employee compliance awareness by inviting external experts to conduct training on such topics as collusion, subcontracting, and technology misappropriation.

Fair Trading Education Performance

Year	Number of training sessions	Number of participants
2019	8	1,429
2020	3	8,456
2021	4	8,261
2022	4	1,779

* Replaced by online training due to COVID-19 in 2020 and 2021

FAIR TRADE AND ANTI-CORRUPTION PROGRAMS FOR SUPPLIERS

In the Ethics Charter and Code of Conduct, Hyundai includes contents such as bribes and customary fees, including rebates, to ensure that its own employees and those of its suppliers adhere to the principles of transparent and fair trade. We also conduct anti-corruption risk checks and report the results to the Sustainability Management Committee under the BOD.

Risk Management

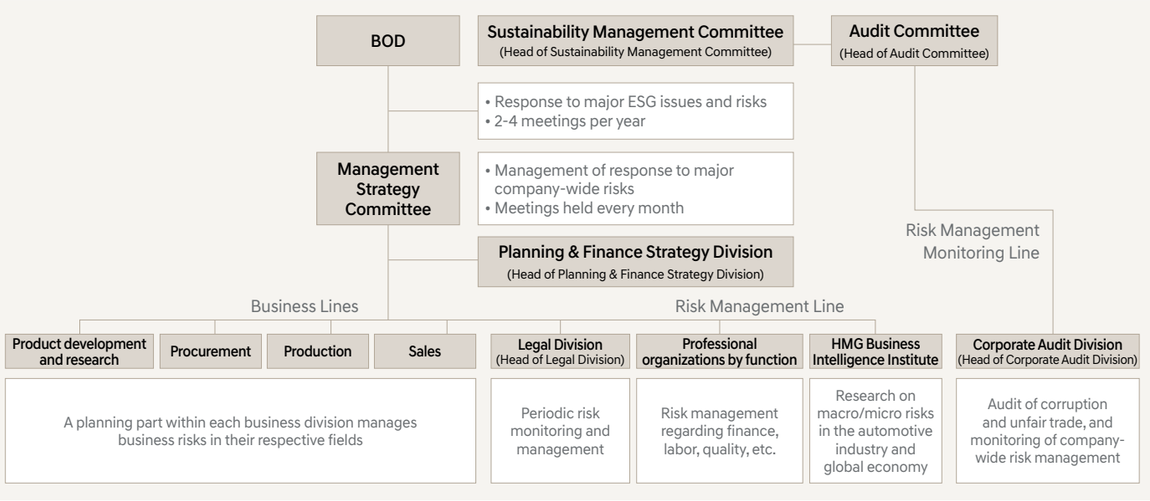
Hyundai is facing a situation in which it must respond to rapidly changing internal and external business environments due to increasing ESG and management risks, in addition to the automotive megatrends such as electrification, autonomous driving, and connectivity. The new paradigm presents an opportunity for Hyundai to leap forward as a global leading company while also entailing risks due to uncertainty. We therefore strive to build proactive risk management culture based on a company-wide risk management and monitoring system, risk-linked employee performance evaluation, and employee training on related topics. Going forward, we make concentrated efforts to turn crisis into an opportunity and thus leap forward on the back of a thorough analysis of the core risks and strengthening of our risk management process.

Global Risk Management System

RISK MANAGEMENT DIRECTION

The automotive industry is closely intertwined with both internal and external changes related to the government's industrial policies and economic fluctuations. To minimize the risks that may arise during these transition, it is crucial to establish a responsive system to comply with government's regulatory standards and guarantee market competitiveness by ensuring high-quality products with superior vehicle performance, greater safety, and competitive pricing. Hyundai has been striving to enhance its comprehensive capabilities in response to the increasingly stringent regulations related to safety, the environment and the automotive industry by strengthening its environmental management, transitioning products and business structures towards electrification, improving resource circulation systems, and reinforcing safety management systems. Furthermore, we have demonstrated our commitment to improving risk management system based on a precise analysis of the global market. Our commitment to sustainable growth through more effective risk management is also reflected in our medium- to long-term strategy – 2025 Strategy. By 2025, we aim to achieve such goals as winning leadership in electrification through the 'Smart Mobility Device' strategy; innovating cost structures; capturing the hydrogen fuel cell-based market; enhancing product competitiveness and customer satisfaction; ensuring stable profits; and mitigating supply chain and regulatory risks. We will respond comprehensively to these goals to achieve successful outcomes.

Risk Management System



COMPANY-WIDE RISK MANAGEMENT

The ongoing Russia-Ukraine War, concerns about a post-pandemic economic slowdown, and other uncertainties in the international geopolitical landscape have exposed businesses to various risks. Amid such a complex situation, Hyundai has implemented a company-wide risk management system that ensures proactive and comprehensive responses to risks across different areas. This system involves the participation of all its members – from staff to the board of directors and key executives (division heads and above including C-suite) – in risk management. Company-wide risks are discussed by the Management Strategy Committee, which is composed of key executives, including the CEO, on a monthly basis. Each division has established a risk reporting line, thereby enabling them to share information on activities aimed at managing identified risks with the CEO and the BOD.

Furthermore, we conduct risk response training for all employees in the form of a video session that provides updates on the company's overall response strategy, such as the 2025 Strategy, to prepare future crises and opportunities, as well as providing separate training on risks in the ESG domain. In addition, we share the latest major risk trends through internal risk monitoring reports such as the Weekly B.I. Briefing, thereby promoting risk management education. Hyundai also conducts research projects on the risk status and outlook related to various key issues such as market trends, climate change, and legal developments. Through the project, we derive proactive risk response strategies for managing risks and identify insights that can leverage opportunities as active value creation opportunities.

COMPANY-WIDE RISK SHARING

HMG Business Intelligence Institute, Hyundai's in-house research institution, analyzes specific scenarios involving macro and microeconomic risks, as well as industrial risks, on a medium-term (potential) and long-term (over 3-5 years) basis. According to the findings of internal analysis, significant risks that could have a substantial impact on Hyundai's business activities have been identified, including an overall reduction in consumer and investment capacity due to the economic slowdown and deepening recession in the US, Europe and China, as well as risks related with geopolitical factors affecting the supply chain of raw materials. Based on the risk analysis, Hyundai identifies issues that could have a significant impact on the company's finances, such as an increased cost burden and a decline in profitability due to a contraction of demand. We also actively explore strategic response measures to address these issues.

RISK MANAGEMENT BY DIVISION

Hyundai operates a segmented risk management system at the division level, in addition to its company-wide approach. Within each business unit organized by value chains, there are dedicated sales organizations responsible for different regions, such as Korea, China, the Americas, Europe-Russia, and India-Africa and the Middle East. The planning organizations prioritize the assessment and management of market risks specific to each region. Furthermore, there are separate risk-related departments that operate independently from the business units, such as the Legal Office, which is responsible for managing legal risks; and various specialized functional organizations responsible for managing finances, human resources, quality, etc. In addition, the HMG Business Intelligence Institute conducts research on macro and microeconomic risks, and the Audit Office under the Audit Committee carries out continuous monitoring of acts of corruption and unfair transactions.

In order to boost the efficiency of each department's risk management system, Hyundai has established a risk identification and reporting procedure for employees. Once identified, risks are managed in the order of identification/check, report and preemptive response through weekly/monthly/ongoing risk assessment meetings. In addition, we incorporate risk criteria into the product development and approval process in order to manage product-level risks more effectively. For significant issues that have a direct impact on overall business operations, separate risk review meetings are organized to have a monthly meeting to discuss and address risk-related matters. Separate risk review meetings include sales and production meetings, product management meetings for overseeing new car development, and product strategy meetings.

OPERATION OF RISK REVIEW

Hyundai operates risk review council to proactively identify and eliminate risk factors throughout its business operations. In April 2022, the Integrated Risk Management CFT (Cross Functional Team) was established under the direct supervision of the CEO to ensure swift responses to both internal and external risks. This company-wide CFT includes representatives from various departments, such as strategy, planning, purchasing, and development, aimed at facilitating collaboration and decision-making. Furthermore, the Sustainability Management Committee and the ESG Committee, both of which operate under the supervision of the BOD, Hyundai's top decision-making body, receive biannual reports on risks identified in the ESG domain, and engage in discussions, deliberations, and decision-making processes related to the reported significant issues. They also formulate plans and monitor the progress of their implementation, playing a vital role in operating effective risk review council. Also Hyundai conducts external review on its internal risk response strategies and process such as EV optimal price strategy, operation process. The external reviews are conducted by consulting firms.

Risk Management

Management of Major Non-financial and Financial Risks

ANALYSIS OF RISK SENSITIVITY AND STRESS

Hyundai sets the priorities for risk management across various non-financial and financial categories, including company strategy, operations, finance, regulations and reputation by taking risk appetite into consideration. We analyze sensitivity to these risks and conduct stress test to assess the impact of these risks on the company. Based on this analysis, we select key risks that could significantly affect business operations and finance, while the Management Strategy Committee, comprising C-level executives including the CEO, reviews the results of the analysis of key risks on a monthly basis and formulates response plans. In particular, we focus on proactively preventing and/or mitigating key risks. If prompt responses to key risks are inadequate, they may result in constraints on business activities and financial losses. We therefore place a strong emphasis on proactive measures to prevent and mitigate key risks.

REGULATORY RISKS

Automobile companies are exposed to various regulatory risks related to their business activities, as well as the environmental, safety, quality, and certification aspects of their products. These regulations have significant impacts not only on their operations but also on their financial performance. In particular, fleet-wide CO_2 emission standards or corporate average fuel economy standards, which are being implemented in major countries, are being tightened continuously in order to achieve the carbon reduction targets of those countries. In February 2023, the European Union (EU) Parliament adopted an ambitious targets for reducing CO_2 emissions from passenger cars. The new target sets the path towards zero CO_2 emissions for new passenger cars by mandating a 55% reduction by 2030 compared to 2021 levels, and 100% by 2035. To meet these targets, a significant expansion of electric vehicles (EVs) is deemed necessary.

Hyundai, in response to the CO_2 emissions or fuel efficiency standards in major countries, has been actively strengthening its EV lineup and sales. We also incorporate regulatory compliance volumes, including EV volumes, into our short- and long-term sales plans. We regularly monitor and evaluate our compliance progress based on monthly sales performance. In addition, we take measures to minimize regulatory risks, such as adjusting sales volumes and utilizing accumulated credits, in preparation for potential non-compliance with the regulations.

GEOPOLITICAL AND GEOECONOMIC RISKS

Political and policy-related risks, such as the serious impact on Hyundai's sales in China due to the Korean government's deployment of THAAD (Terminal High Altitude Area Defense) in 2017, have significant implications for business operations and finances. As such, a preemptive response is crucial. Amid escalating conflicts and tensions between Russia, China, and Western countries, protectionist policies based on the U.S. Inflation Reduction Act (IRA) and the EU Critical Raw Materials Act (CRMA), including the establishment of self-sufficient supply chains for critical raw materials, including battery materials, are posing significant risks to Hyundai.

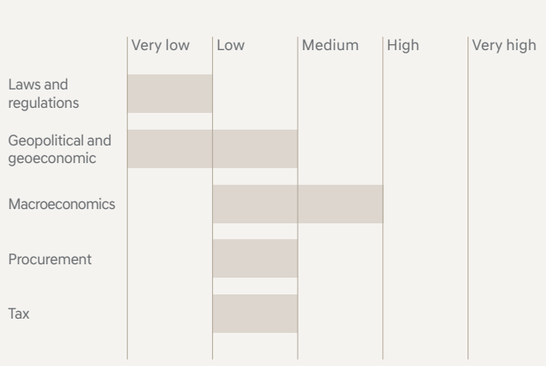
Hyundai has established a dedicated organization called the Policy Coordination Office (PCO) to monitor political and policy risks in key countries such as Korea, the US, the EU and China. The PCO proactively identifies and analyzes political and policy risks and formulates appropriate responses. In particular, Hyundai is analyzing global supply chain competitiveness in response to protectionist policies, including subsidies related to establishing domestic production and securing key raw materials supply chains in the US and the EU. We are also seeking strategies aimed at increasing local production shares and establishing local integrated production systems within major countries.

PROCUREMENT RISK

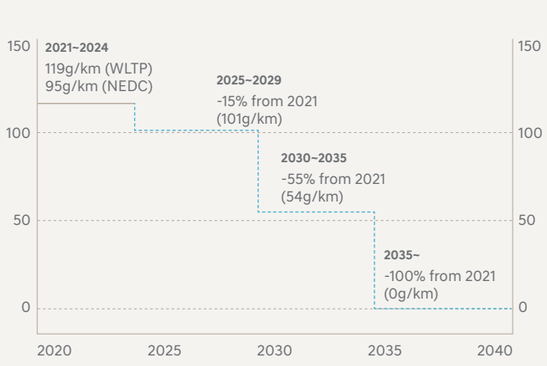
The shortage of vehicle semiconductors, leading to prolonged production delays for automotive companies, is an example of how supply uncertainties for specific components can escalate into risks that delay overall production. In addition, the recent increase in raw material and energy prices has caused a rise in production costs, negatively impacting profitability. In particular, for EVs, which consume approximately six times more minerals than internal combustion engine vehicles (ICEVs), the supply-side risks such as mineral shortages have intensified as the production of EVs has surged among automotive companies. Furthermore, as new mining developments increase, there is growing demand among stakeholders for responsible mineral sourcing due to the increase in cases of environmental and human rights violations associated with mining activities.

Hyundai is addressing material and component procurement risks through such measures as securing an adequate inventory for strategic materials and components, promoting the in-house production of key components, and expanding its direct purchasing of strategic materials. Moreover, to address the risk of rising raw materials prices, we established a raw material coordination body early in 2023, which involves the participation of all departments, including the purchasing, research institutes, sales, and finance departments. This centralized approach aims to streamline the response system for raw material-related issues. We have also identified six major categories for raw materials management and established a system for real-time monitoring of market conditions and automated calculation of profit and loss impacts. These initiatives should enable Hyundai to respond actively to the profit and loss risks caused by fluctuations in raw material prices.

Hyundai's Risk Appetite



EU CO_2 Emission Reduction Targets for New Passenger Cars



Analysis of IRA's Sourcing Requirements for EV Battery Components and Critical Minerals

	2024	2025	2026	2027	2028	2029
Components	60%	60%	70%	80%	90%	100%
	Percentage of components that must be produced or manufactured in North America					
Critical minerals	40%	60%	70%	80%	80%	80%
	Percentage of critical minerals that must be mined and processed in the U.S. or US ally with FTA					

Risk Management

MACROECONOMIC RISKS

Automobiles are a prime example of consumer goods that are highly sensitive to macroeconomic risks. They are greatly influenced by economic conditions due to such factors as consumer spending and business investment. Major countries have implemented quantitative easing and experienced supply chain disruptions due to the economic downturn caused by the COVID-19 pandemic, while events like the Russia-Ukraine War have led to even greater inflationary pressures. In response to the high inflation crisis, major countries, particularly the United States, have implemented rigorous monetary tightening policies, with the result that the global economy is now facing the '3 Highs' – high inflation, high interest rates and high exchange rates. These policies are expected to further accelerate economic downturns in major countries, and some emerging economies with high debt levels and weak fundamentals may also face economic crises.

Hyundai has strengthened its ability to predict changes in demand due to economic cycles by creating a model based on macroeconomic and industrial risk analysis, which was primarily developed by its specialized organization, the HMG Business Intelligence Institute. It utilizes leading indicators closely related to the demand for new vehicles to predict and analyze both the business cycle and medium-term demand for new vehicles. In addition, it has analyzed various global economic crisis scenarios, assuming the simultaneous occurrence of macroeconomic risks such as accelerated US interest rate hikes, a European economic downturn, and deepening uncertainties in the Chinese economy. To effectively address macroeconomic risks and prepare for the worst-case scenario, we have formulated company-wide response measures, including production and sales adjustments, the exploration of new alternative markets, and the strengthening of new model launches.

Path and Impact Analysis by Global Economic Crisis Scenario

Scenario	Occurrence factor/path	Duration and recovery period	Intensity of crisis
Baseline	• Continued US interest rate hikes due to high inflation – Global stock market and exchange rate volatility, and a sharp decline in asset prices – Increased capital outflows from emerging markets	• After intensified sluggishness in the first half of 2023, signs of recovery are observed in the second half	• The global economic downturn worsens amid financial uncertainty
Downturn	• Baseline scenario + deepening economic downturn in Europe – Gas crisis amid worsening European interest rate hikes • Some emerging economies experience financial and economic crises	• In 2023, a mild economic slowdown occurs in the middle of the year – Gradual recovery from the downturn in the US and Europe starting from 2024 – An economic crisis occurs in some emerging markets → Aftereffects persist until 2024	• Global economic slump intensifies, and financial turmoil escalates (approaching global financial crisis levels)
Crisis	• Downturn scenario + worsening economic uncertainty in China – Expansion of the post-COVID-19 sequelae in China and collapse of the real estate bubble • An economic downturn in the US and Europe continued and intensified • Spread of the economic crisis across emerging markets	• The economic downturn continues until 2024. – Gentle signs of recovery in the US and Europe after the second half of 2024. – Crisis spreads across emerging markets → Gradual easing expected after 2025.	• A global economic crisis occurs (at pandemic crisis levels)

MAJOR FINANCIAL RISKS

Due to the ongoing trend of interest rate hikes initiated by the US in 2022, the interest costs associated with global funding have been increasing. In particular, the strength of the US dollar has led to a depreciation in the currencies of major countries, and the continuous rise in the KRW-USD exchange rate and increased financial market volatility have accelerated these trends. To maximize shareholder value and reduce capital costs, Hyundai strives to maintain an optimal capital structure. In addition, we conduct sensitivity and stress tests to evaluate the impact of market risks (exchange rates, interest rates, and prices), credit risk, liquidity risk, derivative risk, and other related risks on Hyundai. We also have signed derivative contracts and use them as a means of hedging risks so as to manage identified risks more effectively.

Hyundai has been making continuous efforts to mitigate financial risks arising from market uncertainties by monitoring debt ratio for short-term and long-term borrowings of each of its subsidiaries, with an aim to optimize our borrowing structure. In relation to exchange rate risks, we identify exchange rate risks based on various scenarios involving the appreciation or depreciation of the Korean won. We also establish preemptive measures for expanding hedging activities and devise plans to offset potential foreign exchange losses, with the goal of managing financial risks resulting from currency fluctuations.

Impact Analysis of Exchange Rate Fluctuations on Pretax Income in Major Countries

(Unit: KRW million)

Currency	5% increase	5% decrease
USD	111,585	(111,585)
EUR	20,435	(20,435)
JPY	(3,585)	3,585

Impact Analysis of Interest Rate Fluctuations on Pretax Income

(Unit: KRW million)

Classification	1% increase	1% decrease
Cash and cash equivalents	35,897	(35,897)
Financial assets at fair value through profit or loss	1,644	(1,644)
Short-term and long-term financial instruments	15,584	(15,584)
Borrowings and debentures	(99,610)	99,610

Major Non-financial and Financial Risks

Classification		Key risk factors	Mitigation measures
Non-financial risks	Regulatory risks	Risks of regulatory violations due to product and workplace-related regulations (CO_2 regulations, etc.), including environment and safety	Reflecting regulatory response volume in short- and mid- to long-term business plans, etc. in response to fleet-wide emission standards and corporate average fuel economy standards, etc.
	Geopolitical and geoeconomic risks	Risk of restrictions on sales and exports due to protectionist policies to establish a self-sufficient supply chain for key raw materials centered on the US and Europe	Increasing the proportion of local production and establishing a self-sufficient local production system, etc.
	Macroeconomic risks	Risk of a decline in new car demand due to a global economic downturn	Reinforcing demand change forecasting due to economic conditions, analysis by scenario of global economic crisis, etc.
	Procurement risks	Cost increase risk due to increase in procurement costs, production delay/stop risk due to supply shortage	Securing adequate inventories of strategic materials and core parts, internalizing core parts, expanding direct purchases of strategic materials, etc.
	Operational risks	Risks related to business operations such as product/technology development, production, and sales	Identifying, analyzing, and responding to operational risks in the planning department of each division
Financial risks	Exchange risks	Exchange risk due to major foreign currency market fluctuations (USD, EUR, and JPY)	Eliminating risks by matching foreign exchange inflows and outflows, and managing exchange risks based on an analysis of Korean won appreciation/depreciation scenarios, etc.
	Interest rate risks	Rising interest costs on borrowings due to interest rate hikes in major countries such as the U.S.	Mitigating the risk of rising interest rates by implementing such measures as prioritizing borrowing and repayment by corporations with ample liquidity and enhancing financial soundness, etc.
	Liquidity risks	Risk of insufficient cash flow and overexposure to market risk	Drawing up long-term and short-term funding plans, establishing a funding system, managing the duration of financial assets, etc.
	Tax risks	Possible tax-related risks in overall business activities	Fulfilling the tax obligations in accordance with each country's laws and regulations

Risk Management

TAX STRATEGY

Hyundai recognizes that tax risk management is a prerequisite for sustainability management, and that compliance with the tax laws plays an important role in securing customer profits, maximizing shareholder profits, and contributing to national finances. Therefore, as a taxpayer, we are faithfully fulfilling our tax obligations. We also respect the principle of fair taxation by tax authorities and strive to comply with the tax rules and principles established by the tax authorities of the countries in which we operate.

MANAGING TAX RISKS

Strict compliance with the laws is the core of Hyundai's tax risk management policy. The company faithfully provides all the evidence requested by tax authorities to take the lead in creating a transparent tax culture. Hyundai strictly prohibits the use of tax avoidance schemes such as the creation of non-existent commercial entities and the utilization of tax havens. We do not engage in any practices that involve transferring value to low-tax jurisdictions. Furthermore, as a global company, we prevent tax risks in advance by identifying differences in the tax laws of different countries and their intention and by analyzing their respective dispute risks. Good example includes the arm's length principle as a way to prevent the risk of double taxation arising from competition for taxation rights between tax authorities in advance.

POTENTIAL RISKS

Digital Service Competition Expected to Intensify due to Stricter Regulations on Data Sharing

Risk Context

With the advancement of connectivity and autonomous driving technologies, vehicles are gradually being transformed into digital devices. The emergence of mobility service businesses based on data generated by automobiles is becoming a new area of focus for automotive companies. However, starting with the enforcement of the EU General Data Protection Regulation (GDPR) in 2018, the data-related regulations are being increasingly strengthened in major countries. In particular, the EU has taken steps to address the current industry practice whereby the legal ownership of data generated through the use of products or services is unclear and the usage rights are exclusively retained by IoT (Internet of Things) product manufacturers. To tackle this issue, the EU has introduced a draft data law that establishes the conditions for data sharing, and imposes data sharing obligations on manufacturers. When this law takes effect in the future, manufacturers who currently have data will be legally obligated to provide data between B2C, B2B, and B2G when certain conditions are met, and fair contracts related to data access and use between companies will be mandatory. Due to personal information protection measures and data-sharing obligations, there is an increased regulatory risk regarding the utilization of vehicle data. At the same time, it is anticipated that competition in the mobility service market will intensify due to the future sharing of vehicle data with external companies. Furthermore, the expansion of data requests from external sources raises concerns about the management of critical data, such as customer information and trade secrets, as well as increasing the risk of cyber safety issues, including hacking incidents, during the data sharing process.

Hyundai's Approach

Hyundai has established a company-wide task force team (TFT) to address the strengthened data regulations in major countries, including the EU. In the short term, we plan to revise the internal criteria and management systems regarding the types and scope of publicly available data for vehicle data generated when driving in order to comply with the EU data law. We will also strengthen security systems in the data sharing process in order to minimize potential risks to cyber security and safety that may arise from increased data sharing with external parties. To preemptively prevent a decline in service competitiveness due to the weakening of Hyundai's exclusive position in the utilization of our vehicle data, we are making continuous efforts to improve the Hyundai Developers platform, an open platform for vehicle data, in collaboration with external service developers, with the aim of establishing Hyundai's own digital service ecosystem. Furthermore, we plan to secure our own capabilities in the field of data intelligence, leveraging data processing, analysis, and services, to generate high-value businesses, which will in turn help sustain and strengthen our digital service competitiveness.

Increased Regulatory Risks Associated with the Establishment of a Plastic Circular Economy in Europe and Korea

Risk Context

The European Commission, under its circular economy strategy for plastics published in 2018, has set ambitious targets for managing plastic packaging and waste. Its principal goal is to reuse or recycle 100% of plastic packaging and to recycle over 50% of all plastic waste generated in Europe by 2030. To achieve these objectives, the EU implemented a ban on major single-use plastics (SUPs) in 2021. It has also been strengthening its regulations on the use of plastics in vehicles, and is currently pushing for the enforcement of regulations that would require the use of recycled plastics in new vehicles. In Korea, the government is presenting the establishment of a plastic circular economy as a major national task, so that it is expected to change the current recommendation on the recycling of scrap cars to a 95% recycling mandate, in addition to introducing the mandatory use of recycled plastics in new cars, as is already the case in Europe. Once Korea has enforced the regulation mandating the use of recycled plastic materials in new cars, it is expected that Hyundai will face multiple risks such as the risk of an interruption of production due to a rise in the price of recycled plastic materials combined with a shortage in supply, as well as regulatory risks stemming from a shortage of high-quality recycled plastics that meet the safety and quality requirements for new cars. In particular, the regulatory risks are most likely to increase when Korea enforces a 95% compulsory regulation on the recycling rate of scrapped cars, like the European ELV (End-of-Life Vehicles) regulation because, unlike in Europe, if Korea implements the pre-shredder method (the manual dismantling and recycling of the parts of a scrapped car), there will be limits to the disposal and recycling of scrapped cars in large quantities.

Hyundai's Approach

Plastics make up the second largest segment after metals, accounting for 17% of all vehicle materials on average on an ICEV basis. However, the recycling rate of plastics used in vehicles is low because they are composites. Hyundai has been making active efforts to implement various plastic recycling activities with the aim of establishing a closed-loop system for recycling end-of-life plastic components in vehicles, while concurrently promoting the recycling of plastic waste from other industries through an open-loop system. We are developing a mid-to long-term plan for the exploration of new waste resources and the development of recycling technologies. We are also formulating strategies to incorporate recycled plastics into our upcoming vehicle models by leveraging our internal resources. In addition, Hyundai is establishing a monitoring system to track the implementation of recycled plastics, which will ensure efficient management of the entire process of utilizing recycled plastics. We also have developed technologies for recycling discarded fishing nets, a major marine pollutant, and applied them to carpets and plastic components. In order to promote the widespread application and reuse of these technologies, Hyundai is seeking external collaborations and building partnerships with other businesses including maritime industries.

Risk Management

Personal Information Protection

PERSONAL INFORMATION PROTECTION GOVERNANCE

Privacy Policy of Hyundai Motor Company

Hyundai has set in place a framework for systematic personal information protection governance and has formed the Security Compliance Team, a dedicated body that is responsible for handling tasks related to personal information protection. The company has also appointed a Chief Information Security Officer (CISO) and Chief Privacy Officer (CPO), who serves as the heads of the Hyundai Security Center and hold overall responsibility for personal information protection. Each division and business unit has designated departments, personnel, and responsible individuals who are involved in handling tasks related to personal information protection. The Security Compliance Team develops and distributes policies and guidelines, ensuring continuous management and monitoring of personal information protection. In 2022, there were no cases in which our customers' personal data were used for purposes other than the "purpose of collecting and using personal information" as specified in our privacy policy for users, etc. Furthermore, we have established a Personal Information Protection Committee composed of key service operation teams from various divisions and dedicated departments. The Committee meets annually to discuss major issues and matters related to personal information protection.

MANAGEMENT MEASURES FOR PERSONAL INFORMATION PROTECTION

Hyundai applies various management safeguards to ensure the secure protection of customers' personal information. In addition to establishing a company-wide personal information protection policy and operating a dedicated team, we conduct regular and ad-hoc training programs using newsletters, videos, and other means to provide education to all employees and outsourced partners involved in the relevant tasks. Furthermore, when developing or modifying personal information processing services or systems, we carefully assess their impact on personal information and analyze potential vulnerabilities at the design stage, thus allowing them to establish a response system that minimizes threats and ensures the construction of a secure framework.

TECHNICAL MEASURES FOR PERSONAL INFORMATION PROTECTION

Hyundai applies various technical measures to enhance the effectiveness and security of personal information protection. We ensure that customer data are transmitted securely by encrypting communication channels and customer information. Even in the event of external breaches, the use of customers' personal information is made impossible. In addition, we have put in place security solutions and intrusion prevention/detection systems, regularly update them, and conduct periodic monitoring as a way to defend against external threats such as hacking attempts.

INTERNAL INSPECTION AND THIRD-PARTY AUDITS OF THE PRIVACY POLICY COMPLIANCE

Hyundai performs internal and external audits to ensure compliance with the personal information protection laws and internal regulations (privacy policy), while also conducting its own assessments of outsourced personal information management practices. Furthermore, we have maintained the Information Security Management System (ISMS) certification since 2019, and the ISO 27001 certification since 2006 for its major services and systems, including the customer portal and connected car service. In accordance with the relevant laws, we undergo regular inspections such as the Personal Information Protection Commission's survey on personally identifiable information and the Korea Communications Commission's survey on the status of location information service providers.

Cybersecurity

CYBERSECURITY SCHEME

Hyundai strives to establish an advanced cybersecurity scheme, which is essential for the transition to a smart mobility system. Through a dedicated security organization, we have been building and monitoring a response system for potential hacking and information leakage threats that may arise during business operations. In January 2022, we obtained the Cyber Security Management System (CSMS) certification in Europe. Furthermore, we set security policies for all our internal employees and conduct an annual review of these policies. To enhance employees' security awareness, various efforts are made as education on security policies, security newsletters, Security Day campaigns, and training on responding to malicious emails.

Major Activities Related to Cybersecurity

- Appoint experts to strengthen security at overseas subsidiaries; and expand inspection activities.
- Strengthen security threat response via the advanced security monitoring system/performance of self-infiltration activities
- Specify incident response procedures according to the business continuity plan (BCP) in the Security Incident Prevention and Response Guidelines; and conduct inspections at least once a year
- Provide phishing email training for employees and education on preventing malware infections from infected individuals at least once a year
- Distribute a monthly security newsletter to all employees; and hold the Employee Security Day at least once a year

RESPONSE TO DATA REGULATIONS

Data play a crucial role in the transition to the digital economy and serve as a key driver for new businesses. Both domestically and internationally, discussions on strengthening data regulation policies have been accelerating. Hyundai recognizes the importance of establishing a data management system that can adapt to regulatory changes. Through a centralized organization for data protection, we conduct ongoing and regular inspections of our data systems and operate a management system to address vulnerabilities and take necessary measures.

ANALYSIS OF CYBER ASSET VULNERABILITY

Hyundai has established security review procedures for its computer systems, aimed at the secure construction and operation of its business systems, based on which it manages security vulnerabilities and improves its security guidelines in line with advancements in IT technology. Furthermore, we have maintained the ISO 27001 certification since 2006, demonstrating our commitment to comprehensive information security management. In addition, we have obtained the ISMS certification which verifies our integrated information protection management system.

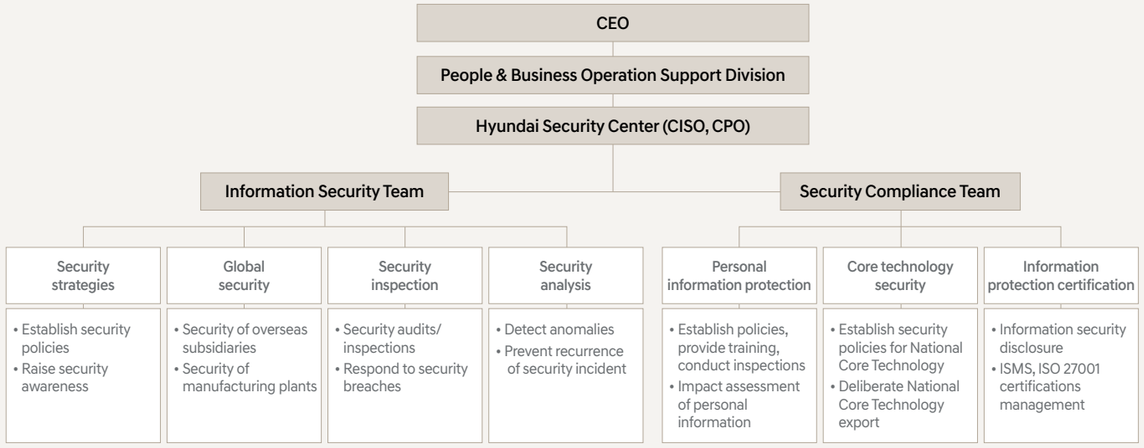
ORGANIZATION AND ROLE OF THE HYUNDAI SECURITY CENTER

Hyundai operates a dedicated organization aimed at systematic and effective information security management. We have appointed the CISO and CPO as the Head of the Hyundai Security Center, who is responsible for overseeing overall information security and personal data protection. Their responsibilities include developing security policies, establishing security systems, conducting security audits and analyses, incident response, and managing overseas security. The Center is composed of an Information Security Team which focuses on protecting trade secrets, and a Security Compliance Team which handles personal information protection, national core technology protection, and information security certification.

SECURITY DELIBERATION COMMITTEE

The Security Deliberation Committee, headed by the Head of the People & Business Operation Support Division, serves as the top decision-making body for security matters. Together with the heads of the relevant departments, namely the HR, Corporate Audit, Legal, Research Center, and Production Plant Security, the committee convenes at least once a year to deliberate and make joint decisions on the company's security-related issues.

Organization of the Hyundai Security Center



ESG Factbook

Facts & Figures

Sales and Financial Information

Classification		Unit	2020	2021	2022	Note
Global Production	Domestic	Vehicle	1,618,411	1,620,231	1,732,639	
	India[1]	Vehicle	521,300	636,000	706,000	
	China	Vehicle	465,388	334,700	255,000	
	U.S.	Vehicle	268,700	291,500	332,900	
	Czech Republic	Vehicle	238,750	275,000	322,500	
	Russia[1]	Vehicle	219,491	234,150	44,163	
	Brazil	Vehicle	150,610	187,300	209,045	
	Turkey	Vehicle	137,100	162,140	208,100	
	Vietnam[1]	Vehicle	71,140	71,443	63,020	
	Indonesia	Vehicle	-	-	82,500	
	Others[2]	Vehicle	42,532	57,311	44,427	
	Total	**Vehicle**	**3,733,422**	**3,869,775**	**4,000,294**	
Global Sales	Domestic	Vehicle	787,854	726,838	688,884	
	Overseas	Vehicle	2,956,883	3,163,888	3,254,038	
	Total	**Vehicle**	**3,744,737**	**3,890,726**	**3,942,922**	
Global Best-selling Models	Tucson	Vehicle	429,241	493,689	570,058	Based on Tucson
	Elantra (AVANTE)	Vehicle	439,194	391,899	367,209	Based on Elantra
	Santa Fe	Vehicle	221,597	227,536	218,688	Based on SantaFe
	Sonata	Vehicle	217,289	168,878	134,752	Based on Sonata
	Accent	Vehicle	293,560	190,833	133,847	Based on Accent, Verna, Solaris

[1] Including production performances derived from the joint venture (JV) subsidiary, in addition to those disclosed in Hyundai Motor Company's Business Report
[2] Performance of CKD and consigned commercial vehicle production

Classification			Unit	2020	2021	2022	Note
Financial Performance	Statements of Financial Position (Consolidated)	Total assets	KRW billion	209,344	233,946	255,742	
		Total liabilities	KRW billion	133,003	151,331	164,846	
		Total equity	KRW billion	76,341	82,616	90,897	
	Statements of Financial Position (Separate)	Total assets	KRW billion	78,252	79,758	83,412	
		Total liabilities	KRW billion	25,064	27,083	27,657	
		Total equity	KRW billion	53,189	52,675	55,756	
	Statements of income (Consolidated)	Sales	KRW billion	103,998	117,611	142,528	
		Operating profit	KRW billion	2,395	6,679	9,820	
		Selling and administrative expenses	KRW billion	16,087	15,252	18,498	
		Net profit	KRW billion	1,925	5,693	7,984	Including non-controlling interests
		EBITDA	KRW billion	6,580	11,235	14,867	Based on Bloomberg[3]
	Statements of income (Separate)	Sales	KRW billion	50,661	55,605	65,308	
		Operating profit	KRW billion	769	662	2,829	
		Selling and administrative expenses	KRW billion	8,885	8,404	9,342	
		Net profit	KRW billion	527	646	3,702	
		EBITDA	KRW billion	3,550	3,766	6,222	Based on Bloomberg[3]
	Profitability Ratio (Consolidated)	Operating profit margin	%	2.3	5.7	6.9	
		Net profit margin	%	1.9	4.8	5.6	
	Profitability Ratio (Separate)	Operating profit margin	%	1.5	1.2	4.3	
		Net profit margin	%	1.0	1.2	5.7	

[3] Sum of operating profit, depreciation of tangible assets, depreciation of real estate held for investment, and depreciation of intangible assets

2022 Audited Financial Statements of Hyundai Motor Company

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Classification			Unit	2020	2021	2022	Note
Financial Performance	Distribution of Economic Value (Consolidated)	Dividends (Shareholders and investors)	KRW billion	786	1,301	1,830	
		Interest expenses (Shareholders and investors)	KRW billion	362	305	536	Refer to "financial income and financial expense" in the notes to the consolidated financial statement
		Salaries (Employees)	KRW billion	9,099	9,614	10,667	Refer to "classification of expenses by nature" in the notes to the consolidated financial statement
		Raw materials costs (Suppliers)	KRW billion	59,085	67,579	80,774	Refer to "classification of expenses by nature" in the notes to the consolidated financial statement
		Income tax (Government)	KRW billion	169	2,266	2,964	Refer to "income tax" in the notes to the consolidated financial statement
		Donation (Local communities)	KRW billion	74	66	90	Refer to "other income/expense" in the notes to the consolidated financial statement
		Total	**KRW billion**	**69,575**	**81,131**	**96,861**	
	Distribution of Economic Value (Separate)	Dividends (Shareholders and investors)	KRW billion	786	1,301	1,830	
		Interest expenses (Shareholders and investors)	KRW billion	124	87	190	Refer to "financial income and financial expense" in the notes to the financial statement
		Salaries (Employees)	KRW billion	6,190	6,392	7,007	Refer to "classification of expenses by nature" in the notes to the financial statement
		Raw materials costs (Suppliers)	KRW billion	32,803	37,011	44,184	Refer to "classification of expenses by nature" in the notes to the financial statement
		Income tax (Government)	KRW billion	(0.1)	344	474	Refer to "income tax" in the notes to the financial statement
		Donation (Local communities)	KRW billion	52	38	46	Refer to "other income/expense" in the notes to the financial statement
		Total	**KRW billion**	**39,955**	**45,173**	**53,731**	
	R&D/ Investment	Total R&D expense	KRW million	3,108,591	3,100,111	3,340,589	
		Government subsidy	KRW million	(11,530)	(2,214)	(4,016)	
		R&D expense to sales ratio	%	3.0	2.6	2.3	Total R&D expenses/ sales of the year X 100
	Distribution of Investment (Consolidated)	CAPEX	KRW billion	4,553	3,767	3,879	Based on head office and overseas business sites
		Depreciation	KRW billion	4,185	4,556	5,048	Refer to "classification of expenses by nature" in the notes to the consolidated financial statements
		Difference (CAPEX – depreciation)	KRW billion	368	(789)	(1,169)	
		Treasury stock buyback	KRW billion	303	305	193	
		Total (dividend + treasury stock)	**KRW billion**	**1,089**	**1,606**	**2,023**	

Environmental

Classification			Unit	2020	2021	2022	Note
Environment	Energy Consumption	Electricity (Non-renewable)	MWh	3,344,292	3,338,657	3,377,133	
		Electricity (Renewable)	MWh	70,376	120,171	280,498	
		LNG	MWh	3,534,350	3,562,760	3,442,276	
		Diesel, kerosene, gasoline	MWh	184,158	154,015	131,268	
		Steam, heat	MWh	98,777	90,510	94,027	
		Others	MWh	123,433	143,460	172,986	
		Total energy consumption[4)]	**MWh**	**7,355,386**	**7,409,573**	**7,498,188**	Due to changes in energy consumption calculation criteria and an expansion of the calculation scope, the data for previous years has been revised.
	Energy Intensity	Energy consumption in producing one vehicle	MWh/ Vehicle	1.97	1.91	1.87	
	Greenhouse Gas (GHG) Emissions	Scope 1	tCO_2-eq	716,237	724,013	704,726	
		Scope 2	tCO_2-eq	1,680,079	1,660,058	1,684,121	Scope 2 of 2022 is calculated by market-based approach
		Scope 3	tCO_2-eq	100,536,484	101,790,793	105,790,785	
		Sum of Scope 1 and 2[5)]	**tCO_2-eq**	**2,396,316**	**2,384,071**	**2,388,847**	1) 2021 emissions were slightly adjusted according to the results of a conformity assessment of the domestic emission trading scheme 2) Business sites subject to calculation were added in 2022 (Indonesia, Mexico, Vietnam)
	GHG Emissions Intensity	GHG emissions in producing one vehicle (Scope 1+2)	tCO_2-eq/ Vehicle	0.642	0.616	0.597	
	Raw Materials	Steel (amounts used)	Ton	940,277	1,041,124	1,074,071	
		Steel (scrap)	Ton	357,494	375,924	369,730	
		Aluminum (amounts used)	Ton	90,836	97,805	103,011	
		Aluminum (scrap)	Ton	25,471	24,495	38,892	
	Raw Materials Intensity	Raw materials used for producing one vehicle	Ton/Vehicle	0.276	0.293	0.294	

[4)] Business sites (Indonesia, Vietnam, Mexico) subject to calculation were added in 2022. Total energy consumption in 2022, excluding the added business sites, is 7,217,893 MWh.

[5)] Business sites (Indonesia, Vietnam, Mexico) subject to calculation were added in 2022. Total Scope 1+2 GHG emissions in 2022, excluding the added business sites, is 2,242,879 tCO_2-eq.

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Classification				Unit	2020	2021	2022	Note
Environment	Water	Water withdrawal	Municipal (Industrial) water (or from other water utilities)	Ton	18,709,031	17,127,317	18,240,924	
			Fresh surface water (lakes, rivers, etc.)	Ton	761,644	853,340	942,842	
			Fresh ground water	Ton	229,871	225,861	755,804	
			Total	**Ton**	**19,700,546**	**18,206,518**	**19,939,570**	
		Water consumption		Total	10,967,709	9,941,274	10,790,093	
		Water discharge		Ton	8,732,837	8,265,244	9,149,477	
	Water Use Intensity	Water used for producing one vehicle		Ton/Vehicle	2.94	2.57	2.70	
	VOCs[6] Emissions	**Total**		**Ton**	**11,047**	**10,756**	**7,796**	
	VOCs Emissions Intensity	VOC emissions in producing one vehicle		kg/Vehicle	2.96	2.78	1.95	
	Air Pollutant	By type	CO	Ton	358	489	786	
			SOx	Ton	14	96	37	
			NOx	Ton	333	351	370	
			PM	Ton	214	249	218	
			Others	Ton	16	26	0	
		Total		**Ton**	**935**	**1,211**	**1,411**	
	Air Pollutant Emissions Intensity	Air pollutant emissions in producing one vehicle		kg/Vehicle	0.251	0.313	0.353	
	Water Pollutant	By type	TOC	Ton	313	313	403	
			BOD	Ton	56	79	75	
			SS	Ton	45	55	48	
			Others	Ton	191	196	197	
		Total		**Ton**	**605**	**643**	**723**	
	Water Pollutant Emissions Intensity	Water pollutant emissions in producing one vehicle		kg/Vehicle	0.162	0.166	0.181	

[6] VOCs: Volatile Organic Compounds

Classification				Unit	2020	2021	2022	Note
Environment	Weight of Waste	By type	General waste	Ton	462,421	504,183	508,701	
			Designated waste	Ton	35,895	34,590	39,914	
		Total		**Ton**	**498,316**	**538,773**	**548,615**	
	Waste Intensity[7]	Waste discharge in producing one vehicle		Ton/Vehicle	0.0115	0.0119	0.0126	
	Weight of Waste by Disposal Method	Landfill		Ton	6,297	5,900	7,164	
		Incineration		Ton	32,230	33,147	34,975	
			Collected as thermal energy	Ton	2,531	3,754	5,451	
			Not collected as thermal energy	Ton	29,699	29,393	29,524	
		Recycling		Ton	455,211	492,787	498,162	
		Biodegradation		Ton	962	1,729	1,310	
		Others		Ton	3,616	5,210	7,004	
		Total		**Ton**	**498,316**	**538,773**	**548,615**	
	Weight of Harmful Chemical Substances			Ton	2,781	2,333	3,859	
	Environmental Investment	Costs and investments for environmental protection[8]		KRW billion	563.3	722.5	506.1	
	Green Purchasing	**Total**		**KRW billion**	**8.65**	**6.25**	**1.22**	The amount of purchasing domestic tires (parts with environmental certification) has been relatively decreased due to the increase of imported tire purchasing.
	Sales Portion of Eco-friendly Vehicles[9]	**Total**		**%**	**9.6**	**14.4**	**17.3**	Based on managerial accounting
	Sales Portion of Models for which Full-LCA was Conducted	**Total**		**%**	**2.62**	**14.14**	**25.03**	Based on no. of vehicles sold (shipment)

[7] Waste per one vehicle of subtracting the recycled amount from total waste

[8] Includes electrified vehicle development costs and investment costs in environmental improvement facilities at business sites (Only business sites in Korea are included in case of investment costs for business site environment improvements)

[9] Eco-friendly vehicles : EV, HEV, PHEV, FCEV
Sales portion of IONIQ 5 in 2022: 4.3%

Facts & Figures

Social

Classification			Unit	2020	2021	2022	Note
Employees	Number of Employees by Region (Korea/ Overseas, By country)	Korea	Person	72,020	72,496	73,431	As of the last business day; and based on the number of directly employed staff
		Overseas	Person	49,383	50,325	52,638	
		North America	Person	10,304	15,953	18,229	
		Europe	Person	10,014	9,480	10,010	
		China	Person	13,159	10,741	9,340	
		India	Person	10,106	9,725	9,976	
		Others	Person	5,800	4,426	5,083	
		Percentage of overseas	%	40.7	41.0	41.8	
		Total	**Person**	**121,403**	**122,821**	**126,069**	
	Number of Employees by Duty (Korea)	Management	Person	470	476	466	Excluding 20 senior researchers/ researchers in executive positions
		Research fellow	Person	23	22	20	
		Research	Person	11,716	12,502	13,212	
		Office work	Person	12,716	12,903	13,373	
		Technical/Production/ Maintenance	Person	36,385	34,754	32,887	
		Sales	Person	5,798	5,562	5,264	
		Others	Person	4,912	6,277	8,209	Advisor, specially appointed staff for special duties, temporary staff, etc.
		Total	**Person**	**72,020**	**72,496**	**73,431**	
	Number of Employees by Nationality (Korea)	Korea	Person	71,922	71,191	73,325	17,004 managers (99.51% of total managers)
		Foreign	Person	73	75	70	
		US	Person	37	42	42	34 managers (0.2% of total managers)
		Germany	Person	17	12	11	9 managers (0.05% of total managers)
		China	Person	11	9	9	6 managers (0.04% of total managers)
		Canada	Person	8	12	8	7 managers (0.04% of total managers)
		Percentage of foreign	%	0.10	0.11	0.10	
		Total	**Person**	**71,995**	**71,266**	**73,395**	

Classification				Unit	2020	2021	2022	Note
Employees	Number of Employees by Region/ Gender	Korea		Person	72,020	72,496	73.431	
		Male		Person	68,014	68,215	68,809	
		Female		Person	4,006	4,281	4,622	
		Overseas		Person	49,383	50,325	52,638	
		Male		Person	42,977	43,504	45,045	
		Female		Person	6,406	6,821	7,593	
		Female executives	Korea	Person	14	15	17	
			North America	Person	11	12	17	
			Europe	Person	2	3	4	
			China	Person	8	7	5	
			India	Person	0	0	0	
			Others	Person	2	2	3	
			Total	**Person**	**37**	**39**	**46**	
		Female staff	Korea	Person	4,006	4,281	4,622	
			North America	Person	1,811	2,740	3,431	
			Europe	Person	1,479	1,476	1,563	
			China	Person	2,040	1,761	1,645	
			India	Person	214	242	288	
			Others	Person	862	602	666	
			Total	**Person**	**10,412**	**11,102**	**12,215**	
		Percentage of female employees		%	8.6	9.0	9.6	Number of female employees / Total number of employees

Facts & Figures

Classification			Unit	2020	2021	2022	Note
Employees	Number of Employees by Position/Duty	Number of managers in Korea	Person	15,534	16,779	17,088	Managers: Includes managerial level and higher office, research, and special staff, and executives except for advisors
		Number of female managers in Korea	Person	710	1,042	1,071	
		Number of managers overseas	Person	7,013	7,303	6,625	
		Number of female managers overseas	Person	822	947	1,084	
		Total number of managers	Person	22,547	24,082	23,713	
		Total number of female managers	Person	1,532	1,989	2,155	
		Percentage of female managers	%	6.8	8.3	9.1	Number of female managers / Total number of managers
		Number of female low level managers	Person	1,084	1,504	1,603	Low level manager: Defined as G2 level
		Percentage of female low level managers	%	6.6	8.3	9.2	
		Number of female top level managers	Person	37	42	46	
		Percentage of female top level managers	%	5.38	5.84	6.06	
		Number of female employees in revenue-generating departments/ positions[10]	Person	8,500	9,182	9,695	
		Percentage of female employees in revenue-generating departments/ positions	%	7.4	7.9	8.3	
		Number of female employees in STEM[11] positions	Person	2,295	2,418	2,590	
		Percentage of female employees in STEM positions	%	4.0	4.1	4.4	
	Number of Employees with Disabilities (Korea)	Number of employees with disabilities	Person	2,108	2,101	1,920	Based on the reported number in December (Korea Employment Agency for Persons with Disabilities)
		Percentage of employees with disabilities	%	3.12	3.13	2.82	Number of employees with disabilities / Total number of employees * 100
	Number of Employees by Age (Korea)	Under 30 years old	Person	7,147	7,516	9,263	
		30-50 years old	Person	32,114	32,948	32,067	
		Over 50 years old	Person	32,759	32,032	32,101	
		Total	**Person**	**72,020**	**72,496**	**73,431**	

[10] Revenue-generating departments: Product/R&D/Purchasing/Quality Division, Pilot Center, Manufacturing Area, Ulsan/Asan/Jeonju Plant, Global Business Management Division, Domestic Business/Customer Experience/Commercial/ICT Division, Innovation Division, AIRS Company, AAM Division, CDO, EV Division, Genesis Division

[11] STEM (Science, Technology, Engineering, Math) employees: R&D Division, Innovation Division, AAM Division, TaaS Division, Ulsan/Asan/Jeonju Pant, Advanced Technology Institute, Manufacturing/Quality/ Purchasing/India Regional Headquarters, CDO, EV Division, Pilot Center, ICT Division

Classification				Unit	2020	2021	2022	Note
Employees	Labor Union Membership (Korea)	Number of people with labor union membership		Person	48,933	47,538	45,751	
		Labor union membership percentage		%	68.2	66.3	63.1	
	Strikes	Total number of strikes		Case	0	0	0	
		Number of days of work loss due to strikes		Day	0	0	0	
	Employee Training (Korea)	Total training expenses		KRW billion	29.0	41.7	63.6	
		Training expenses per employee		KRW 10,000	43.3	60.3	88.0	Total training expense / Total number of employees
		Training expenses per person (by position)	Executive level management	KRW 10,000	293.8	161.8	399.6	
			Middle level management	KRW 10,000	49.7	98.3	314.5	
			New employees and non-managers	KRW 10,000	41.0	56.7	59.2	
		Training expenses per person (by gender)	Male	KRW 10,000	-	59.5	86.7	
			Female	KRW 10,000	-	72.9	107.6	
		Training expenses per person (by age)	Under 30 years old	KRW 10,000	-	134.0	77.9	
			30-50 years old	KRW 10,000	-	72.5	150.4	
			Over 50 years old	KRW 10,000	-	41.5	29.9	
		Training hours per employee		Hour	19.8	27.9	34.3	Total training hours provided to employees / Total number of employees
		Training hours per person (by position)	Executive level management	Hour	108.5	29.3	32.4	Total training hours by position / Number of employees by position
			Middle level management	Hour	42.5	35.9	23.5	
			New employees and non-managers	Hour	17.4	27.3	35.6	
		Training hours per person (by gender)	Male	Hour	-	27.5	33.2	
			Female	Hour	-	34.4	50.9	
		Training hours per person (by age)	Under 30 years old	Hour	-	75.6	62.8	
			30-50 years old	Hour	-	30.7	38.8	
			Over 50 years old	Hour	-	20.5	21.7	

Facts & Figures

Classification				Unit	2020	2021	2022	Note
Employees	Parental Leave (Korea)	Number of employees on parental leave (Male)		Person	171	188	285	
		Number of employees on parental leave (Female)		Person	162	162	234	
		Return-to-work rate after parental leave (Male)		%	92.4	89.5	81.7	
		Return-to-work rate after parental leave (Female)		%	98.6	92.6	75.0	
		Retention rate after parental leave (Male)		%	97.3	97.6	93.7	
		Retention rate after parental leave (Female)		%	91.7	98.6	95.3	
	New Employee Hires	Number of people hired			7,096	21,484	23,018	New employee hires in Korea and abroad have been aggregated/ reported since 2021 (Only domestic data was aggregated/ reported in 2020)
		By gender	Male	Person	6,529	18,979	20,344	
			Female	Person	567	2,505	2,674	
		By age	Under 30 years old	Person	3,820	13,883	13,939	
			30-50 years old	Person	1,983	5,603	6,624	
			Over 50 years old	Person	1,293	1,998	2,455	
		By nationality (Korea)	Korea	Person	7,076	7,490	8,110	The categorization of new hires into different nationalities is reported with regards to domestic data only
			France	Korea	2	2	1	
			Canada	Person	2	-		
			China	Person	4	3	1	
			Austria	Person	1	-		
			U.K.	Person	1	-	2	
			Belgium	Person	1	-		
			U.S.	Person	4	9	4	
			Germany	Person	4	1	1	
			Republic of South Africa	Person	1	-		
			Taiwan	Person	-	-	1	
			India	Person	-	-	1	
	Internal Recruitment Ratio			Person	99.3	99.0	92.0	Placement-to-vacancy ratio that reflects internal recruit and transfer
	Youth Interns Hired	Total number of hired people		Person	132	213	120	Intern / Research intern / Recruitment-type intern / Experience-based intern
		Full-time conversion rate		%	30.3	53.1	30.0	Number of personnel converted to regular employment: 36

Classification				Unit	2020	2021	2022	Note
Employees	Employee Turnover (Korea)	By gender	Male	%	4.21	5.72	5.26	
			Female	%	0.20	0.29	0.22	
		By age	Under 30 years old	%	0.58	0.95	0.23	
			30-50 years old	%	0.37	0.72	0.60	
			Over 50 years old	%	3.47	4.31	4.65	
		By position	Executive level management	%	0.01	0.03	0.14	
			Middle level management	%	0.01	0.11	0.15	
			Non-manager	%	3.83	5.04	5.18	
		Turnover rate		%	4.41	6.00	5.47	
		Voluntary turnover rate[12]		%	0.43	0.70	0.94	
	Employee Turnover (Overseas)	Turnover rate		%	-	17.19	18.97	Began to collect data for overseas employee turnover in 2021
		Voluntary turnover rate		%	-	11.00	14.00	
	Employee Turnover (Korea + Overseas)	Turnover rate		%	-	10.6	11.4	
		Voluntary turnover rate		%	-	5.0	6.8	
	Wage by Gender	Male executives	Average basic salary	KRW	298,307,953	292,430,000	329,929,105	
			Average total wage	KRW	308,729,036	330,950,106	429,225,256	Sum of basic salary and bonus
		Female executives	Average basic salary	KRW	299,885,453	257,678,571	323,461,538	
			Average total wage	KRW	315,797,291	325,828,057	417,714,941	Sum of basic salary and bonus
		Male managers	Average basic salary	KRW	71,464,873	73,253,066	77,864,821	
			Average total wage	KRW	89,036,905	99,688,405	114,997,449	Sum of basic salary and bonus
		Female managers	Average basic salary	KRW	67,252,851	70,490,756	72,522,553	
			Average total wage	KRW	82,802,044	95,522,021	108,073,603	Sum of basic salary and bonus
		Male staff	Average basic salary	KRW	72,661,301	79,293,050	88,283,218	Sum of basic salary and bonus
		Female staff	Average total wage	KRW	71,636,398	79,408,784	89,364,988	Sum of basic salary and bonus
	Organizational Culture Survey	Employee engagement rate		%	66.6	68.5	72.9	

[12] Voluntary turnover: When employees voluntarily leave their positions for reasons other than retirement, dismissal, etc.

Facts & Figures

Classification			Unit	2020	2021	2022	Note
Social Contributions	Social Contributions Expenditures by Type	Cash donations	KRW million	50,639	39,015	44,998	
		In-kind contributions	KRW million	2,739	2,123	2,925	
		Employee volunteer	KRW million	451	696	832	Monetary value conversion of employees' volunteer hours[13]
		Management overhead	KRW million	9,008	6,124	10,466	
	Social Contributions Expenditures by Area	Local community investment	KRW million	44,880	37,054	39,506	
		Simple donation	KRW million	8,498	3,658	6,632	
		For commercial use	KRW million	9,007	6,549	12,251	
	Social Contributions Expenditures by Region	Korea	KRW million	62,386	47,262	58,389	
		Overseas	USD	34,111,984	16,288,622	22,394,209	
	Employees Volunteering (Korea)	Number of volunteer activities	Case	859	375	627	
		Number of participants	Person	3,107	6,330	5,592	
		Number of hours participated	Hour	10,420	14,034	15,016	
	Expenditure by Donation/ Contribution Type	Associations and tax-free groups	KRW million	6,208	6,251	5,180	Associations and groups related to the industry
		Lobbyist and interest groups	KRW million	0	0	0	
		Political donations	KRW million	0	0	0	
		Others	KRW million	0	0	0	
		Total donations/ contributions	**KRW million**	**6,208**	**6,251**	**5,180**	
	Expenditure by Major Contributed Association[14]	Foundation of Korea Automotive Parts Industry Promotion	KRW million	3,300	3,300	3,300	
		Korea Automobile Manufacturers Association	KRW million	2,146	2,243	2,178	
		Korea Automotive Technology Institute	KRW million	328	322	332	
		H2Korea	KRW million	237	200	200	
		Korea Traffic Disabled Association	KRW million	110	100	100	

[13] Employees' annual volunteer hours x employees' average hourly wage (average annual income / annual no. of work days / hour)
[14] When selecting associations and organizations, thorough internal review is conducted. In addition, when reviewing the associations and organizations, HMC evaluates whether they are aligned with the Paris Agreements, and makes efforts not to make contributions or expenditures to those that do not align.

Classification			Unit	2020	2021	2022	Note
Quality & Safety	Quality Index (based on the survey conducted by J.D. Power and Associates)	U.S. Vehicle Dependability Study (Hyundai)	Ranking (Score)	Non-premium 7th (132)	Non-premium 4th (101)	Non-premium 3rd (148)	
		U.S. Initial Quality Study (Hyundai)	Ranking (Score)	Non-premium 9th (153)	Non-premium 6th (149)	Non-premium 12th (185)	
		U.S. Vehicle Dependability Study (Genesis)	Ranking (Score))	Premium 1st (89)	Premium 4th 102)	Premium 1st (155)	
		U.S. Initial Quality Study (Genesis)	Ranking (Score)	Premium 1st (142)	Premium 2nd (148)	Premium 1st (156)	
	Quality Management System	Percentage of business sites with quality management system certification	%	100%	100%	100%	All business sites in Korea and overseas are ISO 9001 certified
	Customer Satisfaction Survey	Customer Satisfaction Score - Hyundai Customer Experience Index (HCXI)	Score	71.6	71.2	72.1	1:1 weight assigned to sales/maintenance
		External evaluation – National Customer Satisfaction Index (NCSI)	Ranking	1st place at all segments	1st place at all segments	1st place at all segments	Semi-medium, medium, semi-large, large, RV
		External evaluation – Korean Standard-Quality Excellence Index (KS-QEI)	Ranking	1st place at all segments	1st place at all segments	1st place at all segments	Luxury sedan E-segment, medium, medium SUV, electric vehicle, automobile AS, and other seven segments
		External evaluation – Korean Customer Satisfaction Index (KCSI)	Ranking	1st place at all segments	1st place at all segments	1st place at all segments	Passenger vehicle, RV
		Domestic Maintenance Service Satisfaction (HCXI)	Score (Rank)	69.7 (1st)	70.1 (1st)	71.8 (1st)	1:1 weight assigned to directly-run/ Bluehands
		Overseas Sales Customer Satisfaction (NPS)	Score (Country of Implemen-tation)	90.3 (26 countries)	86.3 (31 countries)	87.7 (35 countries)	Changed management index in 2021 (SSi → Sales NPS)
		Overseas Maintenance Service Satisfaction (NPS)	Score (Country of Implemen-tation)	90.3 (29 countries)	75.9 (31 countries)	77.5 (35 countries)	Changed management index in 2021 (HCXI → Service NPS)

Facts & Figures

Classification		Unit	2020	2021	2022	Note
Safety and Health	Number of work-related fatalities for employees	Person	0	1	1	
	Number of work-related fatalities for contractors	Person	1	3	0	
	Number of employees involved in occupational accidents (Korea)	Person	351	424	478	Changed the aggregate method starting in 2022 (Illness + accident → accident)
	Number of employees involved in occupational accidents (Overseas)	Person	17	11	30	
	Total number of employees involved in occupational accidents	Person	368	435	508	108 cases of work-related illness, and 1 work-related death
	Accident rate (Korea)	%	0.85	0.73	0.81	
	Accident rate (Overseas)	%	0.05	0.04	0.07	
	Accident rate (Total)	%	0.50	0.49	0.55	
	Employee LTIFR[15]		1.72	1.76	1.94	Based on figures of the Ulsan, Asan, and Jeonju plants in Korea, and overseas manufacturing plants Number of injuries that prevent workers from recovering to the same state before the accident within six months: 125 cases
	Supplier employee LTIFR[16]		0.93	1.43	1.53	

[15] Lost-Time Injuries Frequency Rate (LTIFR): Number of lost-time injuries per million hours worked during an accounting period

[16] When investigating the number of in-house supplier workers at the Jeonju Plant in 2021, the total number of workers of suppliers was indicated, resulting in an overestimated figure

Classification			Unit	2020	2021	2022	Note
Compliance/ Ethical Training	Number of training sessions (Korea)		Case	8	11	26	
	Number of participants (Korea)		Person	22,928	21,567	8,651	
	Number of training sessions (Overseas)		Case	1	9	0	
	Number of participants (Overseas)		Person	816	80	0	
Non-compliance with Regulations and Voluntary Codes	Number of personal Information leakage Incidents	Total number of personal Information leakage Incidents	Case	0	1[17]	0	
		Number of customers affected by the Incidents	Person	0	6	0	
	Number of cyber asset damage incidents		Case	0	0	0	
	Number of labeling/advertising violations		Case	0	0	0	
	Penalty and fine for non-compliance with environmental regulations	No. of cases of environmental violations[18]	Case	0	0	0[17]	
		Penalty and fine	KRW million	0	0	0	Based on an environment-related fine of at least $ 10,000
		Environment-related provisions	KRW million	0	0	0	

[17] A public announcement was made regarding the case in 2022. The penalty was paid in 2023.

[18] The Ulsan Plant is in a single trial with the Ministry of Environment on whether it violated the law.

ESG Certifications

Certification Status by Business Site (ISO Certification)

Classification		Term of Validity	Note
ISO 14001 (Environmental Management)	Business sites in Korea (Ulsan Plant, Asan Plant, Jeonju Plant, Namyang Technology Research Center, Headquarters, Korea Business Division)	2020-2023	Integrated certification
	Hyundai Motor Manufacturing Alabama (HMMA)	2021-2024	
	Beijing Hyundai Motor Company (BHMC)	2021-2024	
	Hyundai Motor India (HMI)	2020-2023	
	Hyundai Motor Manufacturing Russia (HMMR)	2022-2025	
	Hyundai Motor Brasil (HMB)	2021-2024	
	Hyundai Motor Manufacturing Czech (HMMC)	2021-2024	
	Hyundai Assan Otomotiv Sanayi (HAOS)	2021-2024	
	Hyundai Motor Manufacturing Indonesia (HMMI)	2022-2025	
	Hyundai Truck & Bus China (HTBC)	2020-2023	
ISO 45001 (Health and Safety Management)	Business sites in Korea	2020-2023 (Jeonju Plant) 2021-2024 (Asan Plant) 2021-2024 (Namyang Technology Research Center) 2022-2025 (Ulsan Plant)	
ISO 27001 (Information Security Management)	Business sites in Korea	2021-2024	
ISO 9001 (Quality Management)	Business sites in Korea & Overseas	2021-2024	
ISO 50001 (Energy Management)	Beijing Hyundai Motor Company (BHMC)	2022-2025 (Renhe/Yangzhen Plants) 2021-2024 (Changzhou Plant)	
	Hyundai Motor India (HMI)	2021-2024	
	Hyundai Assan Otomotiv Sanayi (HAOS)	2021-2024	

GRI Index

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[1)] Reason for non-disclosure: Confidentiality. We manage information on workers who are not employees but it is difficult to disclose information on workers who are not Hyundai employees due to company regulations.

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206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	87	
207-1	Approach to tax	92	
207-2	Tax governance, control, and risk management	92	

GRI Index

Topic Specific Standards - Environmental

GRI Standards		Page	Note
No.	Title		
301-1	Materials used by weight or volume	38, 96	
301-2	Recycled input materials used	38	
301-3	Reclaimed products and their packaging materials	38	
302-1	Energy consumption within the organization	32	
302-2	Energy consumption outside of the organization	32	
302-3	Energy intensity	96	
302-4	Reduction of energy consumption	32	
303-1	Interactions with water as a shared resource	38	
303-3	Water withdrawal	97	
303-4	Water discharge	97	
303-5	Water consumption	38, 97	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	41-43	
304-2	Significant impacts of activities, products and services on biodiversity	41-43	
304-3	Habitats protected or restored	41-43	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	43	

GRI Standards		Page	Note
No.	Title		
305-1	Direct (Scope 1) GHG emissions	27, 96	
305-2	Energy indirect (Scope 2) GHG emissions	27, 96	
305-3	Other indirect (Scope 3) GHG emissions	27, 96	
305-4	GHG emissions intensity	27, 96	
305-5	Reduction of GHG emissions	25-34	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	97	
306-1	Waste generation and significant waste-related impacts	38	
306-2	Management of significant waste-related impacts	38	
306-3	Waste generated	97	
306-4	Waste diverted from disposal	38, 97	
306-5	Waste directed to disposal	97	
308-1	New suppliers that were screened using environmental criteria	61	
308-2	Negative environmental impacts in the supply chain and actions taken	62	

GRI Index

Topic Specific Standards - Social

GRI Standards		Page	Note
No.	Title		
401-1	New employee hires and employee turnover	100	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	48-49, 56	
401-3	Parental leave	56, 100	
403-1	Occupational health and safety management system	53	
403-2	Hazard identification, risk assessment, and incident investigation	55	
403-3	Occupational health services	55	
403-4	Worker participation, consultation, and communication on occupational health and safety	53-55	
403-5	Worker training on occupational health and safety	53-55	
403-6	Promotion of worker health	55	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	55	
403-8	Workers covered by an occupational health and safety management system	53	
403-9	Work-related injuries	102	
403-10	Work-related ill health	102	
404-1	Average hours of training per year per employee	99	
404-2	Programs for upgrading employee skills and transition assistance programs	46	
404-3	Percentage of employees receiving regular performance and career development reviews	46	

GRI Standards		Page	Note
No.	Title		
405-1	Diversity of governance bodies and employees	79, 98	
405-2	Ratio of basic salary and remuneration of women to men	100	
406-1	Incidents of discrimination and corrective actions taken	50	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	48	
408-1	Operations and suppliers at significant risk for incidents of child labor	51	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	51	
411-1	Incidents of violations involving rights of indigenous peoples	-	No incidents of violations occurred
413-1	Operations with local community engagement, impact assessments, and development programs	12, 72-77, 101	
414-1	New suppliers that were screened using social criteria	61	
414-2	Negative social impacts in the supply chain and actions taken	62	
415-1	Political contributions	101	No political contributions made
416-1	Assessment of the health and safety impacts of product and service categories	67	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	65	
417-1	Requirements for product and service information and labeling	70	
417-2	Incidents of non-compliance concerning product and service information and labeling	102	No incidents of violations occurred
417-3	Incidents of non-compliance concerning marketing communications	102	No incidents of violations occurred
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	102	

ESRS Index

European Sustainability Reporting Standards (ESRS) is a management tool for executing the Corporate Sustainability Reporting Directive (CSRD), which is a guideline that was enforced in March 2023 by the EU to make sustainability reports mandatory. It specifies the scope and criteria of information that a company should disclose in relation to sustainability. The European Financial Reporting Advisory Group (EFRAG) announced the final ESRS in November 2022 which includes two common standards, 11 theme-level standards, 84 information disclosure requirements, and 1,144 quantitative and qualitative data. Hyundai has subsidiaries and branches in the EU and achieves considerable sales from them. As such, we are striving to make preparations by developing thorough knowledge of CSRD and ESRS and establishing a system that manages information.

ESRS 2. General Disclosures

Indicator No.	Title	Page
ESRS 2 BP-1	General basis for preparation of the sustainability statements	120
ESRS 2 BP-2	Disclosures in relation to specific circumstances	114-119
ESRS 2 GOV-1	The role of the administrative, management and supervisory bodies	09, 79-84
ESRS 2 GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	14-17, 84
ESRS 2 GOV-3	Integration of sustainability-related performance in incentive schemes	09, 20
ESRS 2 GOV-4	Statement on sustainability due diligence	50-51, 60-64
ESRS 2 GOV-5	Risk management and internal controls over sustainability reporting[1)]	-
ESRS 2 SBM-1	Market position, strategy, business model(s) and value chain	06-07, 28-29
ESRS 2 SBM-2	Interests and views of stakeholders	11-13
ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model(s)	15-17
ESRS 2 IRO-1	Description of the processes to identify and assess material impacts, risks and opportunities	14
ESRS 2 IRO-2	Disclosure Requirements in ESRS covered by the undertaking's sustainability statements	107-109

[1)] We have been operating an IT system-based "ESG platform" since 2022 to secure ESG data collection-inspection-disclosure efficiency and credibility of all business sites in Korea and abroad

ESRS E1. Climate Change

Indicator No.	Title	Page
ESRS E1-1	Transition plan for climate change mitigation	25
ESRS E1-2	Policies related to climate change mitigation and adaptation	26, 28-29, 32-34
ESRS E1-3	Actions and resources in relation to climate change policies	21, 28
ESRS E1-4	Targets related to climate change mitigation and adaptation	25, 28-29, 32-33
ESRS E1-5	Energy consumption and mix	32, 96
ESRS E1-6	Gross Scopes 1, 2, 3 and Total GHG emissions	27, 96
ESRS E1-7	GHG removals and GHG mitigation projects financed through carbon credits	16, 20, 26-27
	Avoided emissions of products and services	16, 29
ESRS E1-8	Internal carbon pricing[2)]	-
ESRS E1-9	Potential financial effects from material physical and transition risks and potential climate-related opportunities	22-24

[2)] The internal carbon price is calculated in connection with the Emission Trading Scheme (ETS) price, and is used for improving energy efficiency, implementing low-carbon strategies and investments, and discovering and harnessing low carbon business opportunities

ESRS E2. Pollution

Indicator No.	Title	Page
ESRS E2-1	Policies related to pollution	19
ESRS E2-2	Actions and resources related to pollution	20, 38-40
ESRS E2-3	Targets related to pollution	39
ESRS E2-4	Pollution of air, water and soil	38-39, 97
ESRS E2-5	Substances of concern and substances of very high concern	39, 97
ESRS E2-6	Potential financial effects from pollution-related impacts, risks and opportunities	-

ESRS Index

ESRS E3. Water and Marine Resources

Indicator No.	Title	Page
ESRS E3-1	Policies implemented to manage water and marine resources	19, 38
ESRS E3-2	Actions and resources related to water and marine resources	38
ESRS E3-3	Targets related to water and marine resources	26, 73
ESRS E3-4	Water consumption	38, 97
ESRS E3-5	Potential financial effects from water and marine resources-related impacts, risks and opportunities	-

ESRS E4. Biodiversity and Ecosystems

Indicator No.	Title	Page
ESRS E4-1	Transition plan on biodiversity and ecosystems[3]	-
ESRS E4-2	Policies related to biodiversity and ecosystems	19, 41
ESRS E4-3	Actions and resources related to biodiversity and ecosystems	42
ESRS E4-4	Targets related to biodiversity and ecosystems[3]	-
ESRS E4-5	Impact metrics related to biodiversity and ecosystems change	43
ESRS E4-6	Potential financial effects from biodiversity and ecosystem-related risks and opportunities	-

[3] We present a mid- to long-term goal as well as activity and performance target through Hyundai Motor Company Biodiversity Protection Policy and Hyundai Motor Company No Deforestation Policy

Biodiversity Protection Policy No Deforestation Policy

ESRS E5. Resource Use and Circular Economy

Indicator No.	Title	Page
ESRS E5-1	Policies related to resource use and circular economy	19, 35, 37
ESRS E5-2	Actions and resources related to resource use and circular economy	35-37
ESRS E5-3	Targets related to resource use and circular economy	36-37
ESRS E5-4	Resource inflows	38, 96
ESRS E5-5	Resource outflows	36, 97
ESRS E5-6	Potential financial effects from resource use and circular economy-related impacts, risks and opportunities	-

ESRS S1. Own Workforce

Indicator No.	Title	Page
ESRS S1-1	Policies related to own workforce	49-50
ESRS S1-2	Processes for engaging with own workers and workers' representatives about impacts	48, 53
ESRS S1-3	Processes to remediate negative impacts and channels for own workers to raise concerns	48, 50, 87
ESRS S1-4	Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	51-55
ESRS S1-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	52-53
ESRS S1-6	Characteristics of the undertaking's employees	98-99
ESRS S1-7	Characteristics of non-employee workers in the undertaking's own workforce	98
ESRS S1-8	Percentage of total employees covered by collective bargaining agreements For employees not covered by collective bargaining agreements, a description of reasons and countermeasures	48, 99
	No. of strikes, no. of work loss days due to strikes, measures and discussions to resolve strikes, etc.	99
ESRS S1-9	Average hourly wage difference between genders, ratio of women's hourly wage against men's hourly wage	100
	Persons subject to family care leave (maternity leave, parental leave, etc.), no. of persons who went on a leave, retention rate after returning to work after leave	100
ESRS S1-10	Adequate wages[4]	46, 100
ESRS S1-11	Social protection	56
ESRS S1-12	Persons with disabilities	99
ESRS S1-13	Percentage of employees that participated in regular performance and career development reviews	46
	Average number of training hours and expenses per person	99
ESRS S1-14	Percentage of own workers who are covered by the undertaking's health and safety management system based on legal requirements and/or recognized standards or guidelines	53, 103
	Number and rate of work-related injuries and ill health, the number of days lost to work-related injuries, accidents, and ill health	102, 113
ESRS S1-15	Work-life balance indicators	56
ESRS S1-16	Ratio of the annual total compensation ratio of the highest paid individual to the median annual total compensation for all employees	82
ESRS S1-17	Number of work-related incidents and severe human rights impacts and incidents within its own workforce and any related material fines or sanctions for the reporting period	51, 54
	Number of complaints and severe human rights impacts and incidents within its own workforce and any related countermeasures and plans to prevent reoccurrence	52, 54-55

[4] We set a wage that is more than the minimum wage specified in local laws where our domestic and overseas business sites are located. An accurate wage that is calculated according to work hours is regularly paid on a set date.

ESRS Index

ESRS S2. (Workers in the Value Chain

Indicator No.	Title	Page
ESRS S2-1	Policies related to value chain workers	55, 60
ESRS S2-2	Processes for engaging with value chain workers about impacts	60, 62
ESRS S2-3	Processes to remediate negative impacts and channels for value chain workers to raise concerns[5]	57
ESRS S2-4	Taking action on material impacts on value chain workers, and approaches to mitigating material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions	62
ESRS S2-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	62

[5] Through Hyundai Motor Group's Transparent Purchase Practices Center, we operate a "suggestion box for transparency and ethical practices" and "suggestion box for tier-2 and tier-3 suppliers"

ESRS S3. Affected Communities

Indicator No.	Title	Page
ESRS S3-1	Policies related to affected communities	72
ESRS S3-2	Processes for engaging with affected communities about impacts	12
ESRS S3-3	Processes to remediate negative impacts and channels for affected communities to raise concerns	12
ESRS S3-4	Taking action on material impacts on affected communities, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions	73-77
ESRS S3-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	73-77

ESRS S4. Consumers and End Users

Indicator No.	Title	Page
ESRS S4-1	Policies related to consumers and end-users	68-69
ESRS S4-2	Processes for engaging with consumers and end-users about impacts	65, 68
ESRS S4-3	Processes to remediate negative impacts and channels for consumers and end-users to raise concerns	68
ESRS S4-4	Taking action on material impacts on consumers and end-users, and approaches to mitigating material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions	64-67
ESRS S4-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities[6]	69

[6] We are continually carrying out activities based on three major directions – "strengthen maintenance capabilities," "secure outstanding personnel," and "operate maintenance regulations" – to enhance customer and consumer service quality

ESRS G1. Business Conduct

Indicator No.	Title	Page
ESRS G1-1	Top decision-making body's declaration of ethical management and roles and responsibilities in relation to management and supervision	87
	Requirements in the Ethics Charter and Code of Conduct	87
ESRS G1-2	Operating the compliance program, conducting activities to make payment improvements, such as the win-win payment system	59, 88
	Diagnosing and conducting a due diligence on supplier ESG risks, reflecting diagnosis and due diligence results in supplier selection criteria[7]	58, 60
ESRS G1-3	Activities to prevent corruption or bribery, and a system to investigate and report outcomes to the administrative, management and supervisory bodies	87-88
	Activities to prevent unfair trading, and a system to investigate and report outcomes to the administrative, management and supervisory bodies	87-88
ESRS G1-4	Number of confirmed incidents of corruption or bribery, details of public legal cases, the number of confirmed incidents in which own workers were dismissed or disciplined	87
	Number of confirmed incidents of unfair trading, details of public legal cases, the number of confirmed incidents in which own workers were dismissed or disciplined	87
ESRS G1-5	Political influence and lobbying activities[8]	101
ESRS G1-6	Payment practices	59

[7] We operate the "5-star System," which evaluates technology/quality/delivery levels to certify outstanding suppliers. We also reflect the results of evaluating ESG and safety/environment/security in trade conditions.

[8] In accordance with Anti-Corruption/Bribery Policy of Hyundai Motor Company, we handle charitable donations and sponsorships fairly according to internal execution standards and processes. Donations and sponsorships for political purposes are prohibited.

Anti-Corruption/Bribery Policy of Hyundai Motor Company

TCFD Index

Disclosure Focus Area	Title	Page	Note
Governance	Describe the board's oversight of climate-related risks and opportunities.	9, 21	Report to Sustainability Management Committee of the BOD and review thereof (once/semi-annually) CDP questions: C1.1b
	Describe management's role in assessing and managing climate-related risks and opportunities.	9, 21	Operation of the ESG Committee, a subcommittee under the Hyundai Business Strategy Meeting (hosted by the CEO) CDP questions: C1.2
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	21-24	CDP questions: C1.1a, C2.2a, C2.3, C2.3a, C2.4, C2.4a
	Describe the impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.	22-24	CDP questions: C2.3a, C2.4a, C3.3, C3.4, C3.5, C3.5a, C3.5b, C3.5c
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	21-24	CDP questions: C3.1, C3.2, C3.2a, C3.2b
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	21-24	CDP questions: C2.1 C2.1a, C2.1b, C2.2
	Describe the organization's processes for managing climate-related risks.	21, 23-24	CDP questions: C2.1b, C2.2
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	9, 21, 89	CDP questions: C2.1 C2.1a, C2.1b, C2.2
Metrics and Targets	Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	6, 27-34, 95-97	Energy consumption, vehicle production and sales status, vehicle CO2 emissions, sales, etc. CDP questions: C8.2, C8.2a, C8.2b, C8.2c, C8.2e, C11.3a
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	27, 96	CDP questions: C6.1, C6.3, C6.5, C7.1a, C7.2, C7.3b, C7.5, C7.6b, C7.7, C7.7a
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	21, 25, 28-29, 32	CDP questions: C1.3, C1.3a, C4.1, C4.1a, C4.1c

SASB Index

<table>
<tr><th colspan="2"></th><th>Accounting Metric</th><th>Page</th><th>Note</th></tr>
<tr><td rowspan="3">Product Safety</td><td>TR-AU-250a.1</td><td>Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating, by region</td><td>67</td><td>Korea: 100%, U.S.: 69.2%
<table><tr><th>Classification</th><th>Percentage</th><th>Vehicle models rated 5-star</th></tr><tr><td>Korea</td><td>100%</td><td>IONIQ 6, GV70</td></tr><tr><td>U.S.</td><td>69.2%</td><td>Kona, Santa Fe, Elantra, Sonata, Tucson Palisade Ioniq5, G80, GV80, etc.</td></tr></table></td></tr>
<tr><td>TR-AU-250a.2</td><td>Number of safety-related defect complaints, percentage investigated</td><td>64-65</td><td>Constant monitoring of customer complaints and 100% voluntary recall immediately when potential issues are recognized to customers of Ministry of Land, Infrastructure and Transport (Korea), NHTSA (U.S. Department of Transportation's National Highway Traffic Safety Administration)</td></tr>
<tr><td>TR-AU-250a.3</td><td>Number of vehicles recalled</td><td>65</td><td>2022: 3.89 million vehicles (voluntary recall)</td></tr>
<tr><td rowspan="2">Labor Practices</td><td>TR-AU-310a.1</td><td>Percentage of active workforce covered under collective bargaining agreements</td><td>99</td><td>2022: 63.1% (domestic basis)</td></tr>
<tr><td>TR-AU-310a.2</td><td>(1) Number of work stoppages, and
(2) total days idle</td><td>99</td><td>2022: No strike history of more than 1,000 people taking a break from work (domestic and overseas)</td></tr>
<tr><td rowspan="3">Fuel Economy & Use-phase Emissions</td><td>TR-AU-410a.1</td><td>Sales-weighted average passenger fleet fuel economy, by region</td><td>31</td><td>EU average passenger fleet carbon emissions, China/U.S. average fleet fuel economy
<table><tr><th colspan="2"></th><th>2019</th><th>2020</th><th>2021</th><th>2022</th></tr><tr><td colspan="2">Average fleet carbon emissions in EU (g/km)</td><td>123.5</td><td>94.7</td><td>107.1</td><td>106.0</td></tr><tr><td colspan="2">Average fleet fuel economy in China (L/100km)</td><td>6.00</td><td>5.61</td><td>6.15</td><td>6.28</td></tr><tr><td rowspan="2">Average fleet fuel economy in U.S. (mpg)</td><td>Passenger car</td><td>38.5</td><td>40.0</td><td>42.8</td><td>44.8</td></tr><tr><td>Light truck</td><td>27.1</td><td>29.4</td><td>30.9</td><td>36.0</td></tr></table></td></tr>
<tr><td>TR-AU-410a.2</td><td>Number of
(1) zero emission vehicles (ZEV),
(2) hybrid vehicles, and
(3) plug-in hybrid vehicles sold</td><td>29</td><td>Number of electrified vehicles sold in 2022 and percentage thereof (Unit: 1,000)
<table><tr><th>Classification</th><th>HEV/PHEV</th><th>EV</th><th>FCEV</th><th>Total</th></tr><tr><td>Global</td><td>285(7.2%)</td><td>209(5.3%)</td><td>11(0.3%)</td><td>505(12.8%)</td></tr></table></td></tr>
<tr><td>TR-AU-410a.3</td><td>Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities</td><td>29-30</td><td>Increase sales of electrified vehicles and promote fuel efficiency improvement of internal combustion engines</td></tr>
<tr><td>Materials Sourcing</td><td>TR-AU-440a.1</td><td>Management of risks related to use of main materials</td><td>37, 63, 90</td><td>Details are provided on the respective page of the report and Hyundai's conflict mineral management report
Hyundai Motor Company Conflict Minerals Report</td></tr>
<tr><td rowspan="3">Materials Efficiency & Recycling</td><td>TR-AU-440b.1</td><td>Total amount of waste from manufacturing, percentage recycled</td><td>38, 97</td><td>90.8% of waste discharged at Hyundai business sites was recycled.</td></tr>
<tr><td>TR-AU-440b.2</td><td>Weight (ton) of end-of-life material recovered, percentage recycled</td><td>36</td><td>Weight of materials reused/used after end-of-life in 2022 was around 199,000 tons.
End-of-life recycling rate in 2022 was 82.4% excluding heat recovery, 91% including heat recovery.</td></tr>
<tr><td>TR-AU-440b.3</td><td>Average recyclability of vehicles sold</td><td>35</td><td>Recyclability: 85% (95%, when including waste energy recovery)</td></tr>
<tr><td rowspan="2">Activity Metrics</td><td>TR-AU-000.A</td><td>Number of vehicles manufactured</td><td>95</td><td>-</td></tr>
<tr><td>TR-AU-000.B</td><td>Number of vehicles sold</td><td>95</td><td>-</td></tr>
</table>

WEF IBC Stakeholder Capitalism Metrics

Theme	Metrics	Page	Note
Governing Purpose	Setting purpose	3, 8	We are continuously making sincere efforts to pursue the creation of economic value by continually securing a competitive edge, realization of customer value through quality management, and creation of social value through corporate citizenship.
Quality of Governing Body	Governance body composition	79-82	The BOD consists of 6 directors and 7 independent directors (including 2 female directors). Among the members of the BOD, the independent director in charge of protecting shareholder rights (Independent Director Chi-won Yoon) participates in meetings with domestic investors and corporate briefings for overseas investors in aim of strengthening communications between the BOD and shareholders, and strives to improve our shareholder values. In order to faithfully perform the duties of the independent director, taking concurrent positions as a director, executive officer, or auditor of two or more other companies is prohibited. In order to prevent conflicts of interest, it is not allowed to engage in transactions in nature of the company's business activities without obtaining a prior approval from the BOD, or to become a general partner or director of other companies in the same industry.
Stakeholder Engagement	Material issues impacting stakeholders	14-17	In order to identify material sustainability management issues that impact Hyundai's stakeholders, we performed a materiality analysis in target of Hyundai employees and outside sustainability management experts.
Ethical Behavior	Anti-corruption	87-88, 102	Reports on unfair and corrupted acts are submitted and processed through the Cyber Audit Office. Additionally, we provide compliance management and ethics trainings to raise our members' compliance awareness and to build an ethical compliance culture.
	Protected ethics advice and reporting mechanisms	50-51, 87-88	Through a regular half-yearly audit and frequent audits every year, we examine the status of employees' practice of the Code of Ethics, and report the results to the BOD's Sustainability Management Committee.
Risk and Opportunity Oversight	Integrating risk and opportunity into business process	16, 23-24, 89-92	By identifying regional/organizational issues on climate change issues, we evaluate the impacts of each factor affecting the company in aim of establishing a decent, company-wide response strategy. In addition, we carry out a materiality analysis to disclose the management directions for each major issue, key performance and mid- to long-term plans.
Climate Change	Greenhouse gas (GHG) emissions	25, 27, 96, 116-119	We disclose the total greenhouse gas emissions occurring from all domestic business sites and 8 overseas subsidiaries. Greenhouse gas emissions (Scope 1+2, tCO_2-eq): 2,388,847 Emissions for a total of 11 categories (6 upstream and 5 downstream) are disclosed. Greenhouse gas emissions (Scope 3, tCO_2-eq): 105,790,785
	TCFD implementation	110	Details of all recommendations in the TCFD Index can be found in the Sustainability Report and the Carbon Disclosure Project (CDP).
Nature Loss	Land use and ecological sensitivity	-	There is no business site located adjacent to the Biodiversity Area (KBA).
Freshwater Availability	Water consumption and withdrawal in water-stressed areas	38, 40, 97	Hyundai Motor India and Hyundai Assan Otomotive Sanayi (Turkey plant) locate in areas of extreme water stress in the WRI Aqueduct water risk atlas tool. HMI & HAOS

Volume of water withdrawal (Ton)	Volume of water consumption (Ton)	Rate of water withdrawal	Rate of water consumption
1,549,769	1,246,046	7.8%	11.5%

Dignity and Equality	Diversity and Inclusion	49, 98-99	Data on employees by age, female employees, and employment status of the disabled is disclosed in the Sustainability Report.
	Pay equality	82, 100	The average remuneration per person is disclosed in the Sustainability Report.
	Wage level	82, 100	
	Risk for incidents of child, forced or compulsory labor	51	There are no business sites or suppliers with a high risk of child/forced labor.

WEF IBC Stakeholder Capitalism Metrics

<table>
<tr><th>Theme</th><th>Metrics</th><th>Page</th><th>Note</th></tr>
<tr><td>Health and Well-being</td><td>Health and safety</td><td>102</td><td>The number of industrial accident victims, industrial accident rate, work loss rate and occupational disease rate are disclosed in the Sustainability Report.
LTIFR & OIFR
<table>
<tr><th>Classification</th><th>Accident rate</th><th>OIFR</th></tr>
<tr><td>Employees (Korea)</td><td>0.81</td><td>0.89</td></tr>
<tr><td>Employees (Overseas)</td><td>0.07</td><td>0.01</td></tr>
<tr><td>Employees (Total)</td><td>0.50</td><td>0.53</td></tr>
<tr><td>Suppliers (Korea)</td><td>2.38</td><td>-</td></tr>
<tr><td>Suppliers (Overseas)</td><td>0.00</td><td>-</td></tr>
<tr><td>Suppliers (Total)</td><td>1.52</td><td>-</td></tr>
</table></td></tr>
<tr><td>Skills for the Future</td><td>Training provided</td><td>99</td><td>The status of employee training (training hours by position, training expense) is disclosed in the Sustainability Report.</td></tr>
<tr><td rowspan="3">Employment and Wealth Generation</td><td>Absolute number and rate of employment</td><td>100</td><td>The number of new employees in Korea and the turnover rate are disclosed in the Sustainability Report.</td></tr>
<tr><td>Economic contribution</td><td>95-96</td><td>Sales and financial information, R&D expenses (details of the company's investments and government subsidies), information on economic values distributed are disclosed in the Sustainability Report and the Business Report.</td></tr>
<tr><td>Financial investment contribution</td><td>96</td><td>Hyundai Motor Company is committed to improving the company's successful investment and profitability.
Total capital expenditure - Depreciation expense: KRW (1,169) billion
Buyback of treasury stock + dividend payment: KRW 2,023 billion</td></tr>
<tr><td>Innovation of Better Products and Services</td><td>Total R&D expense</td><td>96</td><td>Total R&D expense spent is as follows.
- Total R&D expenses in 2022: KRW 3.3 trillion
- 2022 government subsidy: KRW (4,016) million</td></tr>
<tr><td>Community and Social Vitality</td><td>Total tax paid</td><td>96</td><td>Details of corporate income tax are disclosed in the Sustainability Report and business reports.</td></tr>
</table>

Independent Assurance Statement

Hyundai Motor Co., Ltd. (“the Company” or “Hyundai Motor”) commissioned DNV Business Assurance Korea, Ltd. (“DNV”, “we” or “us”), part of DNV Group, to undertake independent assurance of the Company’s 2023 Sustainability Report (the “Report”).

Our Opinion

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe Hyundai Motor’s adherence to the Assurance Principles described below. In terms of reliability of the performance data, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate. We believe that Hyundai Motor is reporting in accordance with the GRI Standards.

We have reviewed that the topic-specific disclosures of GRI Sustainability Reporting Standards 2021 which are identified in the process for defining report content;

No.	Material Topic	Topic Standard
1	Leading the transition to eco-friendly/electric vehicles	302-5, 305-5, 306-4
2	Efforts to reduce GHG emissions	305-1, 305-2, 305-3, 305-5
3	Enhancement of global corporate value	201-1
4	Diffusion of human rights management	407-1, 408-1, 409-1
5	Strategic management of supply chain ESG	414-1, 414-2

Without affecting our assurance opinion, we also provide the following observations:

- **The Principle of Inclusivity**
  Hyundai Motor defines customers, dealers, employees, suppliers, local communities, government and shareholders/investors are their major stakeholder groups and reports on each group’s definitions, communication channels, and major interests. In particular major interests from them have been applied in the materiality assessment process for promoting participation from stakeholders.

- **The Principle of Materiality**
  Hyundai Motor conducted double materiality assessment, taking into consideration the environmental and social (non-financial) impacts and financial impacts. During the assessment process, the survey with employees and outside stakeholders was conducted to reflect their opinions appropriately. DNV confirms that material topics chosen from this assessment were reflected in the Report.

- **The Principle of Responsiveness**
  Hyundai Motor has set an overarching objective of sustainable development, “The Right Move for the Right Future”, with three sub-set directions in relation to planet, people, and community and 15 focus area. For realising this objective, the Company reports roles and responsibilities of Sustainable Management Committee, ESG Committee, the dedicated sustainability team in a detailed manner.

  DNV recommends that the Company exhibit material topics and their performances in relation to the Company’s mid/long-term ESG objectives in order that stakeholders get to know performance of each material topic in the context of the Company’s core ESG objectives and keep track of records on an annual basis.

- **The Principle of Impact**
  Hyundai Motor discloses background of choosing the material topics along with performance progress, whose interests and expectations of stakeholders are reflected in. Hyundai Motor helps stakeholders understand the Company better by managing environmental and social impact effectively and presenting related performance in a quantitative manner. DNV confirms that the material topics selected through the materiality assessment are not missed in terms of the spatial and time boundaries.

- **Reliability of Specific Sustainability Performance Information**
  DNV conducted a review of compliance with the principles of AA1000AP(2018) of the Report with Type 1 verification (Type 2 for accident rate, weight of disposal, and water consumption). The assurance team has sampled data and tested accuracy and reliability of the sustainability performance data of the Company and interviewed responsible people and reviewed the data gathering process with the supporting documents and records. Based on the test, the intentional error or misstatement was not noted. Data owners were able to demonstrate to trace the origin of the data and to interpret the processed data in a reliable manner. The data was identifiable and traceable. The Company reports the sustainability performance of the last three years and can be compared over time. Any errors or unclear expressions found during the verification process were corrected prior to the publication of the Report.

Independent Assurance Statement

Scope and Approach

We performed our work using AA1000AS v3, Assurance Standard set for by AccountAbility, and DNV's assurance methodology VeriSustain™ (Ver. 5.0) which is based on our professional experience, international assurance best practices including the International Standard on Assurance Engagements 3000 ("ISAE 3000"), and the Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards"). DNV provides Type 1 and the moderate assurance. But some part of performance data has been verified by Type 2 as described above.

The engagement excludes the sustainability management, performance and reporting practices of Hyundai Motor's subsidiaries, associated companies, suppliers, contractors and any third-parties mentioned in the Report. We did not interview external stakeholders as part of this assurance engagement. Economic performance based on the financial data is cross-checked with internal documents, the audited consolidated financial statements and the announcement disclosed at the website of Korea Financial Supervisory Service (http://dart.fss.or.kr) as well as Hyundai Motor's website (https://www.hyundai.com/worldwide/en/#utm_source=hmc-kr&utm_medium=referral&utm_campaign=top_util). The review of financial data taken from these sources is not within the scope of our work.

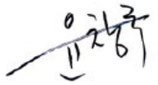
We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing a 'limited level' of assurance. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the company were applied. The baseline data for environmental and social performance are not verified, while the aggregated data at the corporate level are used for the verification.

Basis of Our Opinion

The assurance was carried out from May to June 2023. We undertook the following activities as part of the assurance process:

- Challenged the sustainability-related statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls;
- Site visits to Hyundai Motor HQ in to review process and system for preparing sustainability data and implementation of sustainability strategy.
- Conducted interviews with representatives from the ESG team;
- Conducted document reviews, data sampling and interrogation of supporting databases and associated reporting system as they relate to selected content and performance data;
- Reviewed the process and the result of materiality assessment.

For and on behalf of DNV Business Assurance Korea Ltd.
June 26, 2023



Chang Rok Yun
Senior Auditor and Lead Auditor

Yu Lee Jang
Senior Auditor

Sang Yeon Park
Technical Reviewer

AA1000
Licensed Report
000-10/V3-O02EV

Responsibilities of the Directors of Hyundai Motor and DNV

The Directors of Hyundai Motor have sole responsibility for the preparation of the Report. Our statement represents our independent opinion and is intended to inform all stakeholders. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV expressly disclaims any liability or coresponsibility for any decision a person or an entity may make based on this Independent Assurance Statement.

Competence and Independence

DNV's established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. This engagement work was carried out by an independent team of sustainability assurance professionals.

DNV - Business Assurance

DNV Business Assurance Korea Ltd. is part of DNV Group, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance.

GHG Assurance Statement

Relating to Hyundai Motor Company's Scope 1 & 2 GHG emissions in domestic sites for the 2022 calendar year

This Assurance Statement has been prepared for Hyundai Motor Company.

Terms of Engagement

LRQA was commissioned by Hyundai Motor Company (HMC) to provide independent assurance on its Greenhouse Gas (GHG) Inventory Report for the calendar year 2022 (the report) against "the guidelines on emission reporting and certification under the GHG emissions trading system" and the monitoring plan for the calendar year 2022 using "the verification guidelines for GHG emissions trading system".

The report relates to direct GHG emissions and energy indirect GHG emissions. HMC's geographical boundary includes its domestic operations at Ulsan Plant, Asan Plant, Jeonju Plant, R&D Centers, HQ and owned buildings, Service Centers, Sales Branches (including car delivery centers), and Genesis Sales Branches. GHG emissions have been consolidated using operational control approach.

Management Responsibility

LRQA's responsibility is only to HMC. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The management of HMC. is responsible for preparing the report and for maintaining effective internal controls over all the data and information within the report. Ultimately, the report has been approved by, and remains the responsibility of HMC.

LRQA's Approach

LRQA's assurance engagement has been carried out in accordance with our verification procedure using "the verification guidelines for GHG emissions trading system" to reasonable level of assurance.

The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- Visiting sites and auditing management system to control the data and records regarding GHG emissions and energy uses
- Interviewing the relevant persons responsible for managing and maintaining data and associated records
- Reviewing the historical data and information back to source for the calendar year 2022.

Level of Assurance & Materiality

The opinion expressed in this Assurance Statement has been formed on the basis of a reasonable level of assurance, and at the materiality of the professional judgement of the verifier and at the materiality level of 2.5%.

LRQA's Opinion

Based on LRQA's approach, we believe that the report is prepared in accordance with "the guidelines on emission reporting and certification under the GHG emissions trading system" and the monitoring plan for the calendar year 2022 using "the verification guidelines for GHG emissions trading system" and the GHG emissions data in the Table 1 is materially correct.

Dated: 16 March 2023

Il-Hyoung Lee
LRQA
17th Floor, Singsong Building, 67 Yeouinaru-ro, Yeongdeungpo-gu, Seoul, 07327, Korea
LRQA Reference: SEO6012382

Table1. Summary of GHG emissions

Unit: tCO^2eq

Scope of GHG emissions	2022
Direct GHG Emissions	483,376
Energy Indirect GHG Emissions	1,057,126
Total GHG Emissions	1,540,502

Note: The total GHG emissions may differ from the sum of GHG emissions disclosed by the Ministry of Environment due to the decimal value processing of GHG emissions at each site.

GHG Assurance Statement

Relating to Hyundai Motor Company's Scope 1 & 2 GHG emissions in overseas sites and Scope 3 emissions for the calendar year 2022

This Assurance Statement has been prepared for Hyundai Motor Company in accordance with our contract.

Terms of engagement

LRQA was commissioned by Hyundai Motor Company to provide independent assurance on its GHG emissions inventory and energy consumption for the calendar year 2022 (here after referred to as "the report") against the assurance criteria below to a limited level of assurance and materiality of professional judgement using LRQA's verification procedure, which is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered Hyundai Motor Company's domestic and overseas operations and activities, and specifically the following requirements:
- Evaluating conformance with World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, revised edition[1]
- Evaluating the accuracy and reliability of data and information for direct GHG emissions (Scope 1), energy indirect GHG emissions (Scope 2) and energy consumption in operations of overseas factories[2]
- Evaluating the accuracy and reliability of data and information for other indirect GHG emissions (Scope 3) in domestic and overseas sites.

LRQA's responsibility is only to Hyundai Motor Company. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Hyundai Motor Company's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of Hyundai Motor Company.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that Hyundai Motor Company has not, in all material respects:
- Met the requirements above; and
- Disclosed accurate and reliable data and information as summarized in Tables 1, 2-1, 2-2 and 3 below.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

[1] https://www.ghgprotocol.org

[2] This engagement excludes verification of Scope 1 and 2 emissions for domestic operations in accordance with our contract with Hyundai Motor. Scope 1 and Scope 2 GHG emissions for domestic operations of Hyundai Motor Company have been verified for the same reporting period by LRQA in accordance with the GHG emissions trading system of Korea.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:
- interviewing key people of the organization responsible for managing GHG emissions and energy consumption data and records;
- sampling specific overseas factories and reviewing processes related to the control of GHG emissions and energy consumption data and records;
- reviewing whether GHG emissions have been calculated with parameters from recognized sources;
- checking whether direct GHG emissions and non-renewable energy consumption of HMMC in Czech were transposed correctly from the GHG inventory which was verified by the third-party assurance provider other than LRQA;
- verifying historical GHG emissions and energy consumption data and records at an aggregated level for the calendar year 2022; and
- visiting Hyundai Motor Company's head office and reviewed additional evidence made available by Hyundai Motor Company.

LRQA's standards, competence and independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.
LRQA is Hyundai Motor Company's verification body for its GHG emissions under the GHG emissions trading system of Korea. The verification is the only work undertaken by LRQA for Hyundai Motor Company and as such does not compromise our independence or impartiality.

Dated: 14 May 2023

Tae-Kyoung Kim
LRQA Lead Verifier
On behalf of LRQA
2nd Floor, T Tower, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea

LRQA reference: SEO00001260

GHG Assurance Statement

Table 1. Summary of Hyundai Motor Company's Overseas Factories, Scope 1 and Scope 2 GHG Emissions 2022

Scope of GHG emissions	Tonnes CO_2e										
	HMMA	BHMC	HMI	HAOS	HMMC	HMMR	HMB	HTBC	HTMV	HMMI	HYMEX
Direct GHG emissions (Scope 1)	33,821	59,526	27,574	30,741	32,205	13,396	6,936	868	3,953	5,733	6,597
Energy indirect GHG emissions (Scope 2, Location-based)	170,690	129,901	266,987	22,825	49,272	10,119	10,427	6,780	23,201	47,824	58,660
Energy indirect GHG emissions (Scope 2, Market-based)	170,690	129,901	158,357	11,035	0	10,119	10,427	6,780	23,201	47,824	58,660

Note 1: Scope 2, Location-based and market-based are defined in the GHG Protocol Scope 2 Guidance, 2015

Table 2-1. Summary of Hyundai Motor Company's Overseas Factories, Energy Consumption (TJ) 2022

Energy	TJ										
	HMMA	BHMC	HMI	HAOS	HMMC	HMMR	HMB	HTBC	HTMV	HMMI	HYMEX
Non-renewable energy	1,830	1,970	1,101	699	581	367	433	59	160	376	460
Renewable energy	0	0	452	108	435	0	0	0	0	13	0

Table 2-2. Summary of Hyundai Motor Company's Overseas Factories, Energy Consumption (MWh) 2022

Energy	MWh										
	HMMA	BHMC	HMI	HAOS	HMMC	HMMR	HMB	HTBC	HTMV	HMMI	HYMEX
Non-renewable energy	508,239	547,173	305,763	194,201	161,314	101,818	120,203	16,344	44,490	104,513	127,670
Renewable energy	0	0	125,506	30,000	120,766	0	0	0	0	3,622	0

GHG Assurance Statement

Table 3. Summary of Hyundai Motor Company, Scope 3 GHG Emissions 2022

Scope of GHG emissions	tCO_2e
Other indirect GHG emissions (Scope 3)	
Purchased goods & services – raw materials for parts used in vehicles manufactured in domestic and overseas factories	**19,852,763**
Capital goods – computers & monitors purchased in domestic sites	**326**
Fuel- and energy-related activities – upstream emissions of fuels consumed in domestic sites and overseas factories (excluding electricity and steam purchased) (Overseas factories only include HMMA, BHMC, HMI, HAOS, HMMC, HMMR, HMB, HTBC, HTMV, HMMI and HYMEX)	**145,177**
Waste generated in operations – treatment of waste generated from operations in domestic sites (Ulsan/Jeonju/Asan factories, research centres and service centres)	**1,978**
Business travel – emissions of personal cars, buses, trains and domestic & international flights by employees working in domestic sites	**21,370**
Employee commuting – commuting by buses in domestic operations	**6,617**
Downstream transportation and distribution – vehicles manufactured in domestic factories (This includes shipping and land transportation by Hyundai Glovis)	**964,206**
Use of sold products - internal combustion engine vehicles sold domestically and overseas (This is based on mileage of 150,000 km for 10 years, and excludes electric vehicles and hydrogen vehicles)	**81,959,096**
End-of-life treatment of sold products – vehicles sold domestically and overseas	**2,133,743**
Downstream leased assets – lessee companies in the headquarters building	**539**
Investments – Scope 1 and Scope 2 GHG emissions of six investee companies, in which Hyundai Motor Company owns 20% or more shares and which are listed on the stock market of Korea.	**704,970**

About This Report

Hyundai Motor Company has been publishing a sustainability report every year since 2003 in order to disclose both financial and non-financial performance, including its efforts to promote sustainable management, in an integrated manner and to communicate with stakeholders. This 2023 Sustainability Report elaborates on its key performances achieved in the areas of ESG management strategy, environment, society and governance, and the issues associated therewith. Through this, we will actively communicate with stakeholders to realize social value as a global leading company.

Reporting Principles and Standards

This report is in accordance with the Global Reporting Initiative (GRI) Standards. In addition, this report satisfies the four principles – Inclusivity, Materiality, Responsiveness, and Impact – of the AA1000APS (Accountability Principles Standard) that includes the obligation to explain sustainability management.

In addition, this report was prepared to align with the information disclosure guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), Sustainability Accounting Standards Board (SASB), WEF IBC Stakeholder Capitalism Metrics, and European Sustainability Reporting Standards (ESRS).

Publisher	Hyundai Motor Company Headquarters: 12, Heolleung-ro, Seocho-gu, Seoul, 06797, Korea
Publication Date	July 2023
Production (Contact Information)	Sustainability Management Team, Hyundai Motor Company Tel: +82-2-3464-8886 E-mail: ESG@hyundai.com
Reporting Principle	GRIStandards, TCFD, SASB, WEF IBC Stakeholder Capitalism Metrics, ESRS
Reporting Boundary	Hyundai Motor Company (also include some data and information of Hyundai Motor Group)
Reporting Scope	Economic (based on Korean International Financial Reporting Standards), social and environmental area
Reporting Period	January 1st, 2022 - December 31st, 2022 (also include some data and information from the first half of 2023)
Reporting Cycle	Annual (last report was published in July 2022)

Reporting Period

This report covers activities undertaken from January 1st, 2022 to December 31st, 2022, including some key activities conducted until the first half of 2023. As for quantitative performance, if the results need to be tracked continuously, we have used data for the past three years.

The reporting cycle for this report is one year. The previous report was published in July 2022.

Scope and Boundary of Report

This report covers the activities of the headquarters as well as manufacturing plants, R&D centers, design centers, and sales corporations operated by Hyundai Motor Company in Korea and overseas.

Financial information is based on the consolidated financial statements in accordance with the Korean International Financial Reporting Standards (K-IFRS). Nonfinancial data regarding environmental and social performance is based on the separate figures of Hyundai Motor Company, and some performances include those of Hyundai Motor Group. In case the reporting scope differs, the reporting scope of the information is indicated separately in the annotation.

Third Party Assurance

This report has been assured by an independent assurance corporation (DNV) to ensure the accuracy, objectivity and credibility of the report preparation process and all the information created. The financial information provided in this report has been audited by an independent auditor, and assurance on greenhouse gas emissions and energy usage was carried out by LRQA, an independent assurance corporation. Detailed assurance results can be found in the third-party assurance statement and greenhouse gas assurance statement.

UN Global Compact

The UN Global Compact (UNGC) is an international agreement that former UN Secretary-General Kofi Annan suggested in 2000 to emphasize corporate execution of social responsibilities, and consists of ten major principles in the four areas of human rights, labor, environment, and anti-corruption. Hyundai supports the ten principles of the UNGC and strives to observe them in overall management.

COMMUNICATION ON PROGRESS

UN GLOBAL COMPACT

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Contribution (In alphabetical order)

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Sean Hwang
Sejun Kim
Seokho Kim
Seongjae Lee
Seri Kim
Seulki Yang
Seung Su Kang
Seungbum Kim
Seungji Kang
Seungkyum Ra
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Sewan Park
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Shinwon Lee
Simon Kim
Soohyun Bae
Soonbok Kim
Soonsang Hong
Suksan Yoon
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Wonbae Lee
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Youngpyoe Hong
Youngsu Kim
Yujeong Lee
Yunryeong Song
Yushin Kim

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		Jihyeong Ha
		Minkyung Kim
		Wonjun Choi
		Yooseong Choi
		Youngmin Kang
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	Hyundai Motor Company Brand Design Team	Seohee Park
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	Korea Productivity Center	Hyungyun Jeong
		Junyoung Lee
		Kwangho Jeong
		Sangwoo Han
	Talantone Creative Group	Ahreum Min
		Younhee Park

What moves us:

ESG Magazine

HYUNDAI

Humanity.

Progress for Humanity –
Journey to future mobility, to move everyone.
Hyundai pursues a better future for humanity through innovation. If we had only talked the talk but not walked the walk regarding mobility solutions for all, we wouldn't have been able to develop ideas of creating a better tomorrow.

To bring about changes in all our lives through future mobility technology and to enable an innovative ecosystem where all objects have mobility, Hyundai offers smart mobility solutions that transcend the limitations of time and space, thereby ushering in a new future where people's dreams do come true.

Robotics for Everyone

Advanced Air Mobility for Everyday

Mobility Experiments for Humanity

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Robotics for Everyone

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Advanced Air Mobility for Everyday

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Mobility Experiments for Humanity

Robotics for Everyone – a significant leap toward ‘Progress for Humanity’

FUTURE MOBILITY
WE ENVISION

“Progress for Humanity”, Hyundai’s vision of future mobility has emerged from a sincere heart for humanity. We have been thinking long and hard about what people need and what they want from Hyundai, and finding answers in mobility solutions that provide freedom of mobility to everyone. As there are no limits to what we can achieve in our desires to see all humanity share a better future, we are expanding the sphere of our influence beyond automotive innovation. While creating value that benefits people through mobility, we are taking meaningful steps of progress for humanity by introducing robots that are embodied with affection and care for people.

Mobility for You

MEET THE FUTURE,
TODAY.

Hyundai Motor Company Robotics
Mobility for humanity, towards the world

Human-centered Technology

Hyundai sees robots as a new partner to a better life. Robots are already a familiar part of our daily lives – wearable robots help people walk again; service robots charge electric vehicles in a parking lot without human interactions; cute delivery robots effortlessly weave through the crowd; and a four-legged walking robot "Spot" dances at a BTS concert and serves as a member of "Team Century", promoting the 2022 FIFA World Cup™. Taking a step further, Hyundai is redefining robotics as a new mobility concept that will expand the realm of the human reach and help humanity realize ultimate freedoms of mobility, and leading the lifestyle innovation that will be brought about by robots.

Wearable Robot
- CEX: Chair-type wearable robot supporting the legs
- VEX: Vest-type wearable robot assisting the worker with overhead tasks
- HMEX: Medical wearable robot enabling patients with waist-down paralysis to walk

Service Robot
- DAL-e: Customer service robot
- DAL-e Delivery: Indoor and outdoor delivery robot
- ACR: Automatic electric vehicle-charging robot

Mobile Platform
- PnD: An open mobile module that combines driving, steering, braking and sensing
- MobED: 12 degrees of freedom mobile robot platform that can maintain its horizontal body posture even on inclined roads and uneven ground

Metamobility
New dimension of mobility experience enabled by using smart devices

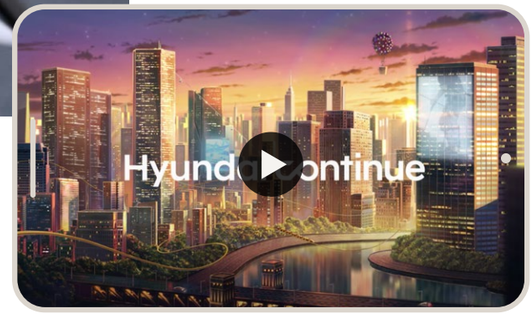
Mobility of Things
Ecosystem where all objects move freely by themselves based on robotics technology

Boston Dynamics
- Spot: Four-legged robot dog for industrial inspection applications
- Atlas: Two-legged humanoid robot for advanced research
- Stretch: Logistics-specialized robot

Exploring new horizons of future mobility, free of limits

The goal of Hyundai's R&D of robotics is to create a better future for humanity. Wearable robots complement the movements of the human body by becoming a part of the body, thus extending freedom of mobility beyond physical limitations.

Hyundai's brand campaign film, released in January 2020, shows a Korean National Team para-archer walking steady with the help of Hyundai's medical exoskeleton "MEX". With the feet placed on MEX's footholds and the legs and back fastened by a belt, even people paralyzed from the waist down can walk by pushing the button on the walking poles. In its early 2023 presentation of the video titled "Journey to Move Everyone", Hyundai reaffirmed its commitment to innovating robotics technology for anyone with freedom of mobility.



Journey to Move Everyone

Wearable Robot

Human and robot moving as one to help people overcome physical limitations

We transgress the boundaries of means of transportation to overcome limitations in mobility. Even people with physical disabilities gain new strength through robotics solutions Hyundai offers. We abide by the basics of mobility and always present bigger goals regarding humanity's movement so that all walks of life can freely move from starting point to destination.

In the Fourth Industrial Revolution era where excitements of advancing technologies and concerns over technological inequality prevail, Hyundai is focused on R&D of robots that truly benefit humanity. Our robotics R&D has begun with a desire to augment the progress of humanity, and our robots are at work in all sectors, small and big, of industry and daily life, creating a more humane world.

AI Robot “DAL-e” | Hyundai Motor Group Robotics Lab

Communicating and communing with people and evolving for humanity

Equipped with AI technology, robots are evolving in the direction of communing with people. Drawing on the technological capabilities it has accumulated as a global automotive company, Hyundai has been developing service robots that move as quietly and reliably as non-vibration vehicles, provide as much information and entertainment as vehicle infotainment systems, and navigate the surrounding area using LiDAR and camera sensors as well as autonomous driving vehicles. What’s more, we have added AI technology to robots to improve them so that they can readily respond to changes in people’s emotions, thereby getting closer to developing robots that can communicate and even commune with people.

A leading example is service robot “DAL-e” developed for serving customers. As implied in its full name, “Drive you, Assist you, Link with you – experience”, DAL-e can avoid moving obstacles that can appear in its paths toward customers. In addition to using words, it communicates with customers using non-linguistic elements, such as postures, facial expressions and intonations. It also can take pictures of customers, dance to music, and perform other entertainment functions upon request. Since 2021 following its pilot operation in June 2019 at the Hyundai Motor Studio Seoul, DAL-e has been welcoming customers at Hyundai showrooms. In addition, it made appearance at the 2022 general shareholders’ meeting to the delight of many attendees and showed off some of its many talents at BTS’ concert in Busan.

AI-based Self-Driving Hotel Delivery Robot

Service Robot

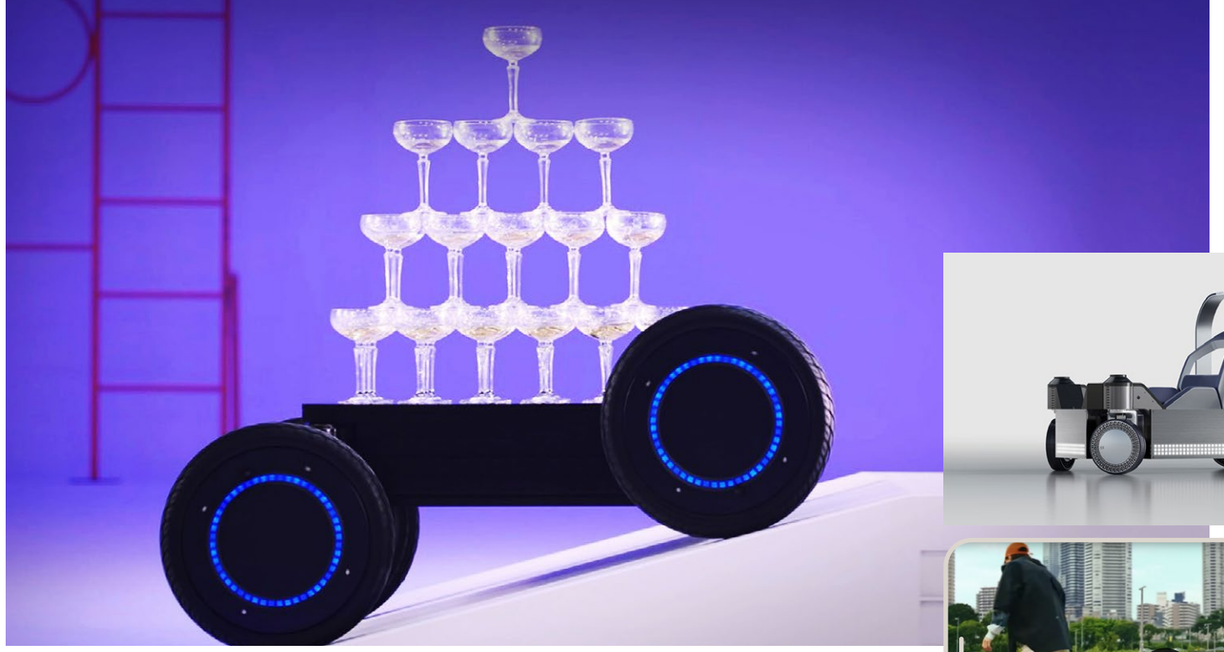
Humanity’s new helper and friendly companion

Anticipations and concerns are multiplying over the rapid development of AI technologies and robots as they increasingly become a part of our lives. Hyundai bridges the gap with people-centric technologies. Just like automobiles that have evolved for hundreds of years for the benefit of humanity, robots that have come together with AI assist our daily lives with their measured and reassuring motions.

Moreover, Hyundai commenced the pilot operation of its indoor and outdoor delivery robots in early 2023, demonstrating that delivery robots, which was regarded as something of the future, are on our doorsteps. Our delivery robot made its debut at a multi-purpose building located in Gwanggyo near Seoul, efficiently performing its task of delivering food to various destinations in the congested area. The robot moves at 5.4 km/h, slightly faster than people walking. The robot can move faster but maintains the speed for safety reason. It uses elevators in apartment buildings and, upon completion of its task, finds its way back to the charging station using Hyundai’s Plug & Drive (PnD) module platform. The PnD module can be attached to any objects and enables mobility of traditionally inanimate things, from small objects to large community spaces. It is an all-in-one mobility solution that combines intelligent steering, braking, in-wheel electric drive and suspension hardware. The four PnD modules attached to the delivery robot constitute the secret behind the robot’s ability to freely and quickly move in all directions.

As robots evolve with a higher degree of precision, people can enjoy their lives more. Hyundai’s robotics technologies will bring about delightful changes in people’s daily lives. Drawing on our fast-advancing robotics knowhow, we will continue to create a more inspiring future where robots help improve the quality of people’s lives in a genial way as an integral part of daily life.

MobED is a new concept of mobility, traveling anywhere as reliably as a quadruped. Simple yet agile and dynamic yet stable, MobED brings its infinite possibilities into our daily lives.



Hyundai Motor Group's New Mobility Platform – MobED

Mobility for You – MobED Action Cam

Creating new opportunities of movement with a new-concept mobile platform

Hyundai is going beyond producing robots and advancing robotics technology and humanizing it in the coat of new services that generate unprecedented value. A leading example is "MobED", which is replacing existing service robots. MobED, which stands for "Mobile Eccentric Droid", is a small mobility platform that is superior in maneuverability even in a complex urban environment.

Robots have become a part of our daily lives as people enjoy the convenience and benefits of using such mobile robots as robot vacuums. A robot vacuum is a smart home appliance that moves by itself and cleans or vacuums floors, but its maneuverability is somewhat limited that it often gets stuck in a corner or stopped by an obstacle. Not only robot vacuums but most other mobile platforms can be used only in certain environments, which also restricts the extent of their usage. To overcome these limitations, we have looked beyond the concept of a simple wheeled mode of transportation and started commencing the development of a new mobile robot with dynamic, stable driving capabilities, and as a result, unveiled MobED in December 2021, thus creating new opportunities of movement.

Contrary to its simple appearance, MobED is extremely agile and dynamic and can stably travel even on rough surfaces. Thanks to the "Eccentric Wheel" technology that enables each wheel to operate independently, MobED can travel over bumpy surfaces with less lateral movements. Also, the four-wheel steering function allows it to stop and turn 360 degrees as well as to avoid obstacles by moving diagonally, which minimizes the distance to travel.

Another distinctive feature of MobED is that it expresses diverse types of information to the user using its flexible joint movements. Such human-robot interactions not only give people pleasure and a sense of closeness, but also make people see robots as a trusty partner to their daily lives. What's more, user experiences of such diverse interactions can lead to the creation of new mobile robot-based services.

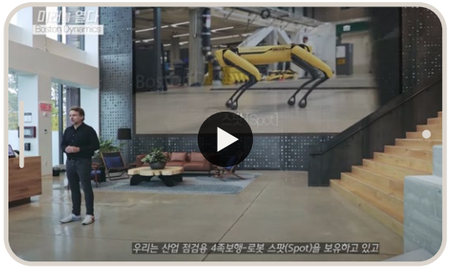
MobED is a universal platform that enables producers and users to freely expand functions to their needs. It can therefore vastly extend the limits of existing mobile robots, easily change the roles of service robots, and has unlimited potential to provide diverse services unimagined before. A MobED of the future will be creating new experiences in our daily lives. To realize such a future today, Hyundai is expediting its development of mobility services that can satisfy both users and consumers.

Adding to the value of humanity from the closest place to people

Boston Dynamics, a global robot company joined Hyundai Motor Group in June 2021, has been working closely with Hyundai to develop robotics technologies that will enable humanity's ever-expanding movements and progress. At the center of the collaboration stands 4-legged walking robot "Spot" that performs diverse roles in various areas.

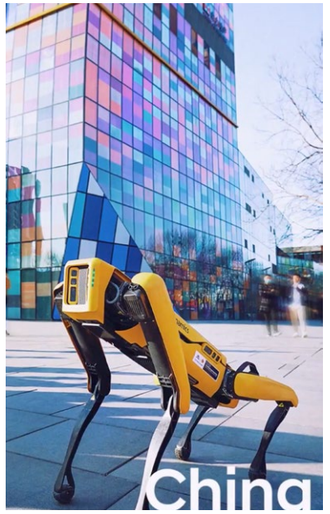
Spot had an especially busy year in 2022. At Consumer Electronics Show (CES) 2022 held in Las Vegas in January, Spot went on the main stage together with Hyundai Motor Group Executive Chair Euisun Chung. During the 2022 FIFA World Cup™, of which Hyundai was an official sponsor, Spot, sporting jersey number 1, played an outstanding part in the Goal of the Century campaign as a member of Team Century, the campaign leaders. Spot also took part in an art project, contributing to creating an arena for discussion on diverse subjects, including robotics, art and climate change. At BTS' concert in Busan, Spot escorted BTS members to the main stage to the surprise and delight of fans in attendance.

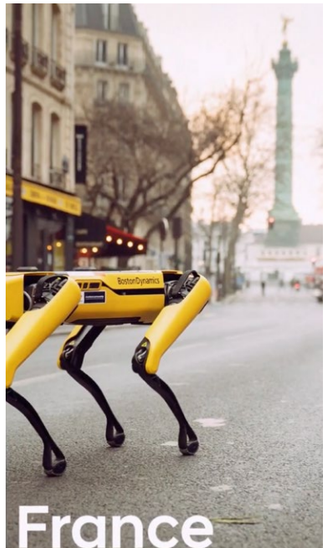
Spot can do many other things. It can go anywhere people can and also explore areas inaccessible to humans. It can be used in a wide range of industry, including manufacturing, construction, research, mining and public safety. By autonomously handling various forms of work, it changes and upgrades the way of working. Spot is actually used at Hyundai's worksites. It performs vehicle quality inspections at the production line and patrols the worksite at night to detect fires or leakages of harmful substances. By playing an exclusive role in ensuring the safety of hard-to-reach areas, Spot is proactively responding to changes expected in the future industrial environment.

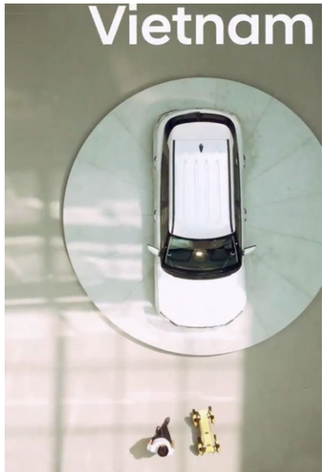


Future of Robotics for Humanity

Spot's potential is infinite, and so is the potential of robots to create new value for humans through their interactions with humans. Through robotics technology, Hyundai seeks to enrich the lives of people, and our robots are created to provide people with values that are meaningful and beneficial. Robots will be soon serving as a reliable helper, freeing people of repetitive work and dangerous tasks so that people can focus more on cultivating their creative potential to the fullest extent. They also will be an integral part of our lives, interacting and sharing fun with people, just like a dear friend. The journey has already begun towards a future where people will be together with robots as a new mobility partner. Through mobility innovation, we will make daily life more dynamic, help build a better world, and lead the journey towards a more sustainable future.







Agile Mobile Robot

New future rising from the fusion of robotics and mobility technology

It has been two years since Boston Dynamics became a member of Hyundai Motor Group. Since then, it has been conducting bold ventures in close collaboration with Hyundai. As a result, meaningful outcomes have been produced that will lead the infinite movement and progress of humanity. Our dynamic and innovative mobility drive, spearheaded by Spot, presents a new path of exploration to the robot industry.

Advanced Air Mobility for Everyday – ready for take-off toward sustainable future mobility

FUTURE MOBILITY
WE ENVISION

The future Hyundai envisions is a smart city where people are at the center, as we look beyond automotive business to emerge as a “Smart Mobility Solution Provider”. Then what would be most important to the realization of such a future? Our answer is freedom of mobility in everyone’s daily life. To bring the tomorrow we all dream of into reality today, we are transcending vehicle innovation to focus our resources and energy on mobility technologies that can establish the smart city’s identity.

Hyundai Enables the New Economy

MEET THE FUTURE,
TODAY.

A new concept of mobility to change our daily lives

KEY MILESTONES OF AAM DEVELOPMENT

UAM

2022-2023	2024-2025	2028
Quarter-Scale Tech Demo	Full-Scale Tech Demo	Entry-Into-Service

RAM

2022-2025	2030
Tech Demo	Entry-Into-Service

RAM

Developing the "Zero Carbon Fixed-Wing", a new alternative for intercity/ regional movements

- Applying hydrogen fuel cell-based CTOL[1]/ STOL[2] and autonomous flying technologies
- Developing a vehicle concept optimal for point-to-point transport
- Production costs minimized through design and manufacturing innovation (design for manufacturability)

UAM

Developing an eVTOL vehicle, a new mobility that will redefine urban passenger transport

- Applying eVTOL[3] and autonomous flying technologies
- Developing lithium metal-based battery pack technology
- Vehicle designed for mass production from the early development stage

Human-centered Technology

To expand the human reach to include the sky for the convenience of humanity, Hyundai is focusing on researching and developing Advanced Air Mobility (AAM), which will extend freedom of mobility to the skies above major cities. In a future city where AAM will have become an integral part of daily life, people can free themselves from the chaos of ground transportation and devote their precious time to something more worthwhile. Air mobility, free of traffic congestions as well as carbon emissions, will present a better way for humanity to co-exist with nature. Although an unexplored course, it is the direction we must be headed for the sake of a sustainable future as well as a destination Hyundai can reach for sure. This is why we are speeding up our innovation, expanding the scope of collaboration, and flying high towards a human-centric, smart future city.

1) CTOL: Conventional Take Off & Landing
2) STOL: Short Take Off & Landing
3) eVTOL: electric Vertical Take Off & Landing

Redefining AAM

Hyundai creates new paths to enable people to enjoy mobility freedom, and we now are blazing new paths in the skies. AAM can lessen the environmental impact of automobiles and other existing transportation measures, while also expanding people's time and space. AAM is the next-generation mobility solution for the sky roads Hyundai is creating.

Designing a new concept of future air mobility

A human-centric smart city should present visions and opportunities to all people and invigorate their relationships. Essential to this end is infrastructure and services that enable people's efficient and smart movements, which is why Hyundai is creating a platform for future cities through Advanced Air Mobility (AAM).

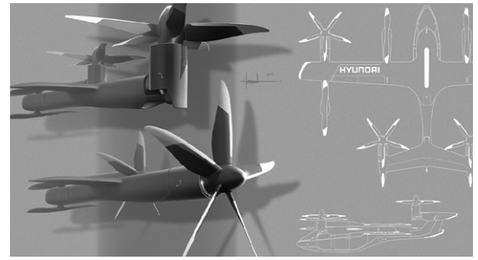
AAM is a rising sector in the air mobility market. National Aeronautics and Space Administration (NASA) defines AAM as an air transportation system that moves people and cargo between places previously not served or underserved by aviation. In other words, AAM covers both Urban Air Mobility (UAM), which provides transportation within cities, and Regional Air Mobility (RAM), which interconnects cities. By adding the concept of eco-friendliness to this definition of AAM, Hyundai is focusing on developing a safe and innovative AAM system that anyone can use as well as eco-friendly air-mobile vehicles.

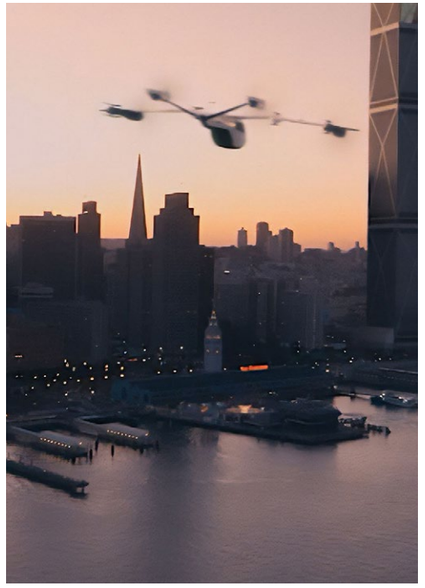
Although AAM has yet to materialize, it has huge growth potential. According to the global investment bank Morgan Stanley, the global UAM-related market, estimated at USD 8 billion in 2020, is forecast to reach USD 9,042 billion in 2050. The market size will be even bigger with the inclusion of the AAM market that will cover the entire global aviation industry, which has pledged to become carbon neutral by 2050. Such an inspiring forecast is based mainly on popular expectation that air mobility will resolve many issues assailing over-crowded cities. For example, UAM causes no road traffic congestions like automobiles do.

Also, its vertical take-off and landing ability enables relatively freer and more efficient movements of people within cities than conventional airplanes which require long and costly runways. Saving travel time can also lead to an increase in the quality of people's lives while reducing negative impact on the environment.

As a way to preoccupy the soon-to-be AAM market, widely expected to boom as a result of satisfying the unmet needs of automobiles and conventional air transport, Hyundai elevated the status of UAM Sub-Division to AAM Division in January 2022 and is expediting its development of Advanced Air Mobility solutions. A business decision has been made public to service UAMs from 2028 through Supernal, a US entity dedicated to UAM, along with the Entry-Into-Service (EIS) plan of RAM vehicles after 2030. In an effort to realize such goals, Hyundai has established partnerships with global players including Rolls-Royce and Microsoft, and is working together to cultivate the AAM market and the ecosystem as a whole.

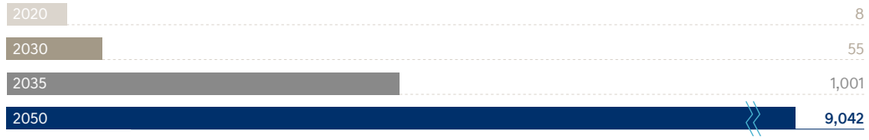
Hyundai has been offering customers reliable, high-performance vehicles, and in turn, earning due recognition for its top-tier products and services. We now are looking beyond automobile innovation in search of ways to open up sky roads for AAM and thus help resolve traffic congestion, housing shortage, and various other issues besetting cities. We are ready to make the future people dream of into reality. Hyundai will focus all of its technologies and competencies on enabling everyone to enjoy freedom of mobility more comfortably and more efficiently at reasonable costs.





Estimates of Urban Air Mobility Market Size

(Unit: USD billion)

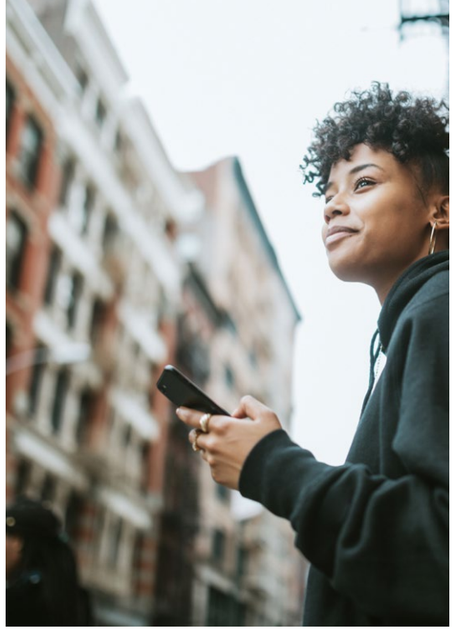


* Source: Estimates by Morgan Stanley

Smart Mobility Solution Provider for Human-Centered Cities

Realizing AAM

Future air mobility is an inevitable future, and Hyundai is realizing the future with its accumulated technologies and capabilities. A global automotive company with products and services infused with its innovation DNA, Hyundai is stepping up its progress for humanity towards a world where imagination is a competitive edge.



Creating a new way to move no one had imagined

Hyundai's vision of innovative future mobility is entailing concerted efforts and promising outcomes. At "AAM Tech Day 2022" held at the Hyundai Motor Studio Goyang in May 2022, Hyundai revealed its AAM business vision as well as related technology development plans and status. Also revealed was the actual vehicle of "Project N", in the shape of a multi-copter drone. Project N is the first R&D outcome unveiled by AAM Division, the heart of Hyundai's AAM innovation. The project name was a befitting choice in that the first letter of Hyundai's FCEV "Nexo" was used, as the application of hydrogen fuel cell as the energy source was one of its main characteristics. Developed as a flight vehicle with a maximum payload of 700 kg measuring 6-meters in diameter, Project N features a hybrid propulsion system of hydrogen fuel cell and battery. The prototype of Project N obtained a special airworthiness certification[1] from the Korean government in February 2022, resulting in Hyundai Motor Group becoming Korea's first automobile maker to obtain a tail number for hydrogen fuel cell-based aircraft. Having successfully completed flight test, Hyundai has clearly set the direction for its development of RAM vehicles that use hydrogen as an energy source.

The global aviation industry is paying attention to Hyundai's AAM innovations as well. Supernal attracted keen attention when it revealed the concept cabin design for its eVTOL vehicle in July 2022 at the UK's Farnborough International Airshow. Supernal aims to commercialize the vehicle in 2028. One of the most unique characteristics of this model, which effectively reflects keywords of the AAM innovation Hyundai pursues, is the intuitive, simple yet refined interior design, an outcome of its adoption of interior design elements from automobiles, without following conventional aircraft design norms. The seat design in particular, an inspiration burrowed from butterflies, emanates both safety and comfort, a clear contrast to seat designs common among conventional aircraft. Another leading keyword is eco-friendliness. The propulsion system, which consists of multiple rotors, is powered by an eco-friendly electric motor. Hyundai's pursuit of sustainability is reflected in its use of eco-friendly materials, including cutting-edge recyclable carbon fiber and other fiber materials made out of either recycled plastics or plant extracts.

To make air mobility a part of our daily lives, it is important to have relevant infrastructure built in where it is best suited. Accordingly, Hyundai Motor Company, in cooperation with Hyundai E&C, has signed a number of MOUs and collaboration agreements for realization and successful demonstration of pilot operation of K-UAM in 2020; realization and establishment of lasting ecosystems for UAM in 2021; and realization and successful operation of UAM vertiports in 2022. In accordance with these agreements, Hyundai is actively participating in Korea's UAM ecosystem development, together with Incheon International Airport Corporation, KT, Korean Air and other leaders in the industry. The vertiport is a new mobility hub crucial to smart cities as well a space that can easily accommodate the growth of nearby residential and business communities. It is one of the top key infrastructure facilities for sustainable UAM ecosystems.

Future cities require a new means of transportation that can fly at low altitude, emit less noise, and uses eco-friendly energy sources. Hyundai creates new modes of movement to enable people to enjoy their freedom of mobility with as few restrictions as possible. Hyundai will continue to develop AAM business and establish AAM ecosystems through cooperation among Hyundai Motor Group affiliates and business partners. Taking a step further, by embracing hydrogen fuel cell and electrification technologies, we will do our best to realize a future where no emissions are produced in the skies as well as on the ground.

[1] Government-issued certification verifying the safety standards of aircraft for test-flying purposes

Mobility Experiments for Humanity

FUTURE MOBILITY
WE ENVISION

If Hyundai had limited its innovation to making better automobiles, we would not have challenged ourselves to pioneer future mobility. If we had regarded mobility only as a means of transformation, the scope of the challenges we have taken on would have been also limited. We are connecting mobility to various spheres of human life, in the hope of seeing daily movements become more seamless and daily lives more comfortable. Children playing at home turning a newly delivered mobility into another sphere of play, and mobility creating a spacious sphere in a building packed with people. To make technologies long thought of a distant future into a part of daily life, we have recently applied for patents on some 10 future mobility technologies under the brand name of “Mobile Living Space”. Drawing on the mobility experiments for whole new mobility, Hyundai will transcend all mobility limitations and expand the sphere of human lives.

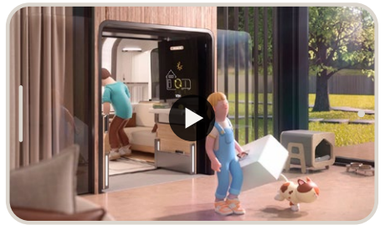
Mobility Becomes Space

Mobile Living Space – Vision of a new living space completed by future mobility

Hyundai has recently unveiled a vision in which mobility space is redefined through a video titled “Mobile Living Space”, which shows scenarios of organic connection between mobility and a building. In the video, mobility support infrastructure is attached to a residential building to enable passengers to seamlessly move between the two without any exposure to the elements. Also shown is the possibility of residents using not only the mobility space but also the vehicle’s features, such as air-conditioning and entertainment systems, just like the electronic devices of their own home or office. The video visibly illustrates our commitment to offering higher value and richer life experiences to customers through diverse new technologies that can transform mobility into not only an innovative means of transportation but also into a futuristic living space

Hyundai Motor Group in 2020 introduced the concept of connecting living/working spaces with mobility in a future technology video titled “Active House”, and has since been conducting R&D in relevant fields. The unveiled vision is particularly significant in that it is based on detailed technologies and patents that can readily be applied to daily life. We have made patent applications on 10 technologies that enable connection between mobility and buildings in Korea and major overseas markets.

Hyundai is redefining and expanding the boundary of mobility into new fields, including robotics, AAM and smart city, as well as in electrification, autonomous driving, and connectivity. Keeping up with the fast-evolving definition of mobility, we will conduct R&D in various areas for the progress of human wellbeing.



Mobile Living Space | What If Mobility And Buildings Were Combined?

Mobility Becomes Shelter

Habitat One – Vision of a new living environment for future generations

In 2021, Hyundai declared “2045 Carbon Neutrality”, an ambitious pledge to achieve zero net carbon emissions across all of its business activity, from production to operation and disposal of automobiles. The declaration was followed by the presentation of a video with a message for “Generation One”, the first generation to live in a carbon neutral world. The name Generation One is coined by Hyundai to identify the first future generation that will be breathing in and feeling the positive changes that will take place with the realization of carbon neutrality.

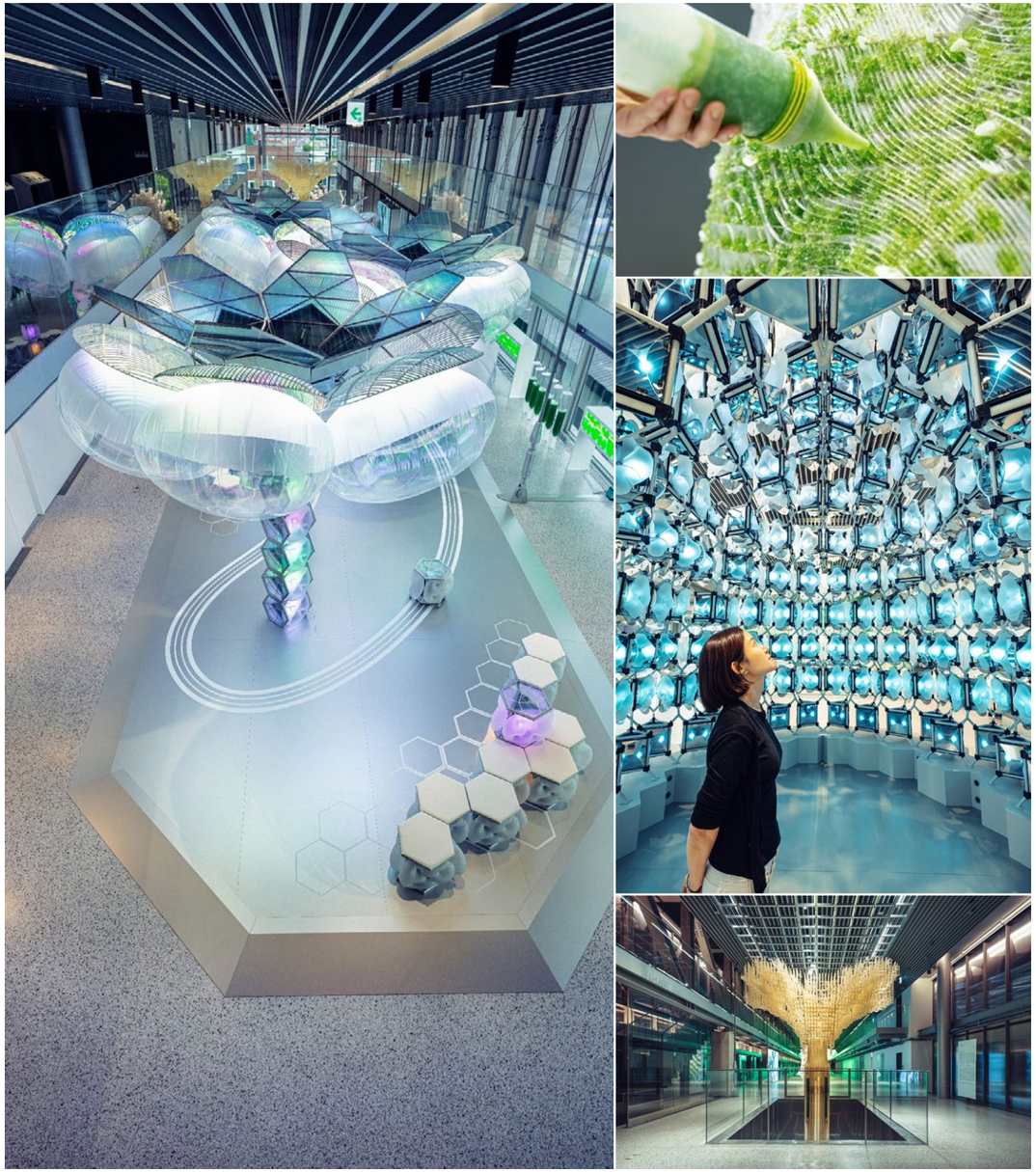
In 2022, we more defined the future in which Generation One will live than ever before. We introduced “Shelter”, a housing solution of a new form for future generations, in addition to making company-wide efforts to devise an integrated climate change solution that stands on three legs of clean mobility, next-generation platforms and green energy.

The “Habitat One” exhibition is a result of collaboration with famous artist groups in Korea and abroad, highlighting the creative ideas about a living environment where people can enjoy more sustainable lives. Held at the Hyundai Motorstudio Busan from July 2022 through January 2023, the exhibition focused on enabling visitors to imagine daily lives in future cities and experience new possibilities of sustainable lives.

Hyundai hopes that the Habitat One exhibition has served as a journey through which people could get a taste of what sustainable lives of the future would be like and to share how such lives can be possible. Based on the vision, “Progress for Humanity”, Hyundai will continue efforts to realize carbon neutrality by 2045 and take compassionate and considerate actions for the future generations to come.

Online Tour

Online space for experiencing the Habitat
One exhibition site without time or movement constraints



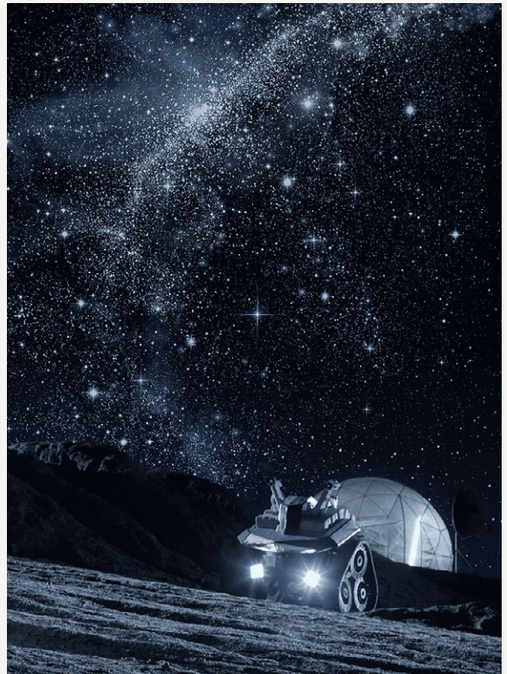
Habitat One Exhibition at Hyundai Motorstudio Busan
Expecting Generation One

1 BARE, *Air of Blooms*, 2022, Assembly of customized robot units–Air(e), lidar sensor, multi-channel video, customized LED displays, air-inflated blobs, OPV panel mock-ups, kinetic control system, app. 1,500×600×500cm

2 ecoLogicStudio, *H.O.R.T.U.S. XL Astaxanthin.g,* 2019, 3D printed substratum, living cultures of Chlorella SP in bio-gel medium, 320x272x114cm

3 BARE, *Inhabiting Air*, 2022, Assembly of customized robot units–Air(e), pneumatic control system, OPV panel mock-ups, kinetic control system, LED lights, app. 460×510×400cm

4 ecoLogicStudio, *Tree One*, 2022, robotically 3D printed algal bio polymers, lab grade borosilicate glass, living cultures of Cyanid-ium Caldarium in liquid medium, 300x400x1,000cm



United and guided by humanity.

Hyundai's journey of progress for humanity has always been a bold attempt to overcome challenges. Even when we are faced with many difficulties lying in the course of numerable challenges, the objectives and directions we set and follow always point toward people and our stride of innovation stay mindful of people.

To transform mobility into not only an individual means of transportation
but also a path leading to a sustainable future, we will continue to take on challenges for, and grow together with, humanity.

The story of the journey is transparently presented to all stakeholders through several communication channels, including this ESG Magazine.