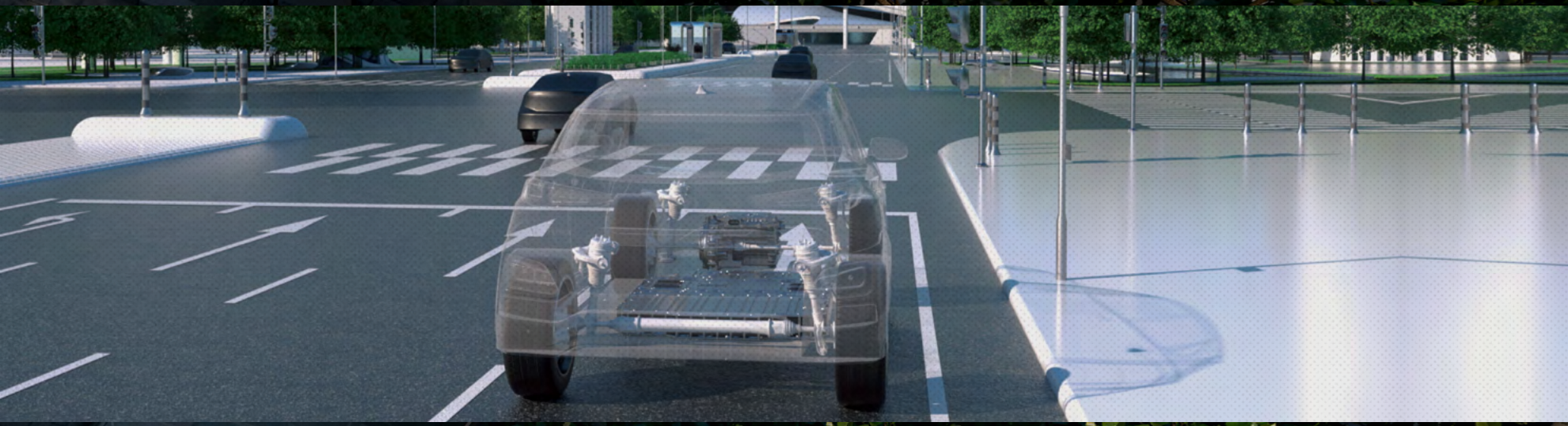
CREATIVE LEADER FOR MOBILITY INNOVATION

HYUNDAI TRANSYS
BROCHURE 2022

HYUNDAI TRANSYS

SUSTAINABLE MOBILITY

Since its inception in 1994, Hyundai Transys has grown into a global automotive parts supplier, offering core vehicle parts, such as powertrain and seating system. Now, we envision a mobility world that will bring us safe & free movement and a peaceful life. With the ambition to make this world reality, we aim to take a leap towards a mobility solution provider beyond an auto parts company. Hyundai Transys will go extra mile to create new value with the provision of 'electrified powertrain' indispensable to eco-friendly transportation and 'seat technology' that drives mobility space in a new direction.



Contents

COMPANY OVERVIEW

ABOUT HYUNDAI TRANSYS

Company Profile

Over the past 30 years, Hyundai Transys has been committed to satisfying customers with endless challenges.
Now, we are reinventing ourselves as a mobility solution provider underpinned by constant growth beyond an auto parts maker.

Company Name	Hyundai Transys
Year of establishment	1994
CEO	Su Dong (Steve) Yeo
Headquarters	Sindang 1-ro Seongyeon-myeon, Seosan-si, Chungcheongnam-do
Credit rating	AA-(Rated by Korea Ratings Co., Ltd, Korea Investors Service CO., Ltd, NICE Information Service, Co., Ltd)

Vision

Creative Leader for Mobility Innovation

Strategy

Creative Technology
Securing technical capabilities for future mobility

Creative Value
Enhancing management efficiency and creating values

Creative Growth
Fostering growth through global sales

Core Value

CUSTOMER | CHALLENGE | COLLABORATION | PEOPLE | GLOBALITY

Sales (2021) 8.1T KRW

Businesses Powertrain / Seating system

R&D Investment (2021) 249B KRW

Rank in global auto part industry 32ND*

Employees (As of June 30, 2022) 9,643

Global network 33sites in 11countries

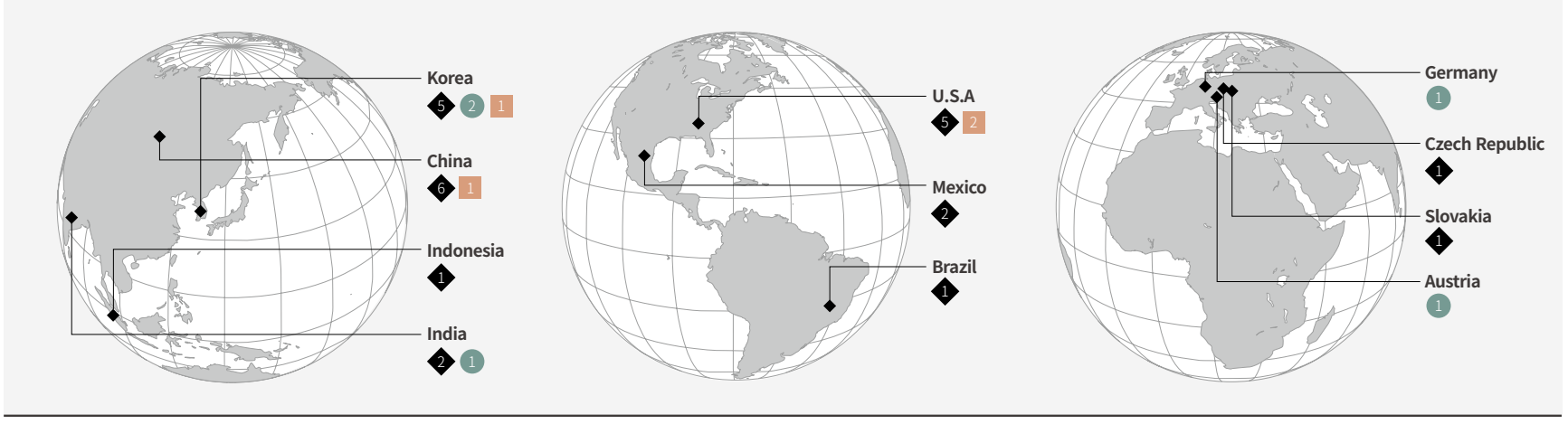
* Global top 100 automotive parts makers in terms of sales in 2021 released by Automotive News, an American media outlet on the auto industry

COMPANY OVERVIEW

Global Network

Our global network stretches 11 countries with 33 manufacturing · sales · research hubs, which provide us with opportunities to communicate with customers across the globe.

◆ Plant ● R&D center ■ Sales Office



Plant 24

- Seosan Jigok Plant
- Seosan Seongyeon Plant
- Asan Plant (Hyundai MSEAT)
- Ulsan Plant (Hyundai MSEAT)
- SCM Plant (Hyundai MSEAT)
- Beijing PT Plant
- Beijing Seat Plant
- Rizhao Plant
- Sichuan Plant
- Cangzhou Plant
- Chongqing Plant
- Chennai Plant
- AP Plant
- Indonesia Plant
- Georgia PT Plant
- Georgia Seat Plant
- Illinois Plant
- Arizona Plant
- Alabama Plant
- Monterrey PT Plant
- Monterrey Seat Plant
- Brazil Plant
- Slovakia Plant
- Czech Plant

R&D center 5

- Dongtan Seat R&D Center (HQ)
- Hwaseong Drivetrain R&D Center
- Europe Technical Center
- Europe Powertrain Control Development Lab
- India R&D Center

Sales Office 4

- Seoul Office
- China Sales Office & R&D Center
- Michigan Sales Office & R&D Center
- California Sales Office & R&D Center

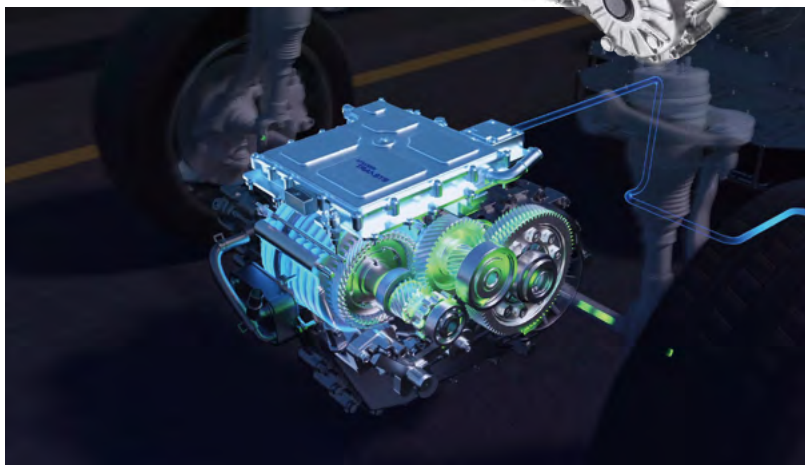
OUR BUSINESS

POWERTRAIN

Electrified Powertrain Solutions

Hyundai Transys provides a full suite of electrified powertrain solutions that encompass battery electric vehicle (BEV), fuel cell electric vehicle (FCEV), hybrid electric vehicle (HEV), plug-in hybrid electric vehicle (PHEV), and other eco-friendly ones, thereby leading a clean mobility era.

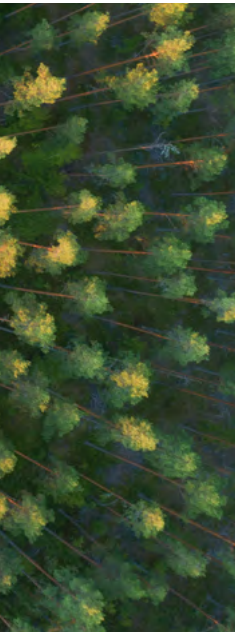
Electrified Powertrain Solution

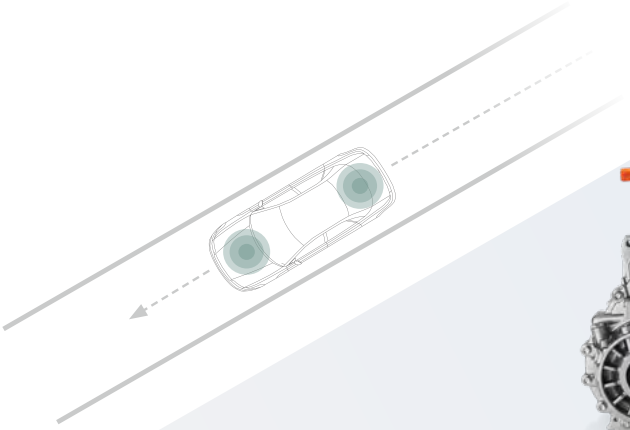


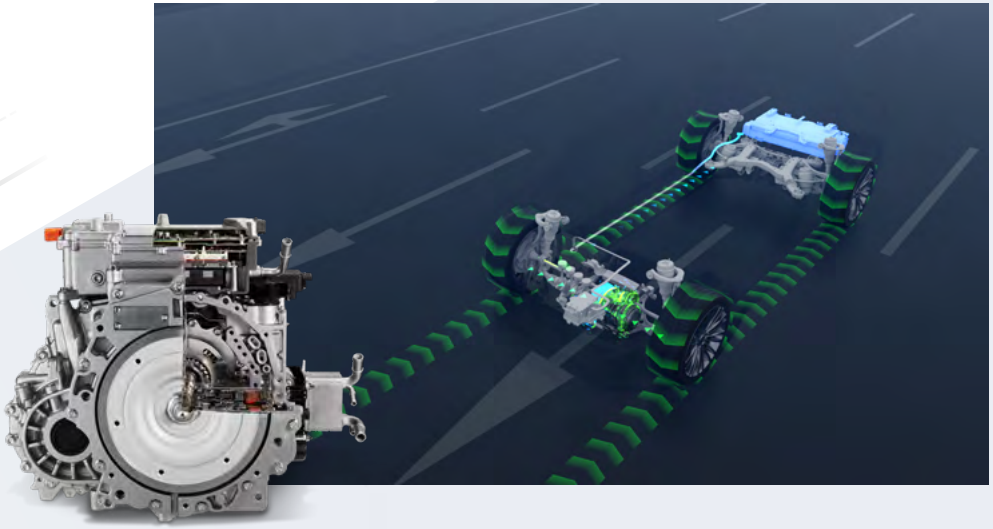
e-Powertrain

e-Powertrain is a driving system dedicated to EVs that replaces the engines and transmissions for internal combustion engine vehicles. It comes in 3-in-1 structure that combines motor required for driving, inverter that converts electricity to control the motor's torque, and gearbox that switches torque and speed to transmit optimal driving force. Its smaller size and lighter weight make it economically feasible. On top of that, we have applied the hairpin winding technology to its driving motor while designing direct spray oil cooling system to maximize efficiency. The Disconnector Actuator System (DAS) technology was utilized for the first time to improve fuel efficiency.

- Compact and Lightweight Design
- High Efficiency
- Competitive Manufacturing Cost
- Improved Cooling System







e²AT | Next Generation Hybrid Drive System

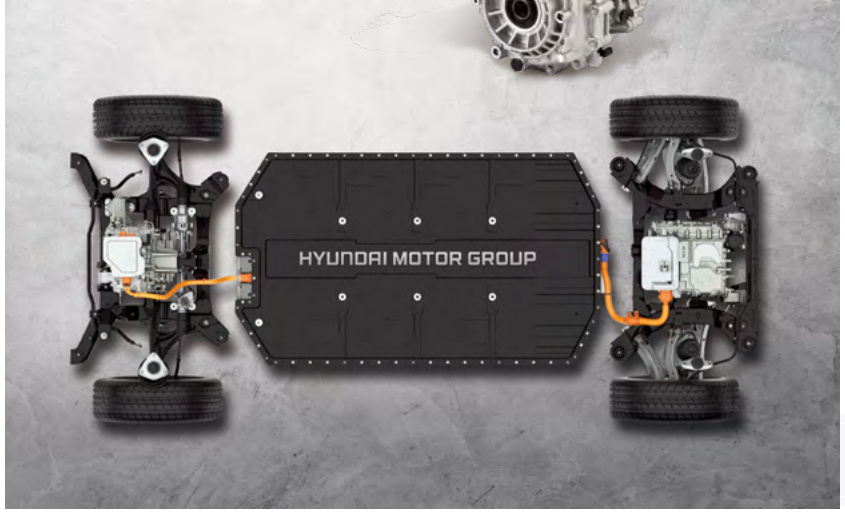
Hybrid drive system refers to a system powered by two energy sources; internal combustion engine and electric driving motor. Taking advantage of our accumulated technical prowess of transmission, we have developed P1+P2 type of hybrid drive system for the first time in the world. The application of built-in damper reduces the overall length, which secures vehicle capabilities while increased gear ratio span and P1+P2 system increase power performance and fuel efficiency. In addition, the development of oil pump unit (OPU) integrated inverter along with the optimized layout enables us to cut down on the cost of materials, which leads to enhanced price competitiveness.

e²AT is our unique brand for the next generation hybrid drive system that we developed. It is a system that combines electric motor and automatic transmission. The name of the brand delivers the meaning that it creates square of effects stemming from two motors.

OUR BUSINESS

Product Lineup

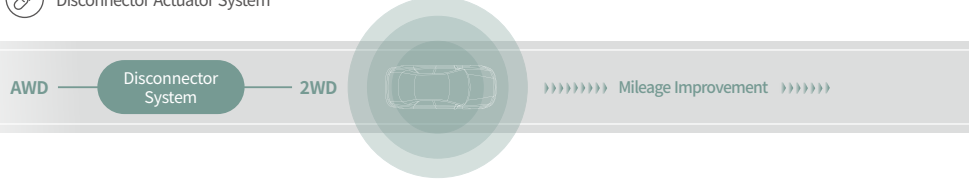
Powertrain is a key component that determines the driving performance of a vehicle. Hyundai Transys has a wide variety of product lineups, from powertrains for internal combustion engines (ICE) to powertrains for electrified vehicles, meeting diverse customer needs.

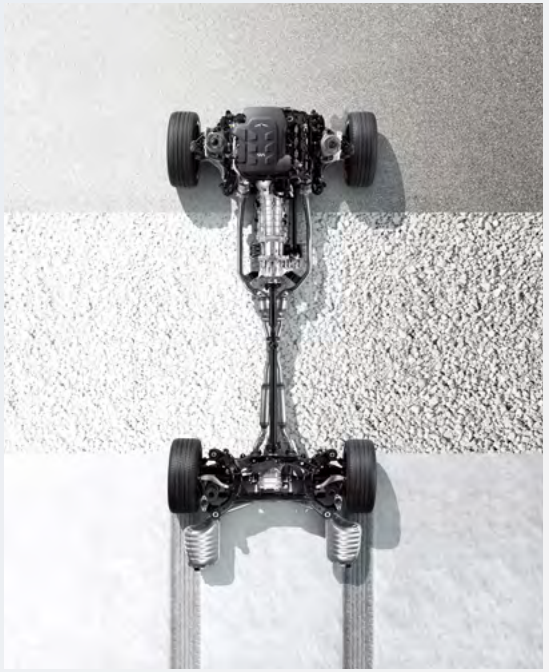


e-GDU

Gear drive unit for electric vehicles is a device that reduces the high-speed revolution counts of the motor and transmits it to the drive shaft. Hyundai Transys has produced gear drive units in full swing since 2019, and is equipped with a lineup of gear drive units for various types of vehicles, encompassing electric passenger vehicles, electric commercial vehicles, and electric hydrogen vehicles. Our 'disconnector actuator system (DAS),' developed for the first time in the world, is a device enabling to freely switch between 2WD and AWD by separating or connecting the motor and the drive shaft depending on the driving situation. DAS extends the mileage of electric vehicles by cutting unnecessary power losses and raising efficiency by up to 8%.

Disconnector Actuator System



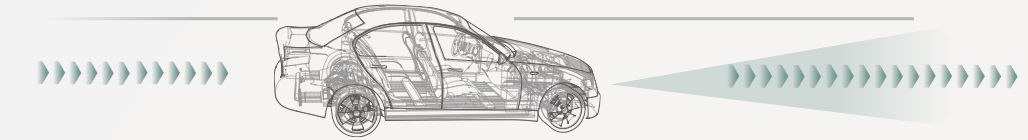


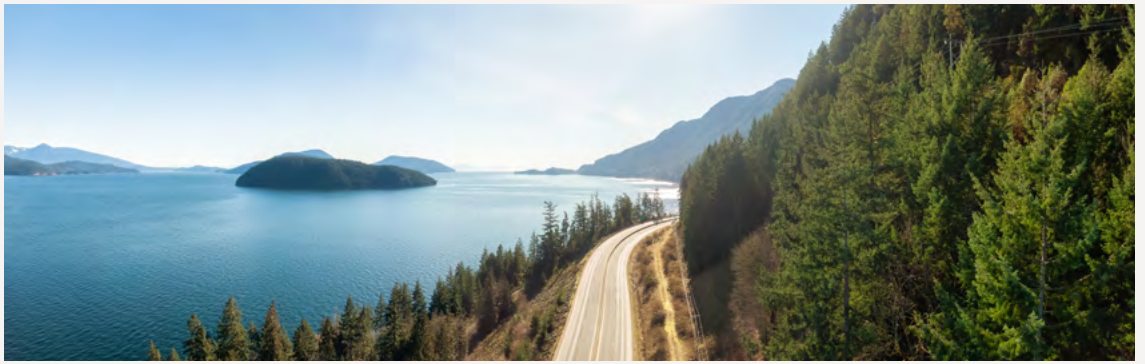
Transmission

Transmission is an integral part of a vehicle that delivers the driving force of the automobile engine to the wheels. Hyundai Transys has met diverse customer needs with a full lineup of transmissions, including automatic transmissions, continuously variable transmissions, dual-clutch transmissions, manual transmissions, and hybrid transmissions. We fulfill customer satisfaction with outstanding quality and broad lineups, encompassing an automatic transmission that boasts quiet and dynamic driving performance through multi-stage development, a continuously variable transmission that optimizes shifting according to the driver's intention and driving condition, a dual-clutch transmission that combines the efficiency of a manual transmission with the convenience of an automatic transmission, a manual transmission that is equipped with high efficiency and economy.

Axle · 4WD

Our axle and 4WD system, representing the essence of cutting-edge technologies, maximize the vehicle's performance. Axle applied with high-strength material shows excellent durability, ensuring high driving stability in various driving conditions, such as high speed, long distance, and rough road surfaces. EST (Electric Shift Transfer Case), an electronic part-time auxiliary transmission, independently designed by Hyundai Transys, provides safe driving and improved traction even on off-road terrain, while the PTU (Power Transfer Unit) brings excellent in-car installation compatibility through an optimal design.





OUR BUSINESS

SEATING SYSTEM

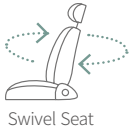
Future Mobility Interior Solutions

In the autonomous driving era, when people are free from driving, the interior of a car is transformed into a mobile living space. Hyundai Transys researches the movement, function, and shape of the seat from the perspective of the total interior so that people are able to experience various lifestyles in the mobility space.

Interior solutions for autonomous vehicles

Seat Mechanism Technology for Autonomous Vehicles

Hyundai Transys provides a flexible seat layout that maximizes space utilization, capitalizing on its seat mechanism technology with enhanced safety design and free movement control so that the interior of an autonomous vehicle can function as a multi-purpose space where you can both work and relax.


Swivel Seat


Long Slide


Belt in Seat


Control Armrest


Slim Seat Structure


Relaxtion Comfort seat

Sustainable Future Mobility Seat Concept

Hyundai Transys revealed a seat with a concept of future mobility autonomous driving using various eco-friendly materials at Milan Design Week and Lineapelle International Leather Fair held in 2022. Applying innovative green materials and processing techniques that can minimize resource waste, such as regenerated leather fabric made of waste leather and weaving technique for scrap leather, we conveyed our sustainable design philosophy and future technology direction.

Sustainable Future Mobility Seat Concept

Seating System for Purpose Built Vehicle

We have developed the purpose-based seat system, HTVM21, to offer diverse lifestyles in connection with the future mobility environment for passengers. Based on around ten UX scenarios, including easy access, wellness support (health care through biometrics analysis), child care (multi-functional module for indoor activity support), personalization mode (independent sound space), and VIP mode (reclining, ventilation, enhanced massage comfort performance), various integrated control technologies were applied in the seat system.

Seating System for Purpose Built Vehicle

OUR BUSINESS

Product Lineup

A car seat is a part that passengers come into contact with for a long time at the closest place in the vehicle. Hyundai Transys' seating systems not only reflect technology for the safety and convenience of passengers but also provide a pleasant mobility experience with an aesthetic design.

Complete Seats

We provide seat solutions optimized for the brand value pursued by each vehicle, from compact cars to large cars, sedans, SUVs, and electric vehicles. With our ergonomic design, a variety of convenience functions, sophisticated styling, and eco-friendly technology, we take the lead in the global car seat market.

Structures & Mechanisms

We design efficient seat structures with standard seat frame solutions and core mechanism technology.
The standardized seat frames for each vehicle segment, such as large, medium, small, and light, offer stable quality and performance on top of cost-saving effects. Our core mechanism, a critical part that controls the basic movement of the seat, also raised compatibility based on the development of module units.

Functional Components

Car seats aggregate the technologies for the safety and convenience of passengers. For instance, a haptic system warns of danger through vibration when any obstacle is detected, while a pre-active seat, which induces a change in a passenger's posture to minimize the injury in the event of a vehicle collision, protects passengers even in unexpected situations. In addition, we provide a pleasant and enjoyable mobile experience through our various comfort functions applied to the seat, such as heated and ventilated seats that control temperature and humidity and relaxation comfort seats that bring the best comfort in a zero-gravity position.

Eco Seat Soultions

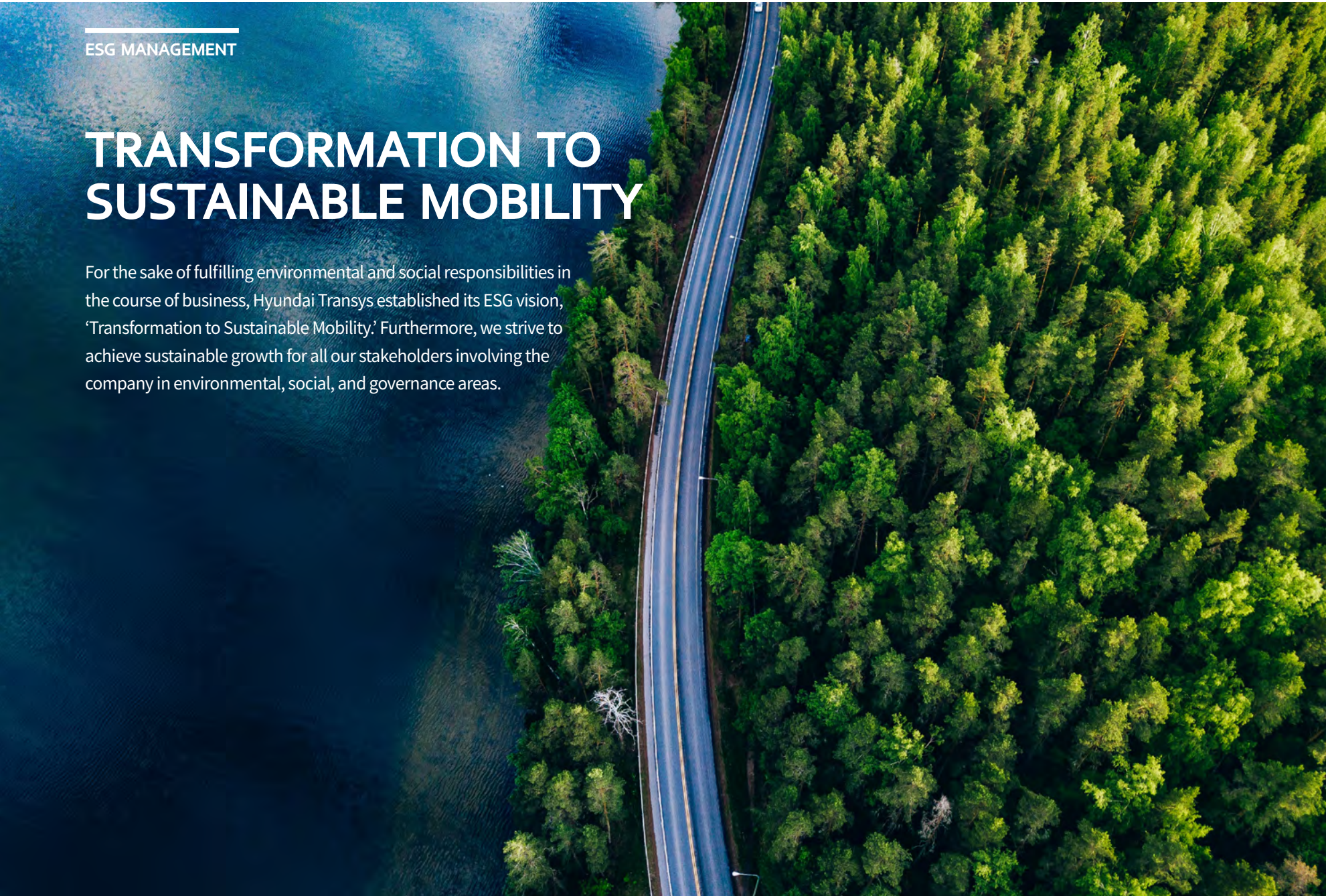
Hyundai Transys is creating a sustainable future with its eco-seat technology considering the environment and human health. Under our nature-friendly strategies, we expand the use of eco-friendly materials such as natural raw materials, renewable materials, and recycled materials to realize a virtuous cycle of resources. At the same time, we pursue the energy cost reduction built on our lightweight technology based on low-density materials. In terms of human-friendly technology, we developed an eco-friendly polyurethane reactive (PUR) adhesion method that reduces harmful substances, VOCs reduction foam using natural vegetable materials, and silicone anti-soiling leather with excellent performance and eco-friendliness.

Eco-friendly seat anti-soiling technology

ESG MANAGEMENT

TRANSFORMATION TO SUSTAINABLE MOBILITY

For the sake of fulfilling environmental and social responsibilities in the course of business, Hyundai Transys established its ESG vision, ‘Transformation to Sustainable Mobility.’ Furthermore, we strive to achieve sustainable growth for all our stakeholders involving the company in environmental, social, and governance areas.



ESG MANAGEMENT

CHANGE FOR RESPONSIBLE BEHAVIOR

ESG Strategy and Company-wide ESG Governance Structure

With an aim to implement the mid- to long-term ESG strategy and the 100% renewable energy conversion strategy established in 2021, we newly established the ESG Management Council, a company-wide decision-making body. It is comprised of the CEO and the person responsible for ESG, playing the role of making ESG-related decisions, conducting monitoring of performance, and disclosing information in a transparent manner. Through the council, we will continue to communicate with stake-holders.

Hyundai Transys ESG Strategy

Vision — Transformation to Sustainable Mobility

Transformation to Sustainable Mobility

	E Eco-mobility	S Sustainability achieved together	G Responsible business building
3 directions	We respond to the climate crisis and practice resource recirculation in preparation for the future.	We pursue a company that is safe and relieving for everyone of our personnel as well as in solidarity with our society.	We practice a fair and transparent honest business and fulfill our social responsibilities.
Core tasks	Minimizing environmental impacts (management of wastewater, waste, chemicals, etc.)	Establishing human rights management systems (human rights impact assessment and follow-up improvements identification)	Building ESG governance (reestablishment of role & responsibility, strengthened global ESG data management)
	Reinforcing GHG emissions management (enhanced management systems for the RE100 initiative and climate risks)	Enhancing social contribution strategies (reestablishment of social contribution strategies, and promotion of employee activities)	Embodying responsible supply chains (establishment of management system for conflict minerals and ESG management of partners)
	Establishing product environmental performance management systems (application of life cycle assessment, development of eco-friendly products, and imple mentation of product recall management)	Providing safe work environment (continued safety management activities on the scale of the entire enterprise)	Participating in global initiatives (drive to join/participate in global initiatives)

Hyundai Transys ESG Governance

Executive council

ESG Management Council

CEO

Area	Environment	Social	Governance
Responsible executives	• Management Support Dept. • PT R&D Dept. • Seat R&D Dept.	• Management Support Dept. • PurchasingDept. • Planning Div.	• Finance and Economy Dept.

Dedicated organization

Dedicated organization

Strategic Support Team

Working council

ESG Working council

Division				
	Business site environment	Powertrain product environment	Seat product environment	Human rights & labor
	Safety & health	Organizational culture Education and training	Social contribution	Compliance & ethics
	Supply chain management	Conflict minerals	Governance Management performance	

ESG MANAGEMENT

CHANGE WITH PEOPLE

ESG Value Internalization for Employees

Hyundai Transys respects the human rights of all stakeholders, including employees, partners, and local communities, in doing its business while striving to realize ESG values. We carry out various human rights protection activities and provide ESG educational programs for employees, raising awareness of ESG management and human rights management.

ESG mindset education

2,012 persons

Human rights education

3,740 persons

11,220 hours

Building a Sustainable Supply Chain

We operate 'PARTNer,' a customized win-win growth program along with ESG evaluations for partner companies, making a strenuous effort to build a sustainable supply chain. As a result, we were selected as the best honorary company by receiving the 'excellent' grade in the win-win growth index evaluation for 7 consecutive years as the first automobile parts company.

ESG Management Support for Suppliers (in 2022)

ESG assessment

91 companies

ESG management education

100 persons

Key Achievements of 'PARTNer'

Company development
Overseas sales support
23 companies

Network
Welfare support
150 companies

Assistance
Financial support
57.2 B KRW

Technology
Technology escrow support
40 cases

Reinforcement
Quality/safety/job training for partner companies
1,492 cases

Win-Win Growth with Local Communities

Due to the COVID-19 pandemic, face-to-face social contribution activities have been restricted. However, we will expand our non-face-to-face social contribution activities to continue accompanying our local communities while advancing the major related projects at each business site.

Representative social contribution projects
Upcycled products

Upcycled products[1)]
4 (3 more types from 2020)

1) A recycling method that redesigns and recreates discarded products such as waste materials as objects with high artistic and environmental value

Silver Car support[2)]

Walking assistance device
800 vehicles

Wheelchair
20 vehicles

2) Cumulative performance from 2020

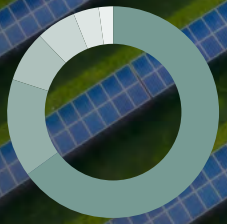
ESG MANAGEMENT

CHANGE FOR OUR PLANET AND FUTURE GENERATIONS

Achieving 100% Conversion to Renewable Energy by 2040

Hyundai Transys promises to achieve 100% renewable energy in all business sites by 2040. In consideration of the environment and economic feasibility of the energy market, we have set out priorities for the options for procuring new and renewable energy. We have put the direct generation of renewable energy by installing solar power facilities on idle sites, roofs of factories, and in parking lots within the business sites as our top priority. For the other energy consumption, we will purchase PPAs or certificates for conversion, thereby achieving 100% of renewable energy in all business sites by 2040.

Power Consumption by Country (2021)[1)]



Korea	65%
China	15%
Mexico	8%
U.S.A	6%
India	4%
Others[2)]	2%

Domestic power consumption
366GWh

Overseas power consumption
197GWh

1) Subsidiaries excluded
2) Indonesia, Czech Republic, Slovakia, Brazil

Renewable energy procurement options

Option	Description
Direct power generation	Solar power facility installation using idle land, roof, parking lot, etc.
Power purchase contract(PPA)[1)]	Applying to large-scale business sites with high energy consumption
Purchase of REC certificates[2)]	Applying to small business sites with low energy consumption

1) Power Purchase Agreement: A system in which power generation companies directly supply electricity generated with renewable energy to consumers
2) Energy supply certificates

MOBILITY INNOVATION

Advanced Air Mobility Cabin Concept

A new world of mobility, from Last-mile Mobility to Purpose Built Mobility, Future Air Mobility, and Robotics, the evolution of transportation leads to more dynamic future. Hyundai Transys' smart mobility technology continues to innovate to enable people to experience happier and safer mobility.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