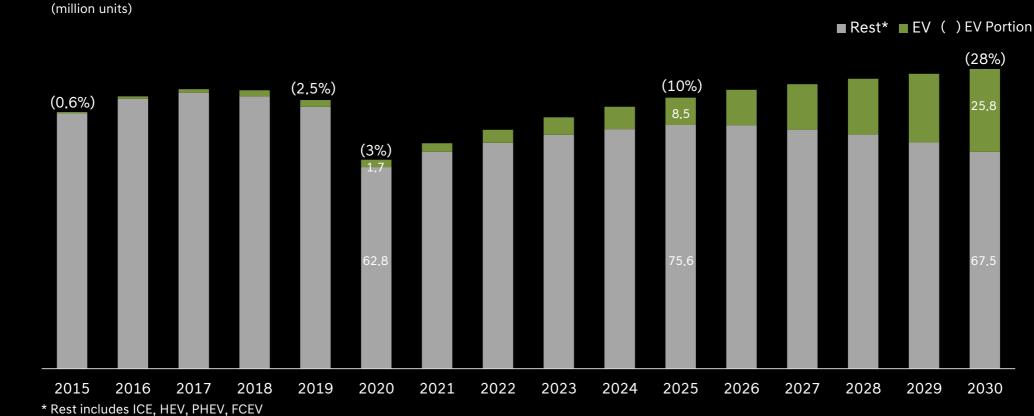


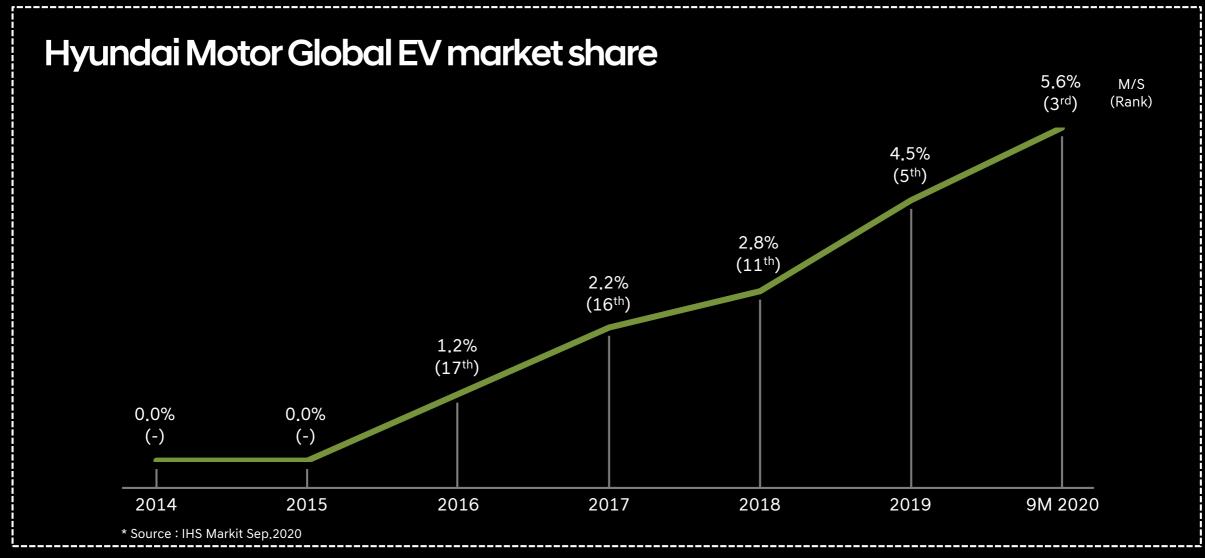


Global Auto Industry & Electric vehicle demand trend



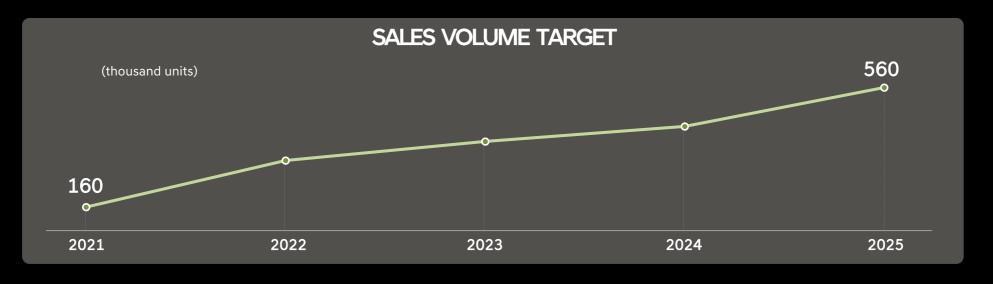


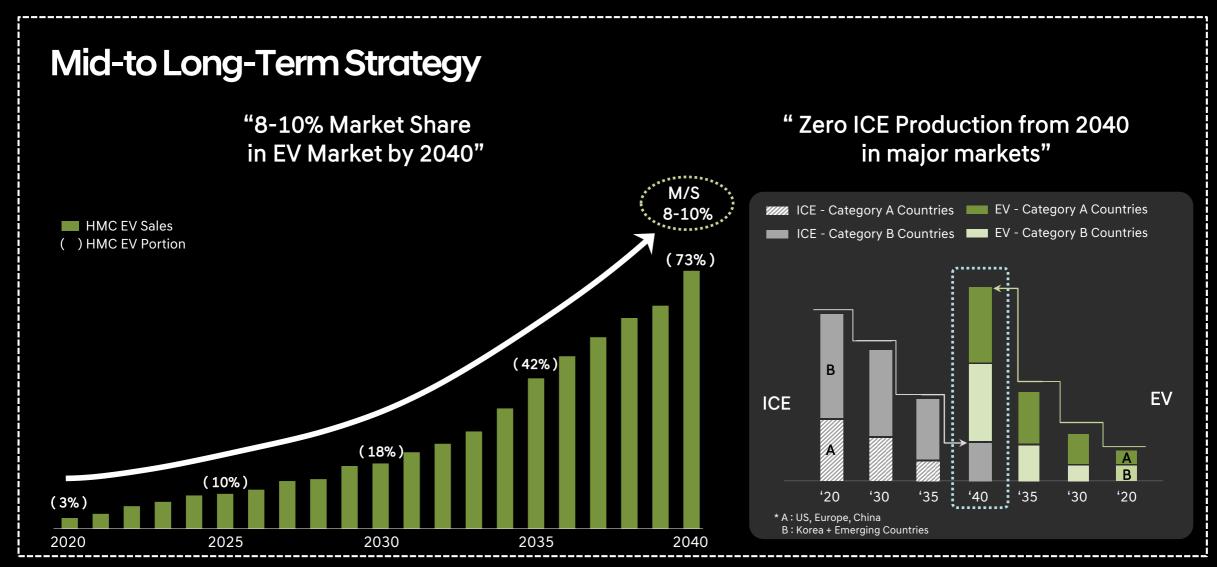
^{*} Source: BNEF



Electric Vehicle Line up



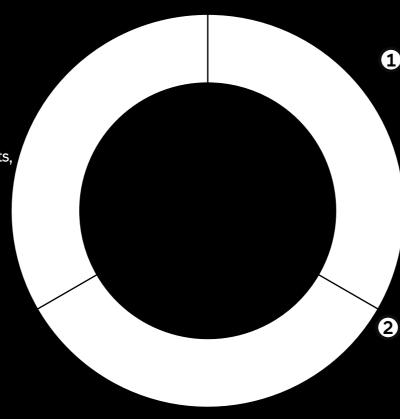




3 Core Strategies

3 Enhancing execution strategy

- Clarify EV brand & line-up positioning
- Expand partnership with external experts, and reinforce development capability
- Adopt innovative EV sales channel create profit models



Securing preemptive manufacturing competitiveness

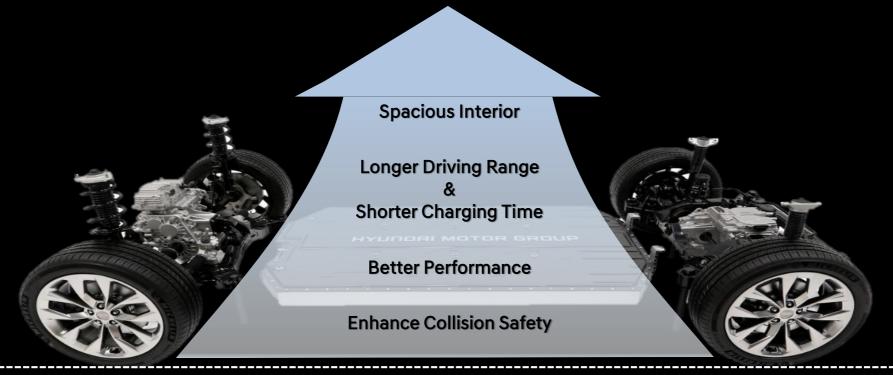
- Similar level of EV cost as ICE to secure cost competitiveness
- Distinct competence between dedicated EV & derivative EV
- SW/HW competitiveness for 5G/6G

2 Optimizing regional strategy

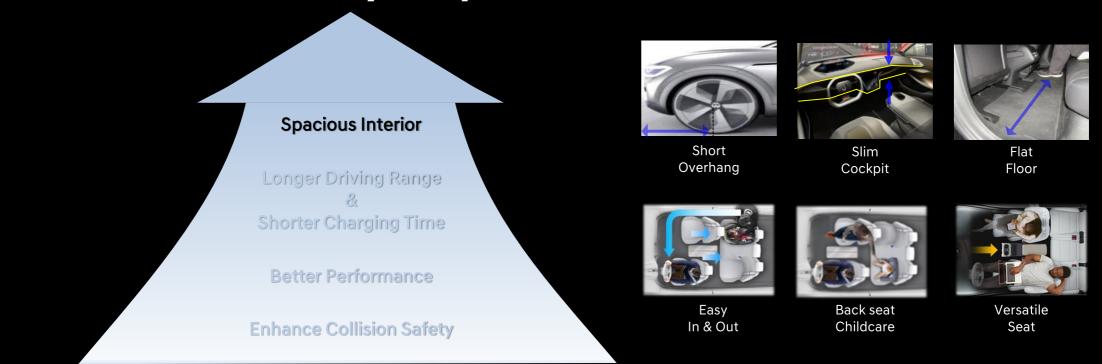
- EU · China : Bold & rapid EV transition in major electrification markets
- Korea · N.America : Expand electrification considering government policies and regulations
- Emerging countries: Securing EV leadership (2030~)



E-GMP (Electric-Global Modular Platform)



E-GMP (Electric-Global Modular Platform)



E-GMP (Electric-Global Modular Platform)

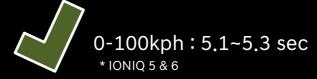


E-GMP (Electric-Global Modular Platform)



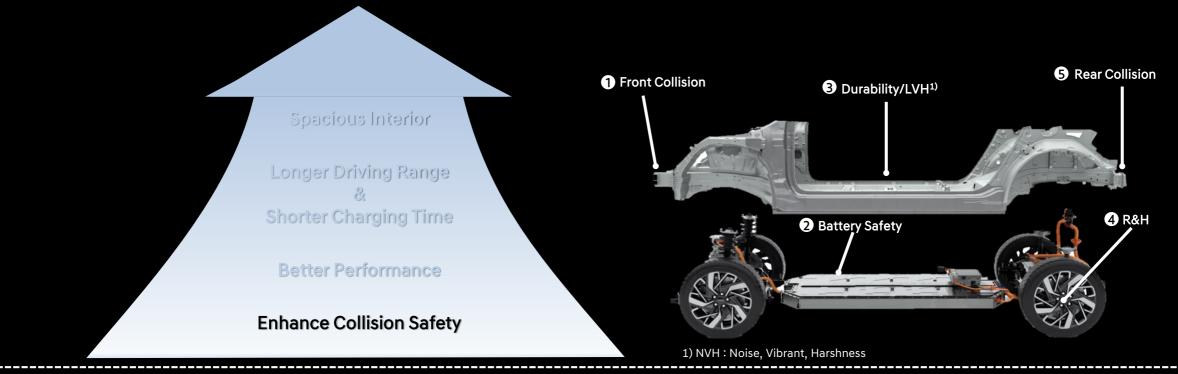




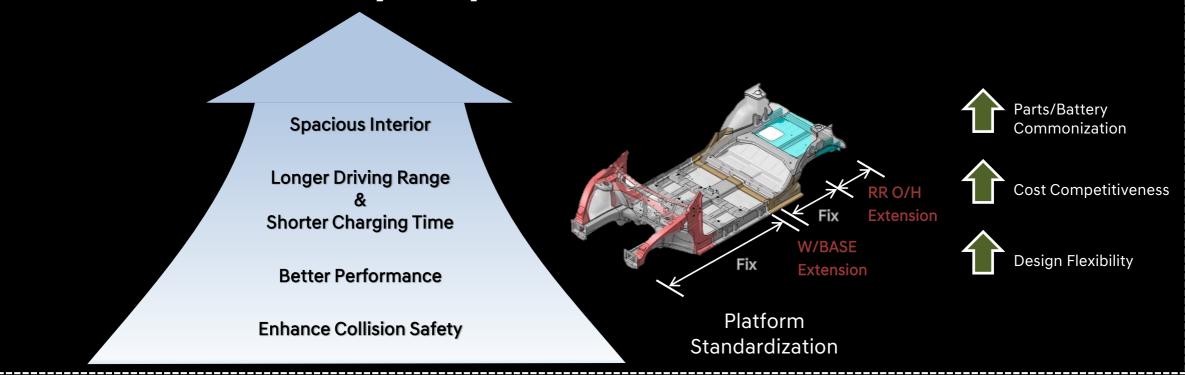




E-GMP (Electric-Global Modular Platform)



E-GMP (Electric-Global Modular Platform)



- BaaS, ESS, Waste battery disposal, etc.

EV Related Business Opportunities

Charging Infrastructure Other Biz Battery • Multiple sourcing from global companies • Provide revolutionary charging experience Smart Grid iust for EVs - Strategical partnership with battery OEMs - [EOU] Equity investment in IONITY - Continue seeking new biz models such as - external use of vehicle power - [UUS] Partnership with EA(Electrify America) - [KOR] Establish 20 ultra-fast charging stations, 120 chargers in highways / downtown by 2021 • Developing next generation batteries • Differentiate services with launching • Expand mobility area - Test production of solid-state battery in 2025 charging package (Begin mass production of EVs with Solid State in 2027, full-scale production in 2030) - Provide additional services using data such as - Respond to various market demand like - vehicle diagnosis, charging reservation, etc. - Car-sharing, Last mile delivery, etc. - Develop PBV in connection with UAM Reviewing battery reuse/recycling Biz-Model * Purpose Built Vehicle * Urban Air Mobility

THANK YOU

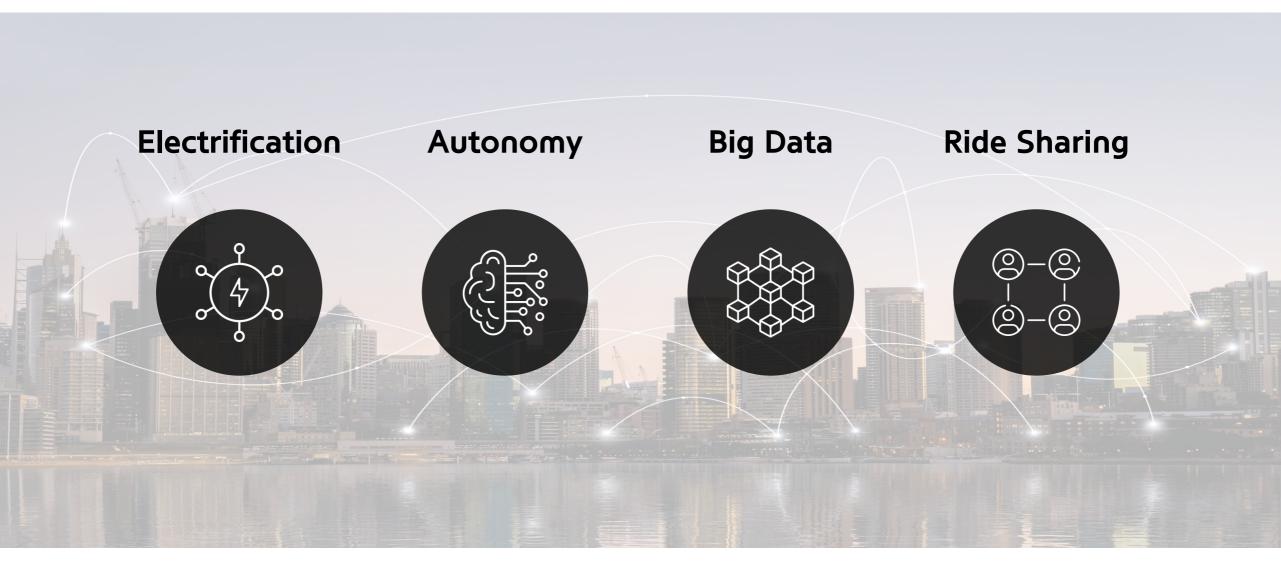




December, 2020

Hyundai Motor Company

New technologies and new business models make UAM possible





UAM has clear applications that will transform the way communities connect and move



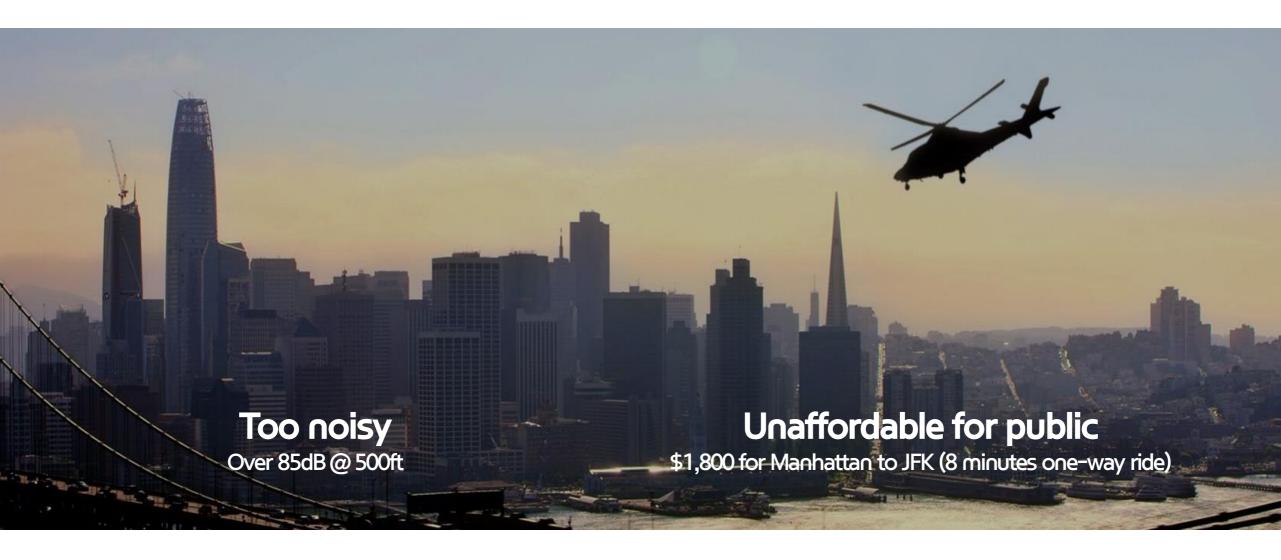
Liberation from traffic congestion



Seamlessly integrated mobility will give back time to people to enhance quality of life

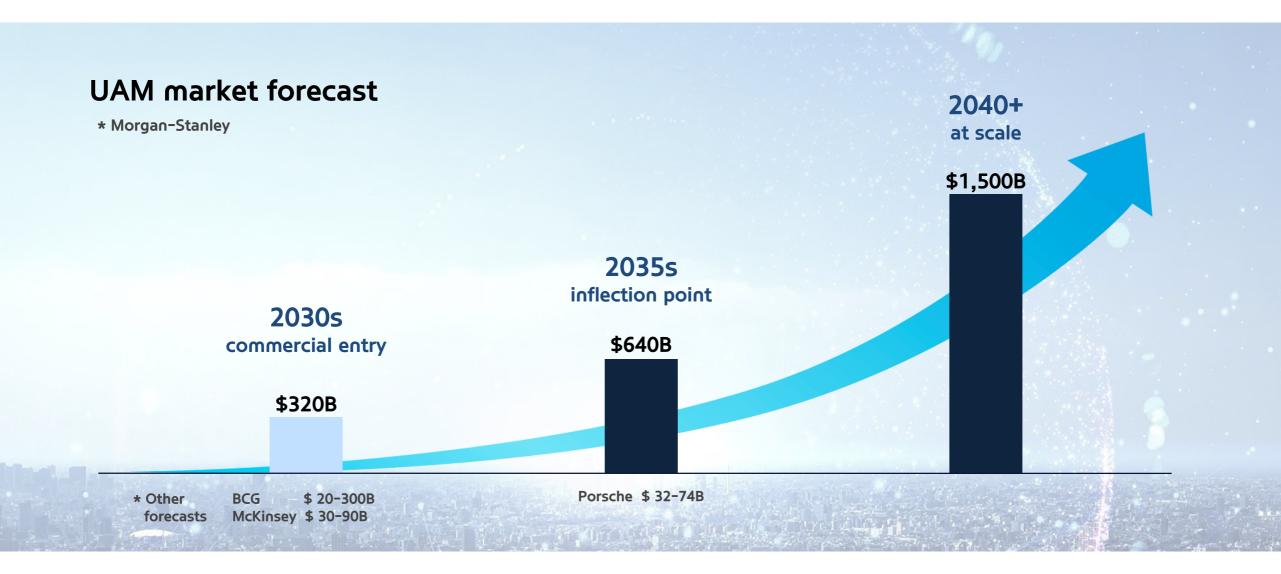


Democratization of urban air mobility





Urban Air Mobility market is projected to grow to \$ 1,500B by 2040+





More than 250 companies are working on vehicle development





Hyundai UAM has unique strengths with comprehensive capabilities

1. Cost effective, high-quality mass production

37 in 10 countries 100 million +

Manufacturing plants

Cumulative sales

2. Diverse capabilities of HMG affiliated companies

Parts MRO Infrastructure Financing

3. Unique technological edge & partnership

Electrification

Fuel cell

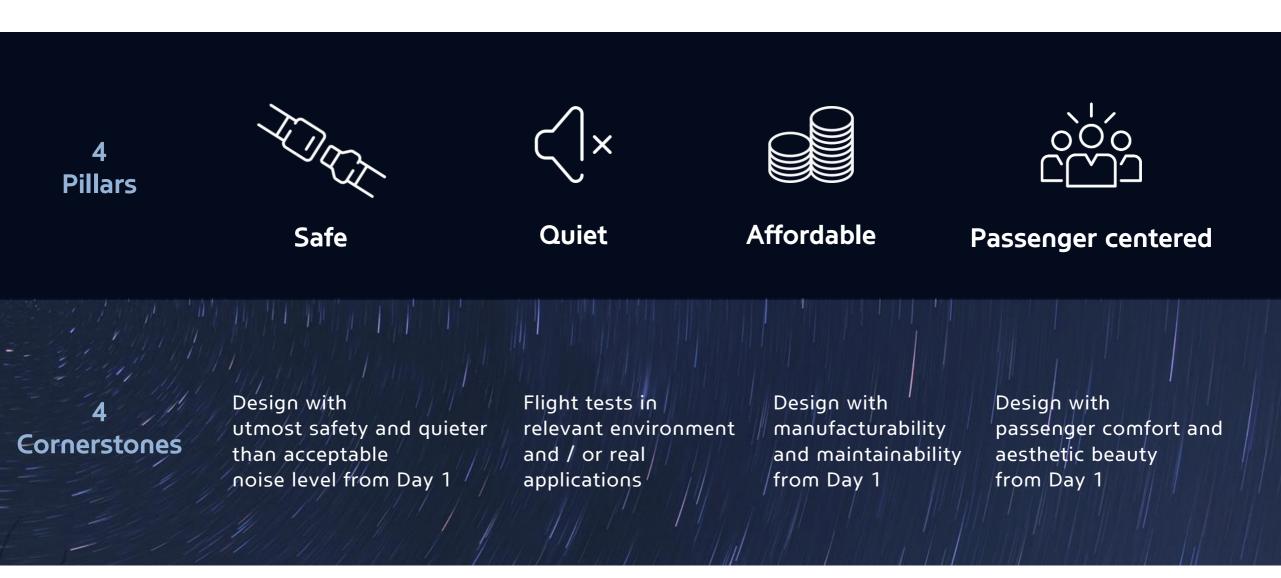
• APTIV•

4. Integrated mobility solution provider

Seamless experience with Ground + Air mobility solution



Our goal is supported by 4 pillars and 4 cornerstones





Autonomous Driving Technology Update

December, 2020

Hyundai Motor Company

Philosophy of AD Technology Development

UNIVERSAL SAFETY

SELECTIVE CONVENIENCE

Provide safety features as standard



Forward Collision -Avoidance Assist

Driver Attention Warning



Lane Keeping Assist



Blind-Spot Collision -Avoidance Assist



Surround View Monitor



Parking Collision -Avoidance Assist





Smart Cruise Control



Navigation-based **Smart Cruise Control**



Lane Following Assist



Highway Driving Assist Highway Driving Assist 2

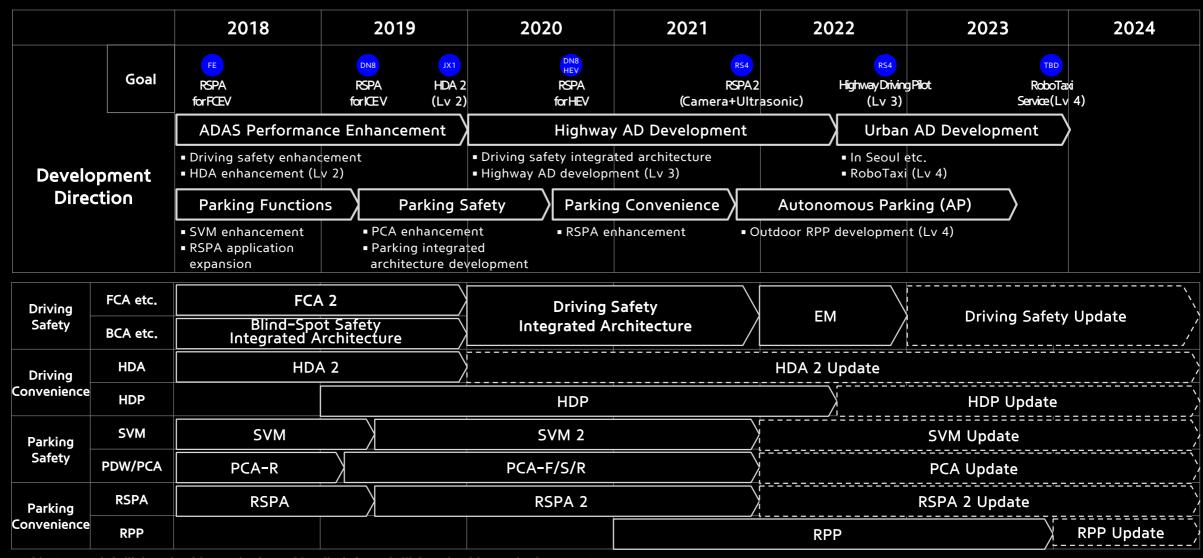




Remote Smart **Parking Assist**



Technical Roadmap



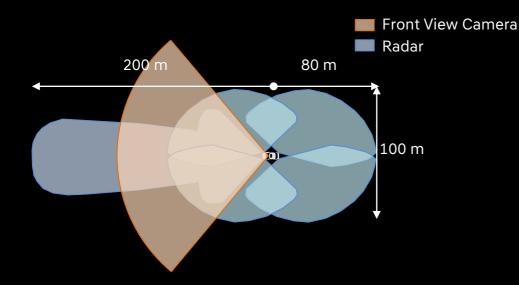
FCA: Forward Collision-Avoidance Assist, BCA: Blind-Spot Collision-Avoidance Assist, EM: Emergency Maneuver HDA: Highway Driving Assist, HDP: Highway Driving Pilot, SVM: Surround View Monitor, PCA: Parking Collision-Avoidance Assist RSPA: Remote Smart Parking Assist, RPP: Remote Parking Pilot



Partial AD Dev. Strategy – Sensor Fusion (1/2)

Sensor Fusion Step 1

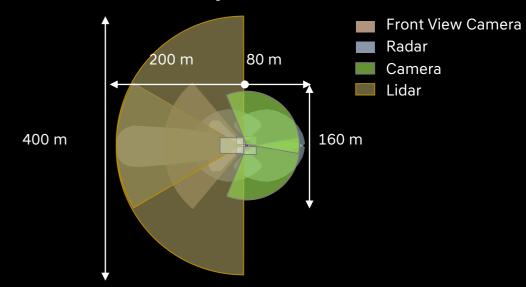
 $(\sim 2019 \rightarrow Implemented on GV80)$



- Lv 0~2 Autonomous Driving
 - On-coming/junction/sideways vehicle recognition
 - Increased collision-avoidance performance
 - Surround recognition during lane change
 - Close cut-in vehicle detection

Sensor Fusion Step 2

 $(\sim 2021 \rightarrow To be implemented on G90)$



- Lv 3 Autonomous Driving
 - Motorcycle recognition
 - Stationary object recognition on the lane
 - Increased recognition range during lane change
 - Improved close cut-in vehicle detection



Partial AD Dev. Strategy – Sensor Fusion (2/2)

Camera Recognition (2019, Implemented on G90 → Improving)







- ☐ FR SD View Camera☐ RR SD View Camera
- SR View Camera













- Major functions
- Object Detection
- : Vehicle/pedestrian/PTW/small objects
- : Close cut-in, lane change assist, biased driving
- Road Environment Recognition
- : Lane/road marker/parking spot/traffic lights
- : ego-vehicle positioning, free-space detection

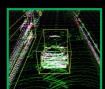
Lidar Recognition

(~ 2021 → To be implemented on G90)









Front Corner Lidar

Rear Corner Lidar

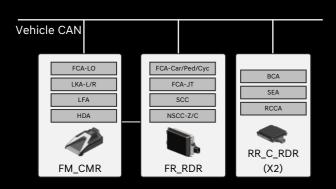
■ Roof Lidar

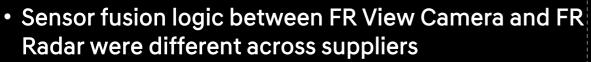
- Major functions
- Enhanced recognition compared to camera/radar
- Recognition of outer shape of object
- : Stationary obstacles/road boundary
- Surround recognition with increased detection range
- : Long distance target & ego-vehicle positioning



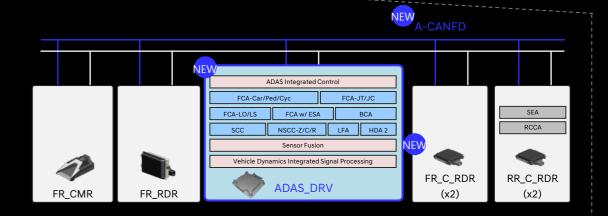
Partial AD Dev. Strategy – Integrated Controller (1/2)







- Challenging to add new features. Had to duplicate development effort with each supplier
- → Adding new features via SW update was difficult due to heavy reliance on suppliers

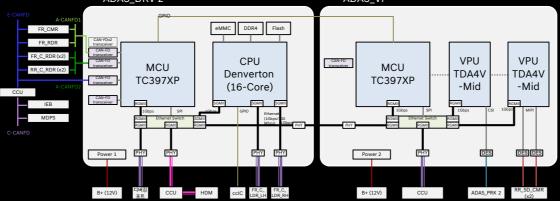


- Sensor fusion SW are embedded at integrated controller
- Established centralized architecture through standardized interface and addition of A-CANFD
- → Adding new features became easy based on HMC centralized architecture and development

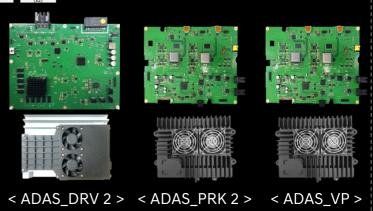


Partial AD Dev. Strategy – Integrated Controller (2/2)



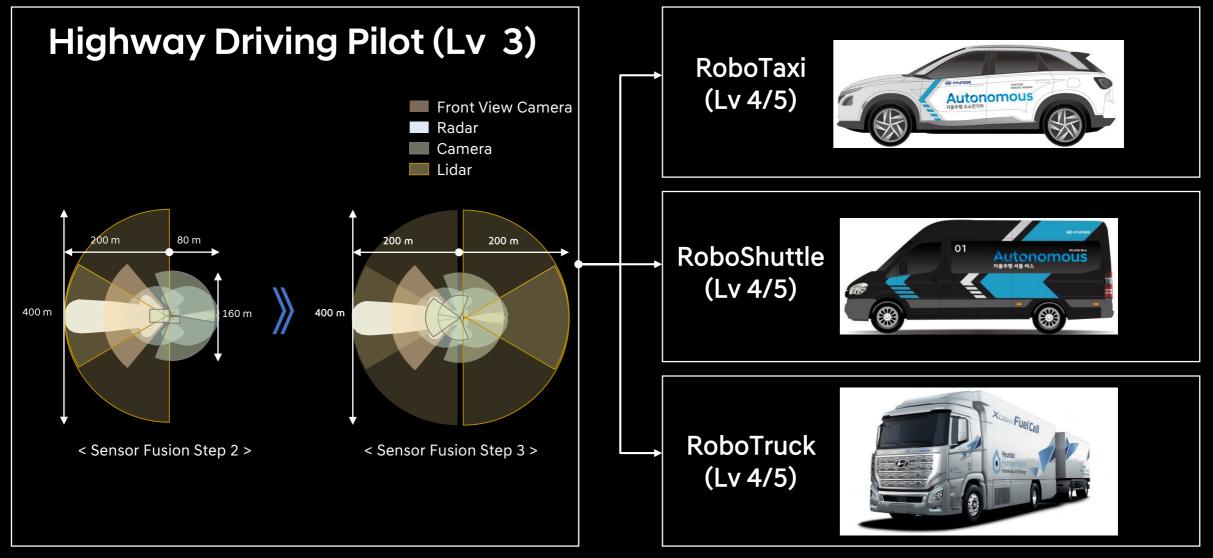


- Lv 3 Driving, Advanced Parking, and deep-learning based recognition technology are under development utilizing high performance processors
- OTA feature will be available by cooperative control with CCU, addition of security module, and power supply change (IGN → B+)
- → Possible to develop SW efficiently, secure reliability for mass production. Applicable for Lv 4/5 by changing processors





Full AD Dev. Strategy – Overview



Full AD Dev. Strategy – Future Strategy







Paradigm Shift and Green New Deal

- Key Factors of Industrial Revolution: Network, Power Source, Transportation Jeremy Rifkin < The Green New Deal(2020)>
- Global Movement towards De-carbonization in the 21st Century



Network Printing, Telegraphy

Power Source Coal

Transportation Railroads

20c

Network Phone, Radio, TV

Power Source Petroleum

Transportation ICE Vehicles

21c

Network IoT, 5G

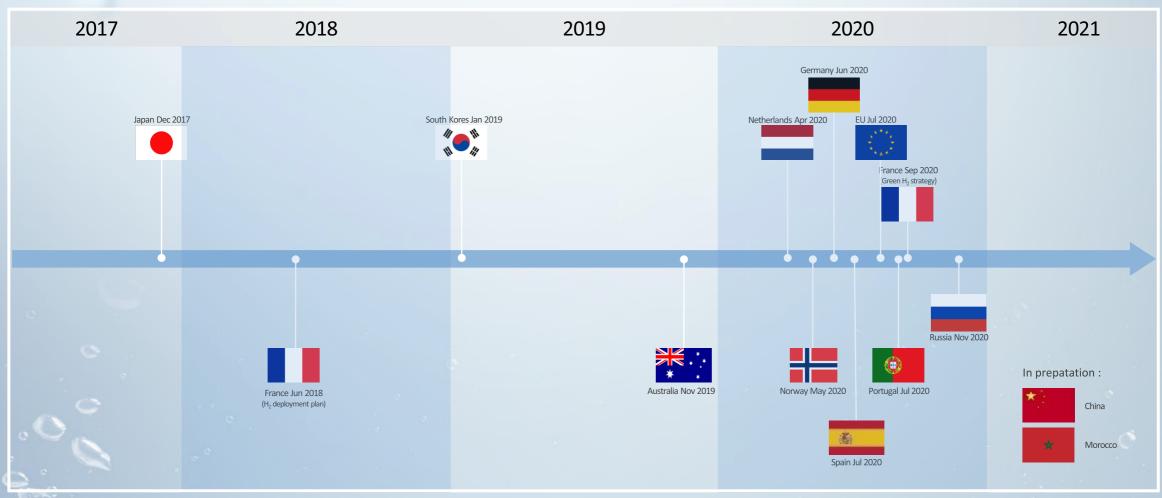
Power Source Solar, Wind, **Hydrogen**

Transportation BEV, FCEV, Autonomous, PAV



Hydrogen Society comes to reality

Timeline of National Hydrogen Strategies Announcement



Source: International Hydrogen Strategies ('20.9, World Energy Council)

Fuel Cell Technology of HMC







1998 Initiated Fuel Cell

Development

First Developed FCEV model (Santa Fe-based)

2000

2004

Independent Development of Stack 2005

Independent Development of Fuel Cell System 2013

1st Generation FCEV (Tucson ix) "The world's 1st

"The world's 1st mass production"

2018

2nd Generation FCEV (NEXO)

"Superior maximum range and energy efficiency"

2020

Fuel Cell Commercial Vehicle (Xcient Fuel Cell)

> "World 1st Fuel Cell Electric Truck"

Stages of technological developn	Passenger Vehicle	Commercial Vehicle	UAM, etc.	
Performance				
Durability				
Cost				

Business in Non-Automotive Sector









Hyundai Fuel Cell System Brand: HTWO

1998~2012 Research & Development 2013~2020 FCEV mass production

2021~ Expand Fuel Cell system business





Global Partnership









Global Partnership



WEICH/II 维 紫

₩ Woodside

Hyundai Fuel Cell System Brand: HTWO

Expand FCEV supply

Expand Fuel Cell system business

Promote FC business by Cooperating with the new government

Create FC market & Secure a leading position













Establishing Fuel Cell System Line-up



Improvement Performance,
Durability, Cost competitiveness

Next Gen. FC system



Together for a better future!

"As a first mover in the forthcoming hydrogen economy, we will lead a society that uses hydrogen as its main source of energy."



Strategy 2025

December 10, 2020

Hyundai Motor Company



Strategy 2025 Performance

Despite the challenging business environment caused by COVID-19, 2020 was the year that laid the foundation for growth for our Strategy 2025

Challenging
Business
Environment
caused by
COVID-19



The Beginning of Strategy 2025

Key achievements of Strategy 2025

Smart Mobility Device

Improved mix via increased sales of high-margin vehicles and global M/S expansion

Ranked Top 3 in global sales of BEV and launched exclusive EV brand 'IONIQ'

Smart Mobility Service

Launched fleet management solution and vehicle subscription service

Operated Open data service based on integrated mobility platform

Strategy 2025 Performance Smart Mobility Device



Achieved product mix improvement and global M/S expansion by increasing high-margin lineup of SUV and Genesis models under the Balanced & Steady growth strategy

Moreover, ranked Global Top 3 in EV sales, launched exclusive EV brand 'IONIQ', and mass-produced the world's first hydrogen fuel cell truck

ENHANCE COMPETITIVENESS AS OEM

Strengthen global market position and highly profitable vehicle lineup



Enhancing SUV lineup

Launch all new Tucson/Creta, SantaFe F/L



Successful launch of new vehicles in major markets

Launch of GV80 (first SUV), G80



Expanding high performance N lineup

New vehicle launches of N brand

Profit-oriented sales mix improvement & global M/S expansion *(5.1%⇒5.2%*)*

* 2020 3Q YTD

TOP-TIER LEADERSHIP IN ELECTRIFICATION

Promote "Securing Top-tier xEV leadership," through differentiating customer value

BEV Sales Global Top3 Brand**





Launch of excusive EV brand 'IONIQ'

VISION: Advance in the EV experience

Mass-production of Fuel cell bus/truck

* * IHS Markit September 20





Launched Fleet Management Solution (FMS) for corporate customers, as well as "Hyundai Selection", a vehicle subscription service for individual customers as a product+ service package provider.

Enhanced customers' vehicle experience and built a foundation for mobility ecosystem via launching "Hyundai/Genesis Developers", which provides open APIs to 3rd parties based on an integrated mobility platform.

PRODUCT + SERVICE PACKAGE

Provide major services as vehicle and vehicle management, finance, and car life

Provided integrated rental car management services, such as vehicle management · location control/ black box related services to small- and medium-sized rental car companies



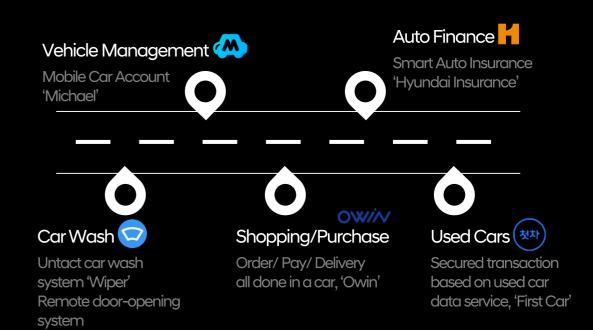
Launched subscription application 'Hyundai Selection', in which users can utilize cars and electric scooters Users: approx, 6,000 / Average Utilization: ~95%

OPEN DATA SERVICE

Develop customized service with partners based on customer/vehicle data

Hyundai/Genesis Developers

Secured more than 100 partners since the launch in Oct '19





Background



Due to the outbreak of COVID-19, the importance of ESG is rising, while Digital Transformation and Energy Shift to electric energy is accelerated Hyundai Motor Company updated Strategy 2025 to respond to changes among customers and auto industry

Customer

Industry Transformation

ESG

Digital Transformation



Energy Shift

Environment / Social issue awareness and participation ↑ Sustainability required

Ontact Value Chain

Digital Device & Platform Business

Fossil Fuel ⇒ Electric (renewable)
Energy
Hydrogen Economy ↑

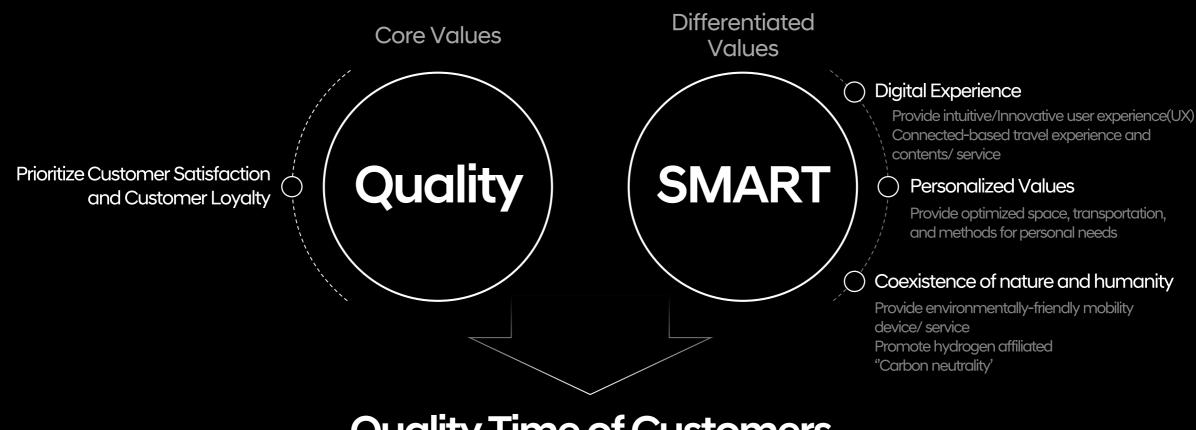
Strategy 2025 Update

Customer Value



Customers are leading the market by purchasing products from sustainable & reliable brands and pursuing data-based customized consumption

HMC aims to provide all customers with 'Quality Time' by providing 'SMART', a digital-based and sustainable travel experience based on quality, the basis of customer loyalty, as a differentiated value



Quality Time of Customers

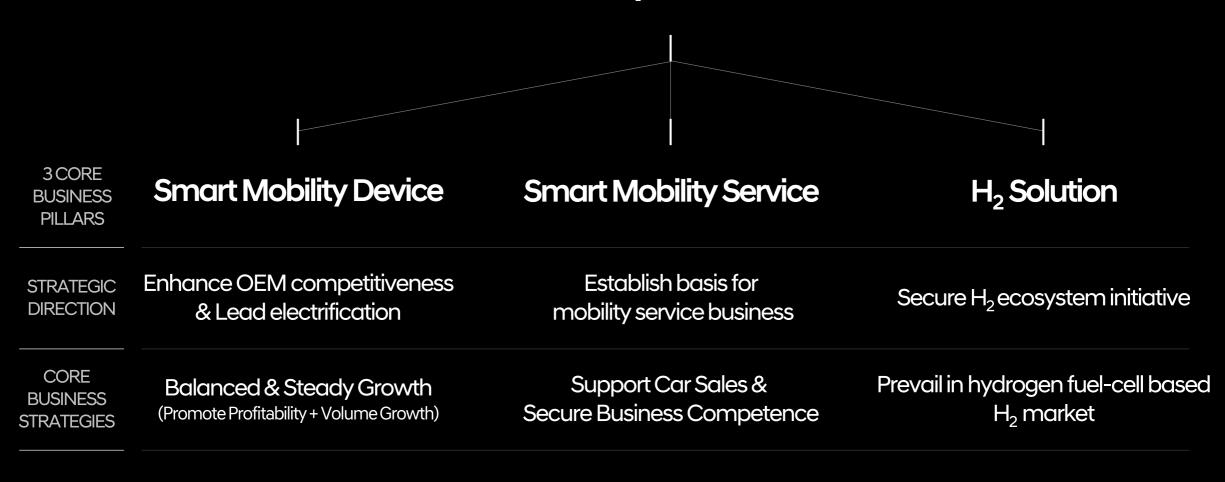


Business Structure



In addition to Smart Mobility Device & Service, 'H₂ Solution', a fuel-cell based business, is updated into core business area Hyundai Motor Company will carry out mid-to-long term strategy based on the three core business areas

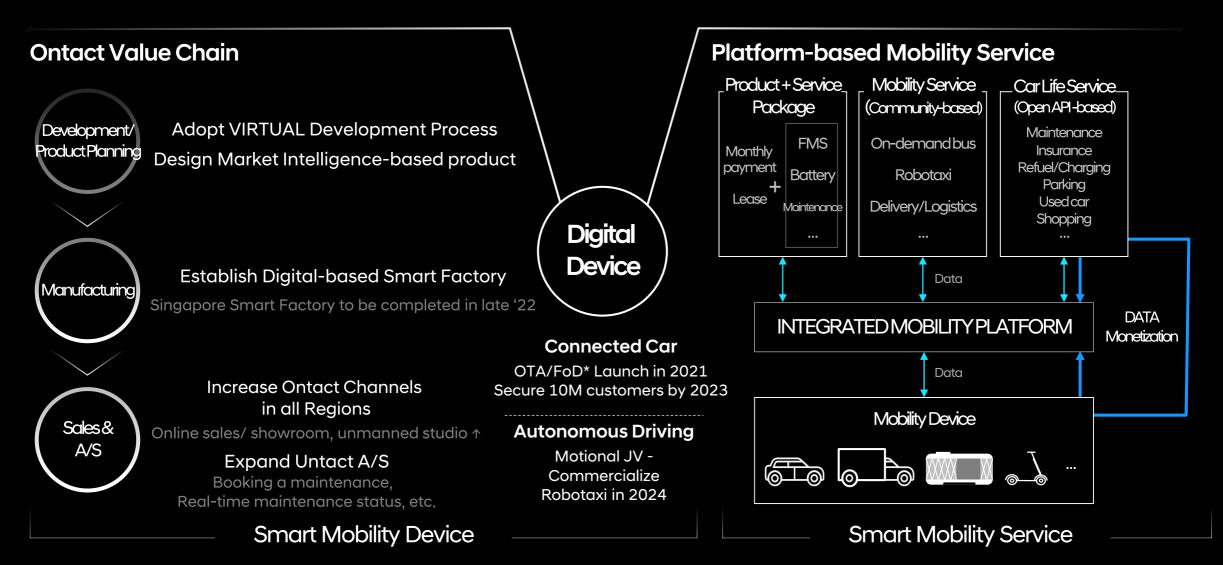
Smart Mobility Solution Provider



Strategy 2025 Update | Accelerated digital transition of Smart Mobility Solution



Accelerate digital transformation of value chain/product/business model to provide optimized vehicle/service based on customer data

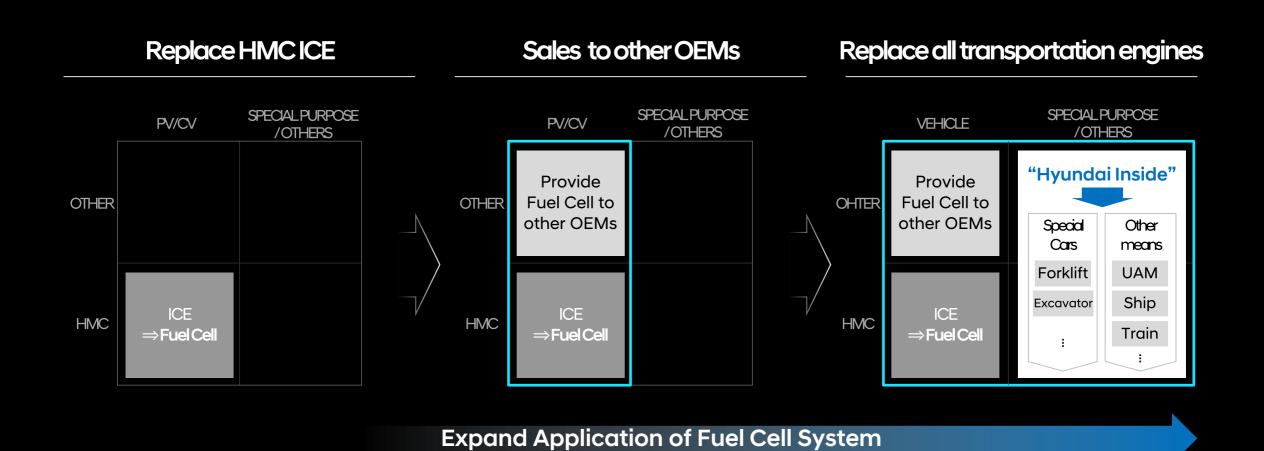


^{*} OTA(Over The Air): Wireless software update service / FoD(Feature on Demand): Customers can selectively purchase software features based on their needs





Advance fuel cell system to secure initiative in hydrogen ecosystem and extend its application to all transportation means

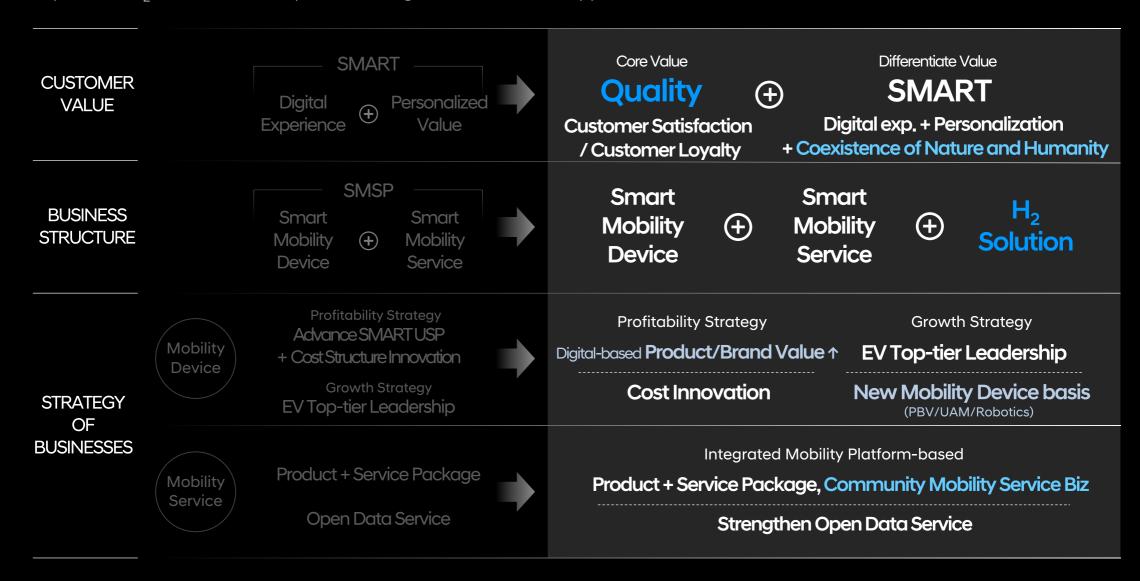




Summary



Through Strategy 2025 update, HMC aims to enhance customer loyalty by continuous emphasis on 'quality', transform business structure to better implement H₂ Solution business, and utilize digital transformation opportunities





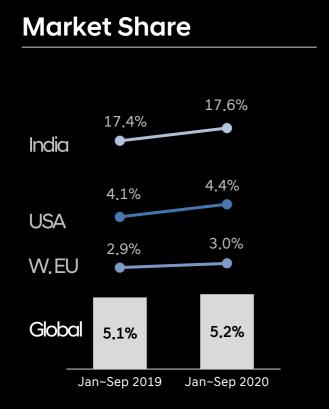
Business & Financial Target

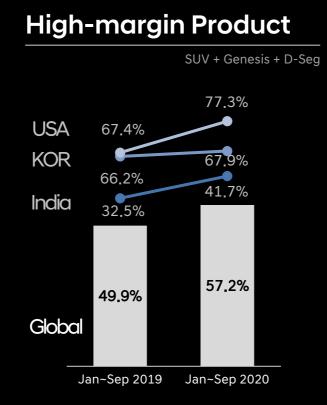
December 10, 2020

Hyundai Motor Company

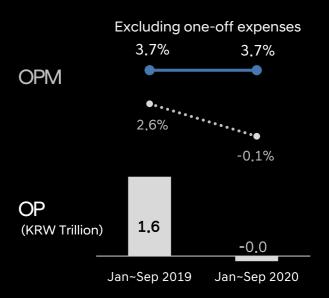
2020 Earnings Result

Despite weak auto demand due to the outbreak of COVID-19, auto division's earnings remained stable with solid fundamental improvement





Auto Div. Profitability





2021 Earnings Forecast

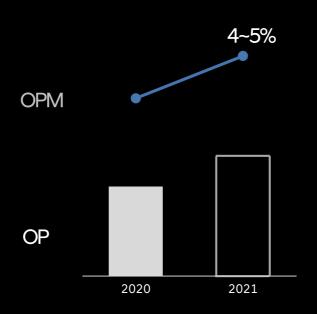
Market Demand & Sales

H10% Market Demand Exceed market growth Sales Target

2020

2021

Auto Div. Profitability



Profitability Drivers

Volume : Recovery of overseas sales

Mix 1: Genesis full lineup & new SUVs

Cost

: Expand commonization, reduce cost of electrification.

Currency: Weak USD & EM currencies

Mix: IONIQ EV

Marketing Cost: Brand launching cost



Mid- to Long-Term Financial Target

Revising 2022 target due to slow recovery of global demand Conservative target for 2025 in reflection of changes in business environment post COVID-19

	Previous Target		Revised Target
Global Demand (Million Units)	2022 95.8 2025 105.2	Global Demand (Million Units)	2022 82.5 2025 90.7
Market Share	2025 5% Range	Market Share	2025 5% Range
Auto OPM	2022 7% 2025 8%	Auto OPM	2022 5.5 % 2025 8 %
Auto ROE	2022 9%	Auto ROE	2022 7.5% 2025 9.5%
Investment Plan (KRW Trillion)	2020-2025 61.1	Investment Plan (KRW Trillion)	2020-2025 60.1

[·] Global Demand: IHS Global Demand



Strategic Direction of Mid- to Long-Term Profit

Internal Combustion Engine



Electric Vehicle



Future New Business



Securing investment resources through profitability recovery

Recovery of global demand post COVID-19

Commonization effect via 3rd generation platform

Optimized production and sales innovation under regional HQ system

Global launching of Genesis brand

Achieving similar profit level as ICE by 2025

Increase M/S in major markets (EU · China)

Enhance competitiveness of new vehicles with E-GMP launch in 2021

Adopt new EV architecture development system from 2024

Differentiate service of sales distribution channels, charging infrastructure

Establishing foundations for profit creation after 2025

Execute platform-based mobility service biz

Prepare commercialization of autonomous driving business

Build foundation of Hydrogen business

Enternew business of UAM, Robotics, PBV etc.



Mid- to Long-Term Investment Plan

Unit: KRW Trillion

9.8

0.6

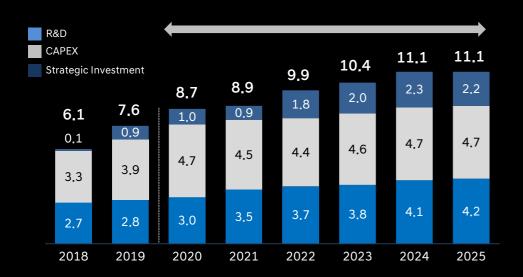
1.6

1.7

0.9

5.4

Investment Plan for 6 Years	60.1		
R&D	22,3		
CAPEX	27.6		
Strategic Investment	10.2		



Strengthen core business competitiveness	36.6	Prev Plan 41.1
R&D: Developing new vehicle, meeting regulations	24.7	26.5
CAPEX: New plant, customer channels	11.9	14.6
Secure future growth business capability	23.5	20.0

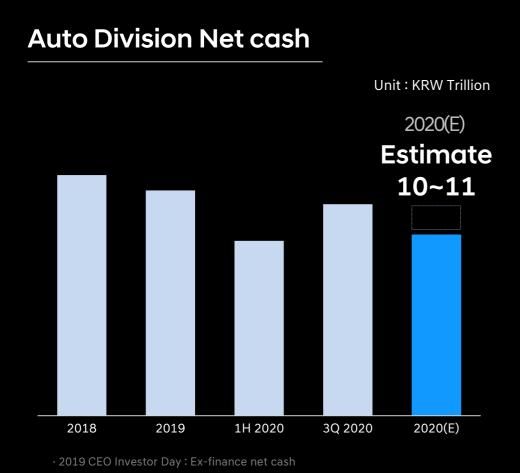
business capability	23.5
Electrification*	10.8
Hydrogen Biz	4.1
Autonomous Driving	1.6
Mobility Service/Platform	1.2
Connectivity	1.0
UAM/Robotics/A.I.	4.8

*	2019 Electrification	Investment P	Plan 9.7T,	9.8T includi	ng waste	battery	/ biz

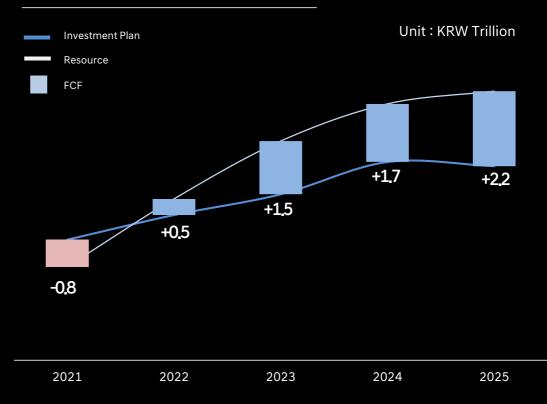


Securing Investment Resource

Securing future growth investment resources as cash flow improves from 2022



Mid- to Long-Term FCF



· 2019 CEO Investor Day: FCF with shareholder return cash out



Mid- to Long-Term Financial Target

2018-2019

Cost Innovation Committee

Enhance Cost Competitiveness

2020

Additional Cost Competitiveness Enhancement

In addition to the existing Cost Innovation Committee activities, promote additional measures of cost competitiveness enhancement

					Enhancement Review for additional commonization Pricing of electrification products · profit strategy	
Regional cost optimization	Commonization	Electrification	Reduce sales-related cost	Expand areas of Cost Innovation Committee	New Improve complexity Lineup + production optimization Reduce number of parts Sub- Committee Localize overseas parts sourcing for new vehicle ⇒ Regional cost optimization	
Enhance productivity	Enhance operational efficiency	Quality cost	Genesis	Total Cost Management	Reduce additional cost of 3 rd gen platform ⇒Enhance operational efficiency Expand areas of cost management Material cost → Total cost Operate integrated organization Design + Procurement + Cost management team	
Reduce KRW	34.5⊤ through 8	categories from	2018 to 2022	Manage Parts cost by units	Reduce parts cost in early development stage Increase efficiency Manage parts cost by units Managed by a vehicle -> single unit of part	

Mid- to Long-Term Financial Target

Reduction target for Cost Innovation Committee

Extend previous 5-year cost reduction target of KRW34.5 T to KRW41.0T by 2025

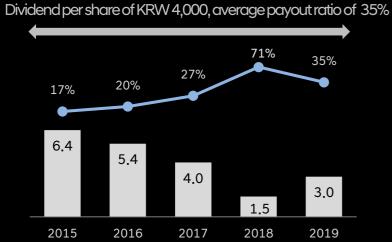
Unit: KRW Trillion

Previous Target		Revised Target		<u>Changes</u>	
2018-2022 34.5		2018-2025 41.0		5 years → 8 years (extend period)	
		2018-2020 agg. results 8.1			
Commonization & Electrification	12.9	Commonization & Electrification	19.5		
Regional cost optimization	9.0	Regional cost optimization	13.5	Volume decrease due to COVID-19	
Productivity, Operational efficiency	2.9	Productivity, Operational efficiency	4.5	Revise target with consideration of	
Sales-related cost	6.1	Sales-related cost	3.1	weak demand and high competitic	
Genesis & Quality cost	3.6	Genesis & Quality cost	0.4		

Shareholder Return

Balanced shareholder return with consideration of future investment

Dividends for past 5 years Payout ratio (%) Net income of controlling interest (KRW trillion)



Shareholder return policy for 2020

- Suspended interim dividend due to crisis management and securing liquidity
- Consider earnings recovery and business environment for 2020 year-end dividend
- Execute flexible shareholder return policy for 2021 considering future investment





Summary of Financial Targets

2021 Profit Target

Mid-to Long-Term Profit Target

Mid-to Long-Term ROE Target

Mid-to Long-Term Investment Target

Auto Division Operating Profit Margin

4~5%

Auto Division
Operating Profit Margin
2022 | 2025

5.5% 8%

Auto Division

2022 2025

7.5% 9.5%

2020-2025

60.1 T



Commonization (Platform, Part)

Platform integration planning, reduce number of parts through standardized design, maximize effectiveness of integrated purchase

Regional Cost Optimization

Parts localization for overseas plants, local optimization of design & sales

(+) localization of overseas new car sourcing

Electrification

Design innovation of green car parts (battery, PE) & sourcing improvement

Productivity

Improve production process & utilization rate, adopt new production technology

Operational Efficiency

Enhancing efficiency of line-up, investment, and stagnated business

(+) additional reduction of PT parts through 3rd generation platform

2020 Complexity

Optimize lineup & production, reduce parts

Sales-related Cost

Miximprovement · Feet reduction · reducing incentive of new cars with enhanced product quality

Genesis

Enhancing brand investment efficiency, early acquisition of business value in new markets

Quality Cost

Minimize claims & campaign costs, strengthening precautionary activities

