# Mid-to long-term EV Strategy

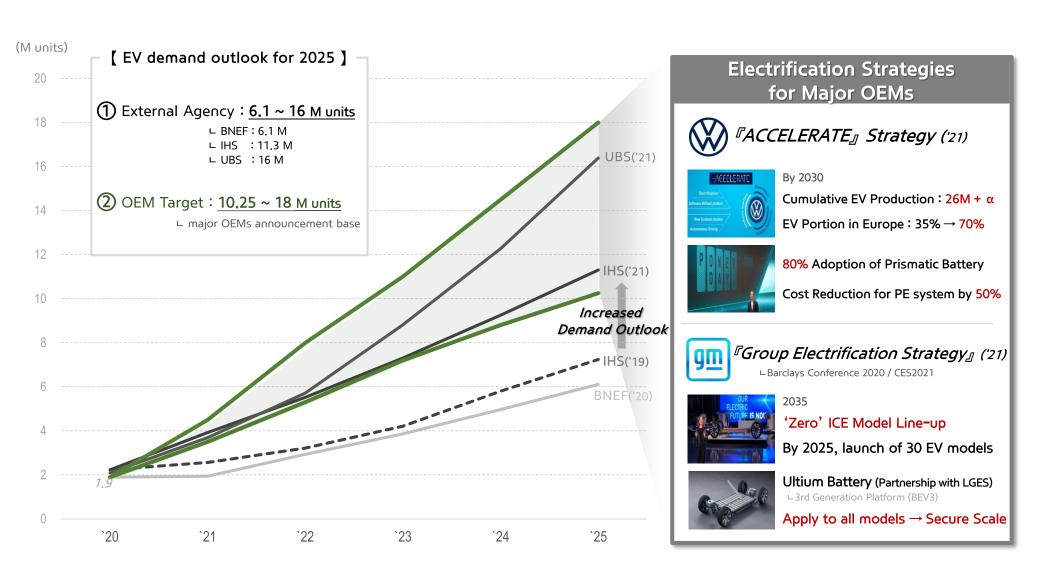
April 2021



#### 1. Global EV Demand Outlook



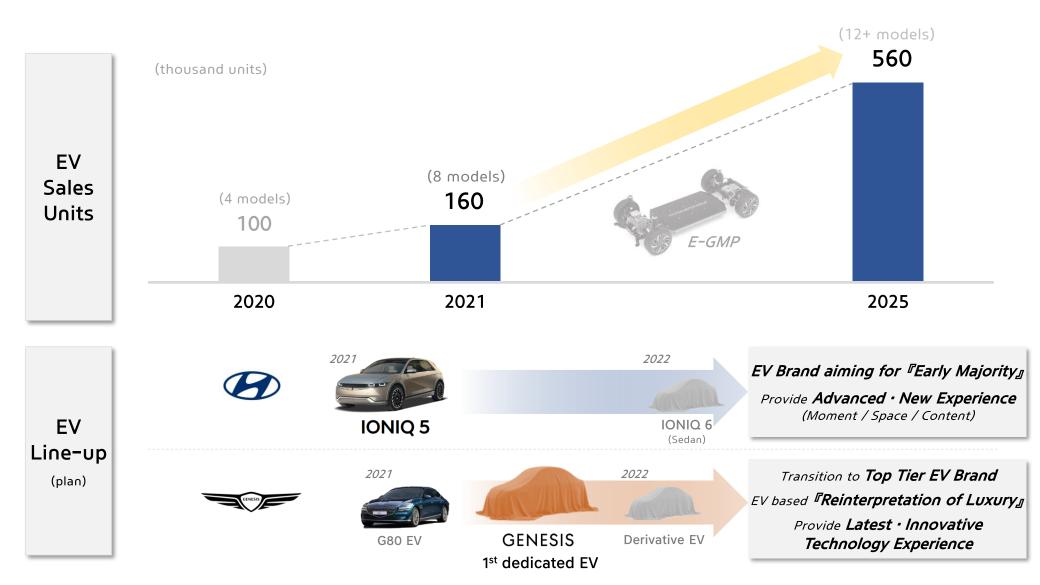
#### As EV market expands, major OEMs are accelerating electrification strategies



# 2. Hyundai / Genesis EV Strategy



#### Diversify EV line-ups from Sedan to SUV based on FE-GMP<sub>3</sub>



### 3. Enhance Core EV Competitiveness



#### Continuously strengthen core EV competitiveness by differentiated USP

(Driving Range / Charging Time / V2L, etc.)

Driving Range (AER)  Expand EV driving range by raising energy density of current Li-ion battery cell and adoption of next generation battery

[ Battery System Development Roadmap ] '16 '18 '23 '25 '27 '20 Prepare for Energy 3<sup>rd</sup> Gen. 4<sup>th</sup> Gen. 1st Gen. 2nd Gen 5th Gen. Density Mass Production ~Mid 500Wh/L ~early 600Wh/L ~Late 600Wh/L ~Mid 700Wh/L ~Late 300Wh/L (per Volume) Of Solid-state battery

Charging Time ■ Domestic : expand fast charging infrastructure nationwide (Expansion of Partnership)

Highway 「E-Pit」

Urban center 「E-Pit」

 Europe: Promote supply of 22kW standard charger in order to respond to growing market demand



 $V2L \rightarrow V2X$ 

 Provide innovative experience related to the ecosystem by expanding and developing current V2L function to V2G / V2V / V2H, etc.





V2G (Vehicle to Grid)
V2H (Vehicle to Home)
V2V (Vehicle to Vehicle)
⋮
Develop

EV-to-other Energy Solution

∟ Source : Off Grid Energy Independence.com

# 4. EV Competency Enhancement Strategy



# Actively respond to EV demand by securing competitiveness of key components, providing innovative charging experience and enhancing product value

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Enhancement Plan	Content
① Secure Competitiveness of Battery/Motor System	<ul> <li>Optimize cost and performance with 「Next-generation PE System」 of integrated EV battery / Motor system</li> <li>Optimize specification of battery / motor system to maximize commonization benefit</li> <li>Standardize cell/module considering expansion of line-up</li> <li>Promote optimal sourcing plan to maximize effectiveness of integrated development of battery and motor system</li> </ul>
② Advance EV Charging Experience	<ul> <li>Improve quality of charging experience by expanding charging infrastructure globally</li> <li>Develop charging solution in domestic apartment and standardize charging quality</li> <li>In Europe, provide advanced charging experience through partnership with IONITY</li> <li>In North America, plan to provide fast charging infrastructure experience with EA and other local charging solution companies</li> <li>Electrified America</li> <li>In Korea, develop new initiative with "E-Pit" establishment experience</li> </ul>
③ Formulate Go-to-Market Strategy in Emerging EV Markets	<ul> <li>Secure market leadership by responding to EV demand in emerging market (India/Indonesia, etc.)</li> <li>Formulate go-to-market strategy given government policy / demand growth trend</li> <li>Optimize development and procurement of key components and system suitable for emerging markets considering model line-ups / local production</li> </ul>