



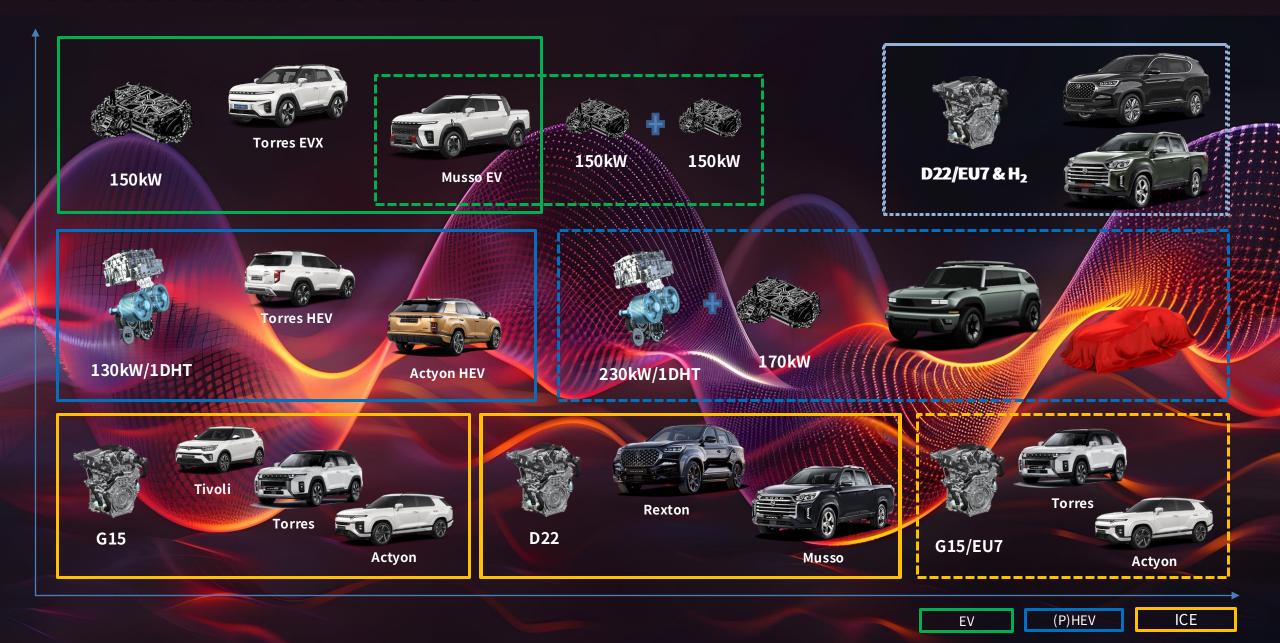


# Future of KGM Powertrains & Product Plan

Head of R&D Yong-Il. Kwon



#### Powertrain Portfolio



## Powertrain Line - up (EV)



## Powertrain Line - up (HEV)



## Powertrain Line - up (ICV GSL)







Actyon



Torres

#### G15T Engine + Eu7 Emission

- Attractive SUV
- Reasonable & Affordable

## Powertrain Line - up (ICV DSL)







REXTON



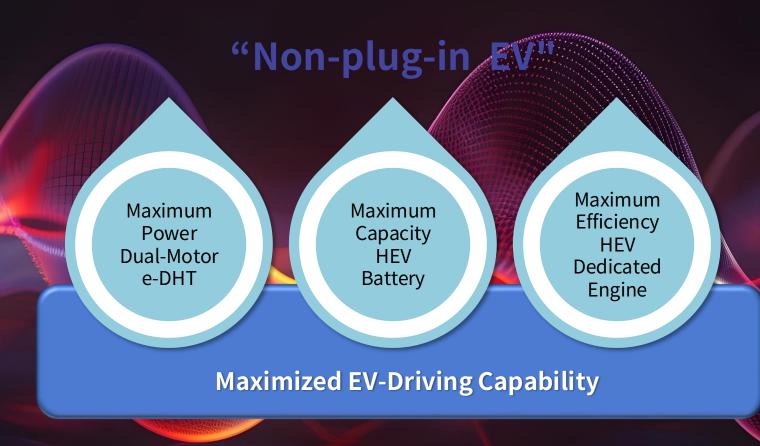
Musso

D22DT Engine + Eu7 Emission & H2

- Eco intentional technology
- New hydrogen solution

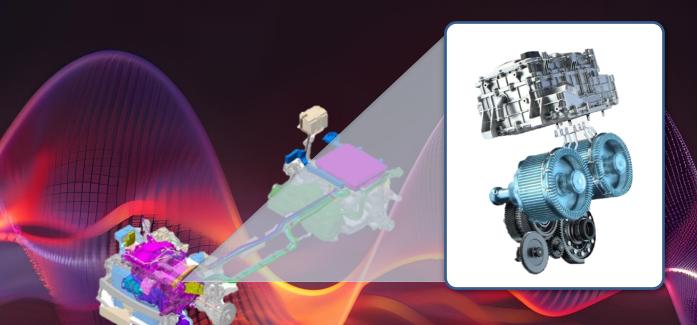


## KGM Hybrid Development Strategy



KGM's hybrid strategy targets a "non-plug-in EV" experience that overcomes EV limitations. Equipped with high output dedicated dual-motor system, maximum capacity battery pack, and a high efficiency hybrid dedicated engine, we have focused on engineering EV-like driving performance

## KGM Hybrid Main System



Maximum Power Dual Motor e-DHT

Spec Comparison					
Maker		KGM (Serial/ Parallel)	OEM "A" (Serial/ Parallel)	OEM "B" (Parallel)	
Туре		P1 + P3	P1 + P2	P0 + P2	
Power	Drive	130kW	100kW	44.2kW	
	Generator /	90kW	60kW	8kW	

With Korea's first P1 + P3 drive system, our hybrid-dedicated dualmotor e-DHT delivers nine distinct driving modes—including EV Drive, series/parallel HEV Drive, and engine operation.

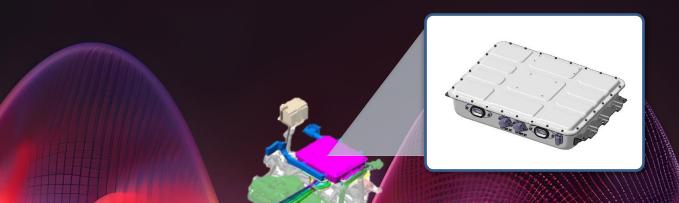
Driving Modes) 1. EV Drive / 2. EV Generative Brake / 3. Series Drive – Charge

4. Series Drive - Power Consumption / 5. Series Generative Brake

6. Parallel Eng. Directive Drive / 7. Parallel Hybrid Drive

8. Parallel Generative Brake / 9. Parallel Running Power Generation

## KGM Hybrid Main System



**Maximum Capacity HEV Battery** 

Spec Comparison			
Maker	KGM	OEM "A"	ОЕМ"В"
Rated Energy (kWh)	1.83	1.64	1.49

Considering fuel-efficiency and optimization of massdistribution, the 1.83 kWh high-voltage battery enables improved driving performance in EV driving mode.

#### Equipped with 12V LFP Battery



## KGM Hybrid Main System



Our hybrid-dedicated engine operates exclusively within its peak-efficiency window, which enables it to deliver world-leading-level efficiency while fully meeting global emissions standards such as LEV IV and Euro 7.

#### **Maximum Efficiency HEV Dedicated Engine**

• Through joint development with a world-leading European engine specialist partner, we have incorporated 15 state-of-the-art fuel-efficiency technologies.

New-Tech Components	KGM G15T Hybrid Engine	
Injector	350bar	
Miller Cycle	Miller Cycle Operation	
Turbine	VGT	
LP EGR	Official	
Intercooler	Water-Cooling Type	
VVT \\\\\	Operated by DC Motor	
Oil Pump	Fully Variable	
Thermal Management	Inlet : Electric Type Outlet : Wax Type	
Piston Cooling Jet	Switchable PCJ Purge Activated When Oil or Coolant Temperature Increases	
Accessory Drive	Beltless type	

## KGM Hybrid

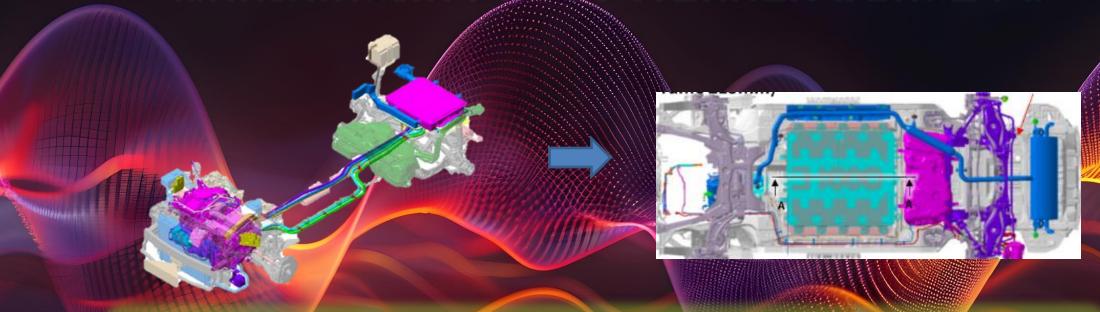
## Non-plug-in EV → KGM Hybrid

WLTC (Ph1/Ph2)				
EV	Serial	EV + Serial	Parallel(Engine)	
71%	24%	95%	5%	

KGM's hybrid integrates a high-output dedicated dual-motor system, a maximum-capacity battery pack, and a high-efficiency hybrid-dedicated engine to deliver an EV mode that comes as close as possible to a pure-EV driving experience.

## KGM Hybrid





Moving beyond EV-like hybrids, we aim to develop an EV where range is no longer a limitation.



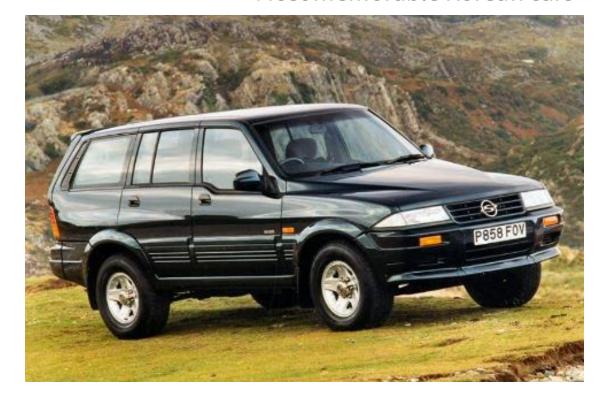


## KGM DESIGN POWERED BY TOUGHNESS

Since 1954

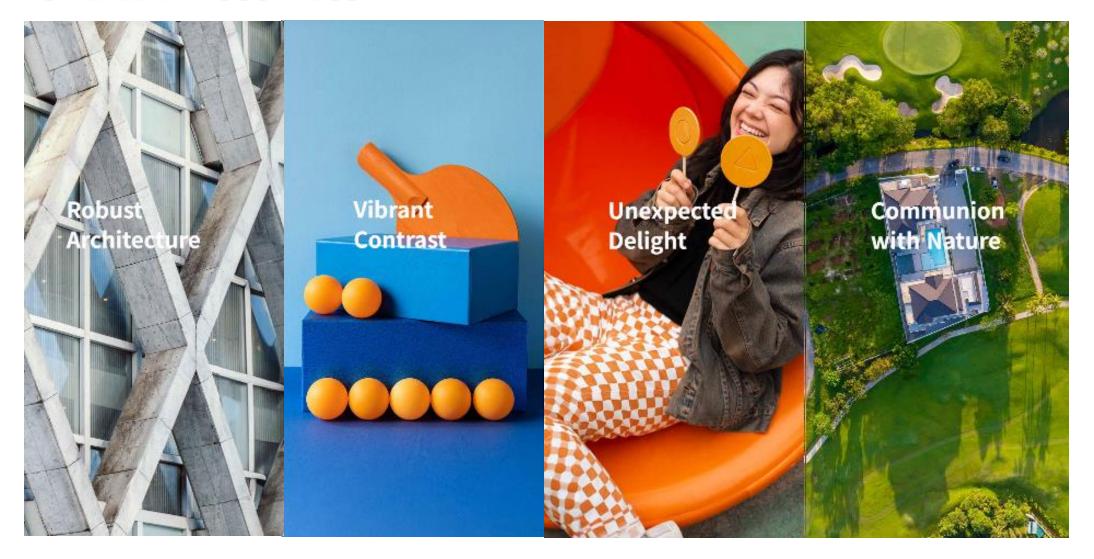


Most memorable Korean cars



#### KGM DESIGN

#### POWERED BY TOUGHNESS











#### MU550 🖾





#### PRACTICAL ENJOYMENT





#### PRACTICAL ENJOYMENT







#### PRACTICAL ENJOYMENT











## TORRES HYBRID

- PRODUCT INFORMATION -

JINYOUNG CHO

PRODUCT STRATEGY DEPARTMENT









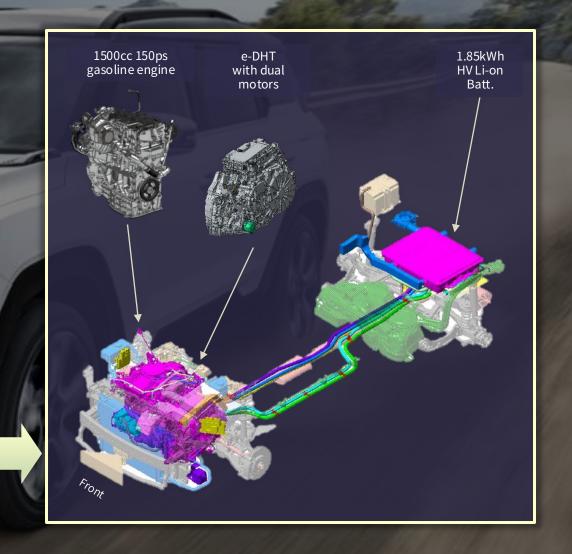


#### FIRST HYBRID SYSTEM IN KGM'S HISTORY



#### Hybrid systems

Туре	Description	Brands
Series	Engine charges the battery; vehicle runs like an EV	Nissan
Parallel	Engine and motor operate together like a conventional hybrid	Hyundai, Kia
Series- Parallel	Combines both methods with a dual-motor system	KGM, Toyota, Honda,



#### THE MOST EV-LIKE HYBRID SYSTEM

KGM's Dual-Tech Hybrid system

"Like electric, but reassuring range."

- Motor-only driving up to 100 KPH ideal for city commutes
- Engine operation primarily as a generator to sustain battery charge
- And combined output for confident acceleration and high-speed cruising

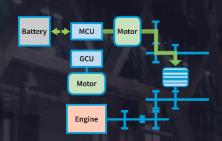
Key Highlights

"Smart and Seamless"

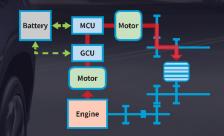
- Automatic selection among 9 optimized hybrid modes no driver input required
- Refined, capable driving up to 95% motor drive in the city\*
- Instant torque & smooth acceleration up to 204 ps
- Outstanding fuel efficiency with no performance compromise  $-5.9 \ell/100$ km



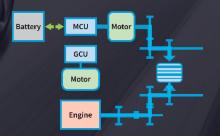
#### **EV Mode**



#### Series Mode



#### **Parallel Mode**



#### **BEST-IN-CLASS EMISSION**



CO<sub>2</sub> Emission: 132.8g/km — Class-leading efficiency in a bigger body

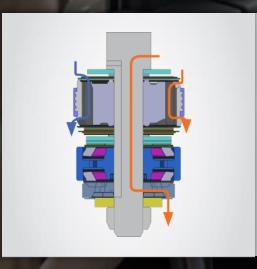
Comparisons to competitive models (WLTP)

Maker / Model		KGM	Hyundai	Kia	Toyota
		Torres	Tucson	Sportage	RAV4
Propulsion		HEV	HEV	HEV	HEV
Powertrain & Transmission		G1.5T e-CVT	G1.6T 6AT	G1.6T 6AT	G2.5 e-CVT
Dimension	Length	4,705	4,520	4,660	4,600
	Width	1,890	1,865	1,865	1,855
	Height	1,720	1,650	1,680	1,685
	Wheelbase	2,680	2,680	2,755	2,690
	Wheel (")	18	18	17	18
Performance	Max Power (PS)	204	215	215	218
	Max Torque (Nm)	300	264	264	202
Fuel Efficiency	Fuel Tank (L)	50	52	52	55
	Fuel Consumption (Combined: L/100km)	5.9	5.7	5.8	5.6
	Battery Capacity(kWh)	1.83	1.49	1.49	N/A
	Co2 Emission (g/km)	132.8	131	132	126

#### SUPERIOR RIDE COMFORT & QUIETNESS



#### Ride comfort & stability improvements

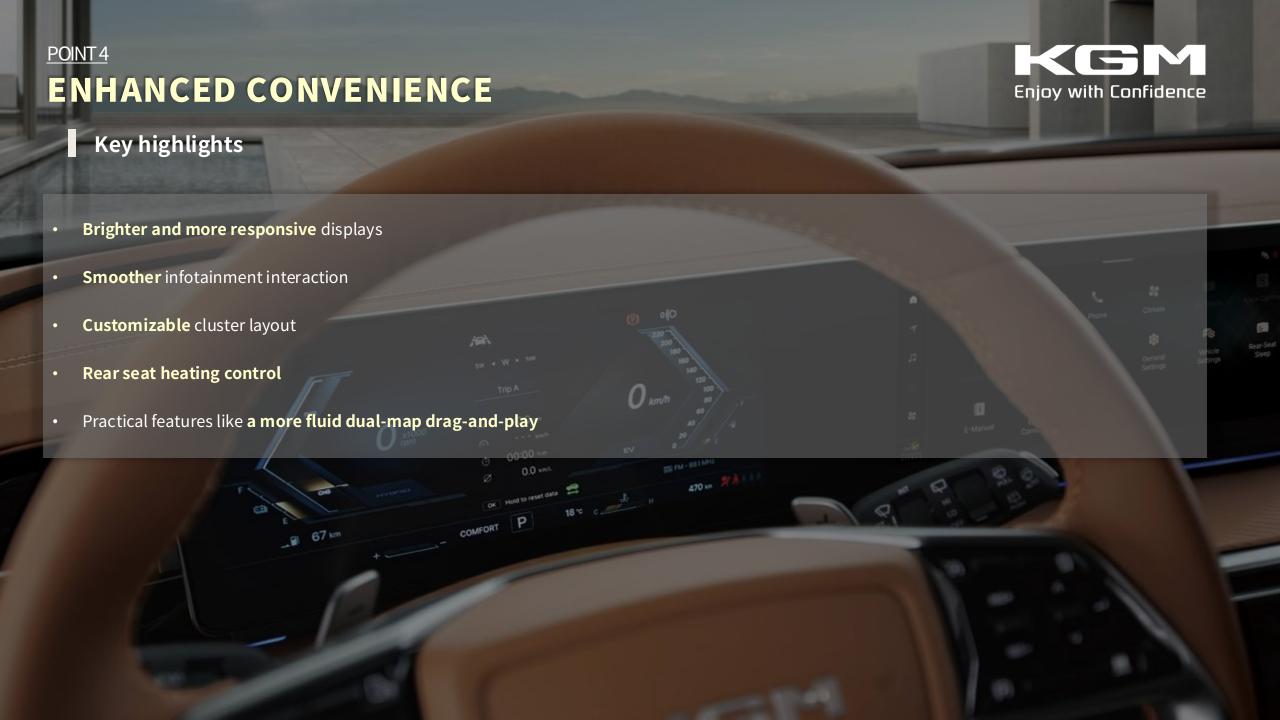


- Upgraded shock absorbers with SFD high-spec valves and larger rod size for better damping
- · Improved ride comfort while maintaining handling performance.

#### **Premium N.V.H performance**



- Enhanced engine sound insulation (engine bay, cover, wheel housings)
- · Premium Tyres for the best performance
- NEXEN Roadian GTX tyres showcase a great fuel efficiency and high performance capability for xEV powertrains, maximizing driving range and torque generation
- MICHELIN sound-absorbing 20-inch tyres reduce road and tire resonance noise





## SUMMARY

**The Torres Hybrid** offers:

A technologically advanced HEV platform.

A well-timed launch in Europe.

A smart path to electrification.

**Efficiency** of an EV.

**Flexibility** of a hybrid.

All with the rugged DNA of Torres.

Let your customers experience it.

Tie your launch to test drives.

Because once they drive it — they'll get it.



#### ENJOY YOUR DRIVE!





# 2025 KGM FORWARD DRIVING EXPERIENCE

TORRES HYBRID & MUSSO EV
EXPERIENCE DAY

Presenter: Renee Park

FRANKFURT 17<sup>TH</sup>-18<sup>TH</sup> SEPTEMBER, 2025 55 years of expertise

Started from 1974

Leading the next chapter in the pickup truck market

# MUSSOEV



**Jeep CJ5P** 1974

Musso Sports 2002 Actyon Sports 2006 Korando Sports 2012 Rexton Sports 2021





### **PRODUCT INFORMATION**



Battery

Motor

App. / Ramp break. / Dept. Angle

Minimum Ground Clearance

Kerb Weight

**Towing Capacity** 

Fast charging time ( $10\% \rightarrow 80\%$ )

Max Speed

**Driving Range** 

80.6 kWh (LFP)

152kW \* 1EA (2WD) / 152kW \* 2EA (AWD)

20.2 / 15.1 / 24.3

181.4mm

2,165kg (2WD) / 2,285kg (AWD)

1,800kg (Braked) / 750kg (Unbraked)

46 min (100kW) / 36 min (300kW)

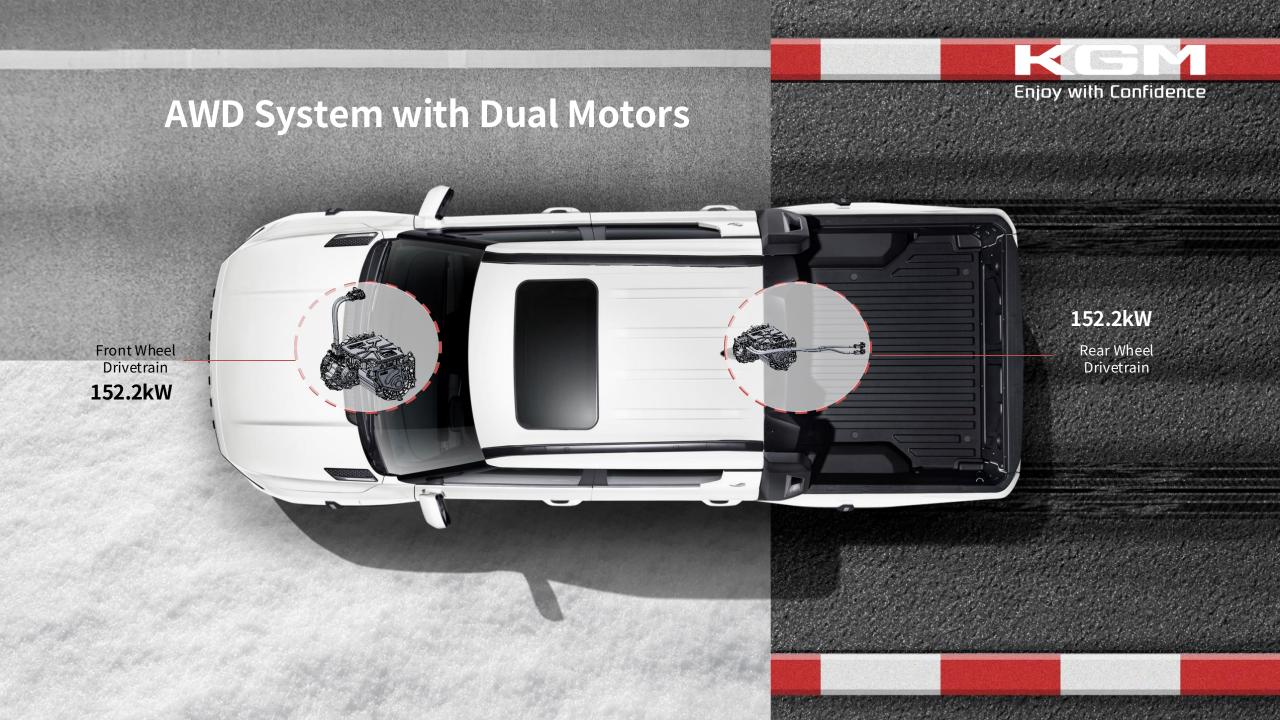
162km/h (2WD) / 177km/h (AWD)

419.6km (2WD) / 379km (AWD)



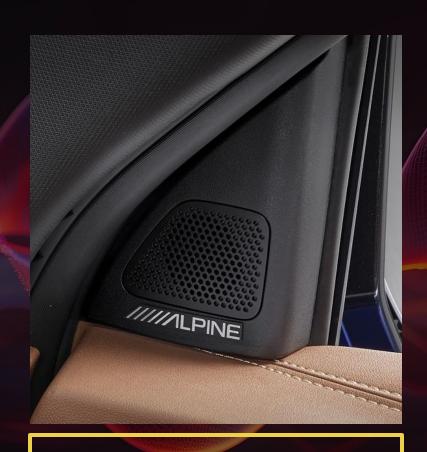






## CONVENIENCE









**2nd-row Reclining Seats** 







Self-Levelizer





## External V2L





## **SUMMARY**

- **1** Dual-motor AWD System
- **2** Convenience Features
- **3** Battery Pre-conditioning
- 4 External V2L
- 5 Black Edition



# ENJOY YOUR DRIVE







## Survey

Please scan the QR code to be directed to our survey.

It only takes a few minutes and will help us improve our services and offerings.

Thank you for your valuable feedback!

