



NEWS

Kia launches Platform Beyond Vehicle business at CES 2024 to go 'Beyond Mobility'

- **Kia's Platform Beyond Vehicle (PBV) goes 'Beyond Mobility', with adaptability that stands 'Ready to Answer Every Question'**
- **Customized vehicles and solutions will enhance versatility and open up limitless possibilities, catering to both businesses and individuals**
- **Five Kia PBV concept models unveiled at CES 2024 – three Concept PV5 derivatives, Concept PV7 and Concept PV1**
- **Kia Concept PV5 to enter mass production in 2025**
- **PBV platform offers users a blank canvas to redefine how space and mobility can adapt to their needs by providing exceptional flexibility through radical modularity**
- **Three-phase PBV road map will transform the mobility landscape, with more models, advanced software and bespoke services to come**
- **Concept EV3, Concept EV4 and EV6 GT and EV9 production models showcase an 'EV Life for Everyone'**

(Las Vegas/Seoul) January 8, 2024 – Kia has revealed its Platform Beyond Vehicle (PBV) future strategy at the 2024 Consumer Electronics Show (CES) in Las Vegas. Kia's PBV business will initially be based around the introduction of an all-new, modular vehicle, previewed by the Kia Concept PV5.

This future vision was presented alongside a multi-phase plan that will see PBVs revolutionize the mobility industry while helping to advance Hyundai Motor Group's ambitions in robotics, Advanced Air Mobility (AAM), and autonomous driving.

Kia PBVs are a total mobility solution that combines fit-for-purpose EVs with advanced software solutions based on the Hyundai Motor Group's software-to-everything, or SDx, strategy. As a Platform Beyond Vehicle, Kia PBVs will open the door to new businesses and lifestyles by redefining the concept of space thanks to advanced, tailored interiors that provide ultimate freedom and flexibility.

"Kia's PBV business represents our vision of going beyond the traditional concept of automobiles by fulfilling the unmet needs of diverse customers and communities through

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optimized vehicles and services catering to specific market and business circumstances,” said Ho Sung Song, Kia President and CEO.

“Kia PBVs will be an enabler of business innovation thanks to our customer-centric management system, EV mass production expertise, and the Hyundai Motor Group’s rapidly developing SDx strategy and related future businesses. We are excited to show that we are fully prepared to become the first mover in the global PBV market,” he added.

A vision for future mobility

The launch of Kia’s PBV business will see the brand commit to providing a varied range of customized vehicle types to meet customers’ individual requirements. Determined to overcome all existing restrictive and one-dimensional industry product line-up offerings, Kia believes its new approach to PBVs can help solve the mobility challenges encountered by individuals and organizations with limited transportation options.

Kia’s PBV offering is the embodiment of a genuine customer-centric approach and will be built around a dedicated business system, integrating vehicles, software, and future technologies to deliver added value.

The brand’s PBV roadmap, divided into three distinct phases, illustrates how Kia PBVs will be pivotal in realizing the Group’s SDx vision as devices that offer tailored solutions according to customer usage patterns.

Phase one will see the introduction of the Kia PV5, a versatile EV optimized for major domains such as hailing, delivery and utilities that features conversion capability for diverse customer needs. Enhanced data connectivity between vehicles and external data such as route or delivery information will enable convenient operation of multiple vehicles as a software-defined fleet. This emergence of customized business fleets and PBV-specific solutions means less downtime and enhanced cost-effectiveness.

Phase two will see the completion of the dedicated PBV model line-up, and PBVs will evolve into AI-based mobility platforms that use data to interact with users and ensure that the vehicles are always up to date. An integrated PBV solution will provide a customized, seamless experience across devices and software. Meanwhile, new forms of business linked with robotics and other future technologies will emerge.

In phase three, Kia PBVs will evolve into highly customizable, bespoke mobility solutions by integrating with the future mobility ecosystem. This is where Kia PBVs will ultimately become life platforms that turn any inspiration into reality. Connected self-driving vehicles will be managed as part of a single smart city operating system. With the emergence of a hyper-connected world where people, PBVs and social infrastructure are seamlessly linked, we will open the door to completely new lifestyles by creating a robust PBV ecosystem based on the

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Hyundai Motor Group's future technologies for autonomous driving, advanced air mobility, robotics, and the energy grid.

Designed to make users' lives easier

Utilizing 'Easy Swap' technology to flexibly address the diverse demands of customers, a single vehicle chassis can be used to fulfil multiple mobility needs. Behind a fixed cab, or 'driver zone', a variety of interchangeable upper bodies, or 'life modules', can be connected to the base vehicle via a hybrid electromagnetic and mechanical coupling technology, turning the PBV into a taxi during the day, to a delivery van at night, and a personal recreational vehicle on weekends.

Modularization is further made possible thanks to 'Dynamic Hybrid' weldless body structure assembly, which enables the length of moveable members to be flexibly adjusted according to vehicle use purpose. Comprised of high-strength tubular steel and engineered polymers, typical parts are reduced by 55 percent with no loss in rigidity. Shipped in standardized, convenient kit form, Dynamic Hybrid technology will allow for the quick and simple in-field transformation of a Kia PV5.

The design of Kia's PBVs is inspired by robust, simple and clever tools and goes far beyond mere aesthetics. Kia's primary mission is to ensure that the brand's PBVs are simple and intuitive to operate and engage with, regardless of where, when or how they are used.

Whether the purpose of the vehicle is to transport people, move goods, or meet logistics or personal mobility needs, each PBV shares a consistent quality of design that reflects its solid, robust nature and projects a dependable and highly capable attitude. There are no unnecessary adornments, with each feature designed to serve a useful function which makes the lives of vehicle users easier, as clearly demonstrated by the concepts unveiled at CES.

A combination of a simple yet robust surface language combined with expressive graphics seamlessly unifies the PV5 models, despite their diverse natures. On each vehicle, large doors open out to reveal an exceptionally accommodating pillarless opening that provides effortless ingress and egress. Inside, the extended wheelbase and electric platform ensure wide, flat open spaces to offer near-endless stowage and usage possibilities. The driver's experience is also enhanced, as the cockpit provides a desk-like surface, and the steering wheel can be folded to serve as a desk lamp, creating an office-like environment.

Sustainability sits at the core of Kia's PBV design strategy. Extensive use of materials such as bio plastic, Post Consumer Material (PCM) plastic, bio paint, recycled PET fabric, felt and yarns, and bio-PU foam not only limits environmental impact today and tomorrow, but also delivers a unique visual and tactile appeal that leads to the creation of new aesthetic values.

Inspiration becomes reality

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While ensuring consistency in design across all vehicles, Kia will create an ecosystem that fosters interaction between PBVs. With extensive modularity — including the ability to share features across all vehicles — PBVs will enhance versatility, opening up limitless possibilities to cater to the needs of both businesses and individuals.

In line with Phase One, various versions of the PV5 will be available, including Basic, Van, High Roof, and Chassis Cab versions. In the future, Kia also plans to introduce a Robotaxi model developed with Motional (a joint venture between HMG and Aptiv), which aims to provide a revolutionary autonomous hailing experience for passengers.

During Phase Two, symbiosis of the PBV ecosystem will be complimented by two further models, the 'PV7' and 'PV1', utilizing cabinet and frame systems to enhance interaction and connectivity among vehicles based on the modular concept.

- 1) PV7 — The largest product in the line-up, defined by more interior space, greater driving range, and enhanced functionalities.
- 2) PV1 — The smallest product in the line-up, PV1 is optimized for agile and short-distance logistics transportation, using driving modules to minimize turning radius even in narrow spaces.
- 3) PBV modularity — An integrated rail system on the vehicle's ceiling, floor, and side panels, as well as on the exterior, enables effortless customization of the vehicle to meet individual customer needs. This system enables seamless transfer of goods and items between vehicles, using cabinets and frames. The 'rails' within this ecosystem simplify the movement of items between vehicles, while the modular design of the 'tiles' and functional accessories, such as speakers and shelves, offer limitless flexibility for a wide range of scenarios.

“Kia PBVs will initiate a new era of seamless everyday business and lifestyle solutions. We hope to make our customers’ lives easier and better, whether they’re stationary or on the move, offering exceptional flexibility and customization through radical modularization,” said Karim Habib, Executive Vice President and Head of Kia Global Design.

“Untethered to any fixed place, and unbounded by the traditional restrictions of space, Kia PBVs offer users a blank canvas to reimagine their lifestyles and workstyles,” he added.

‘Ready to answer every question’

To take full advantage of the opportunities enabled by PBVs, Kia will launch a dedicated business system, encapsulating every aspect of the process, from the product line-up to integration of software solutions, and global partnerships.

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The product line-up outlined above will be augmented by the introduction of a customer participation-based development process, utilizing customer input and feedback to create more tailored, mission-specific solutions.

Kia is taking significant steps to meet the diverse demands of customers by constructing a PBV-dedicated EVO plant in Autoland Hwaseong, Korea. This factory will implement a hybrid production approach, combining conveyor and cell-based methods. Through collaboration with global conversion partners, Kia will be able to offer conversion models for various PBV line-ups, catering to different customer preferences. The factory is set to become operational in 2025 and will have an annual capacity of 150,000 units.

The brand's solutions for In-Vehicle Infotainment (IVI), Fleet Management Systems (FMS), and charging will leverage vehicle software-based data and AI technologies, further enabling customer-centric solutions, predictive maintenance suggestions to minimize downtime, and charging programs tailored to the customer's business operating environment.

Kia's PBV IVI solution aims to enhance daily life by recognizing user preferences in real-time and providing relevant contextual data. It offers access to the Kia PBV App Market and third-party apps, ensuring customers have the latest information and entertainment content on the go. By connecting with business-specific apps previously limited to mobile devices, it improves service convenience and information reliability, providing a holistic user experience across different hardware form factors.

The fleet management solution for Kia PBVs allows customers to efficiently oversee multiple vehicles. It provides insights on sales, inventory, and deliveries, benefiting mobility and logistics businesses. Features include inventory monitoring, temperature control, and intelligent route planning for efficiency. The solution streamlines fleet management with real-time data and AI integration for predictive maintenance and optimal operational efficiency.

Kia's EV charging solution optimizes charging schedules for maximum efficiency. It considers battery charge levels, routes, schedules, and breaks. Additionally, Kia aims to provide a total energy solution by utilizing advanced charging infrastructure, allowing high-density energy batteries to power mobile devices and emergency equipment. This is made possible through innovations like Vehicle-to-Everything (V2X) technology.

This integration of IVI, FMS, and charging systems will be delivered via unified software, enabling packaged solutions adaptable to various business environments. Kia has established partnerships with companies like Uber, Coupang, CJ Logistics, Kakao Mobility, and Dubai Taxi Corporation to further enhance its PBV-dedicated business system.

"The Kia PBV business is the pinnacle of our customer-centric business approach. With the aim of developing PBVs and solutions tailored to their business environments, we are

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confident that these strong partnerships will be a driving force on the road to becoming a sustainable mobility solutions provider,” said Pierre-Martin Bos, Vice President and BDM Director of Kia PBV Business Division.

Future business and affiliate partnerships will serve to strengthen the integration of robotics, AAM, and autonomous driving to ultimately complete a PBV mobility solution within smart city environments.

- 1) Robotics — Kia is leveraging robotics, including Boston Dynamics' Stretch and Spot robots, to enhance logistics automation and round-the-clock quality control at their smart factories. These efforts aim to uncover new business opportunities through collaborations and drive innovation.
- 2) AAM — Kia is collaborating with Hyundai Motor Group affiliate Supernal, to expedite the development of smart cities by introducing multi-modal services and mobility hub businesses based on advanced air mobility.
- 3) Autonomous driving — together with Motional, the Group will expand beyond personal autonomous driving technology into the business phase. This is already underway with plans for the development of a software based PV5 Robotaxi. This collaboration aims to combine Kia's competitive strengths with Motional's advanced Level 4 autonomous driving technology to expand global business opportunities.

As such, Hyundai Motor Group's software capabilities transcend beyond vehicles and extend to various areas of mobility, such as robotics, aircraft, and autonomous driving, aiming to enable operation, control, and management, fostering an era of hyper-connectedness between people and things.

Going 'beyond mobility', sustainably

By enabling unprecedented levels of flexibility, Kia's PBV models will redefine how customers can live their lives. Boundary-pushing design will create new vehicle interiors for a better future and will expand to both mobile and stationary spaces, enhancing daily life, work, and leisure.

Since the brand's relaunch in 2021, Kia has embarked on a journey to adapt effectively to the rapidly changing market through its Plan S strategy. With award-winning models including the EV6 and EV9 having helped to successfully establish the company as a leader in the design and manufacture of EVs, Kia aims to solidify its position as a top-tier sustainable mobility solutions provider by 2030 through the launch of subsequent vehicles, such as the EV3, and EV4. In pursuit of achieving its vision and meeting diverse customer needs, Kia's brand relaunch has led additionally to a transition towards a sustainable customer-centric management system.

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During the course of this transformation, Kia has achieved a number of significant sustainability goals on its roadmap to becoming a sustainable mobility solutions provider, including the implementation of 10 must-have sustainability items to be applied to all new Kia lines to achieve sustainability at scale.

Kia's PBV strategy further facilitates the brand's climate objectives by allowing PBVs to distribute responsibly generated hydrogen and electricity directly to infrastructure. This not only reduces the environmental impact associated with traditional power plants and fossil fuels but also ensures a cost-effective and reliable supply of electricity throughout the city.

Leading the way

Kia's presence at CES 2024 marks a return to the industry-leading Consumer Electronics Show after a five-year absence.

The brand will be presenting two exhibitions at the event. Located in the LVCC West Hall, Kia's PBV exhibition is based on the theme 'Place of Inspiration'. The exhibition showcases the diverse ways in which PBVs can inspire and shape individuals' lives through a range of lifestyle and experience displays and features five PBV concept vehicles, including three variations of the Concept PV5, as well as the Concept PV7 and Concept PV1.

The four display areas take the form of visual representations of a park, city, home and factory bathed in four visually distinctive colors. Together, the displays highlight the multiple applications and benefits of Kia's PBV technology in addition to showcasing Kia's brand values and 'Opposites United' design philosophy.

Kia's second exhibition is located in the CES Central Plaza, under the theme of 'All-set EV Life for Everyone.' Featuring a futuristic Kia connected home, the display showcases the Kia Concept EV3, Concept EV4 and the EV6 and EV9 production models, in addition to an exciting EV9 driving technology simulation, a 10 must-have sustainable items exhibition, and Vehicle-to-Home (V2H) power supply and Vehicle-to-Load (V2L) camping demonstrations in real life scenarios.

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Kia Corporation – about us

Kia (www.kia.com) is a global mobility brand with a vision to create sustainable mobility solutions for consumers, communities, and societies around the world. Founded in 1944, Kia has been providing mobility solutions for more than 75 years. With 52,000 employees worldwide, a presence in more than 190 markets, and manufacturing facilities in six countries, the company today sells around three million vehicles a year. Kia is spearheading the popularization of electrified and battery electric vehicles and developing a growing range of mobility services, encouraging millions of people around the world to explore the best

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ways of getting around. The company's brand slogan – 'Movement that inspires' – reflects Kia's commitment to inspire consumers through its products and services.

For more information, visit the Kia Global Media Center at www.kiaNewscenter.com

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