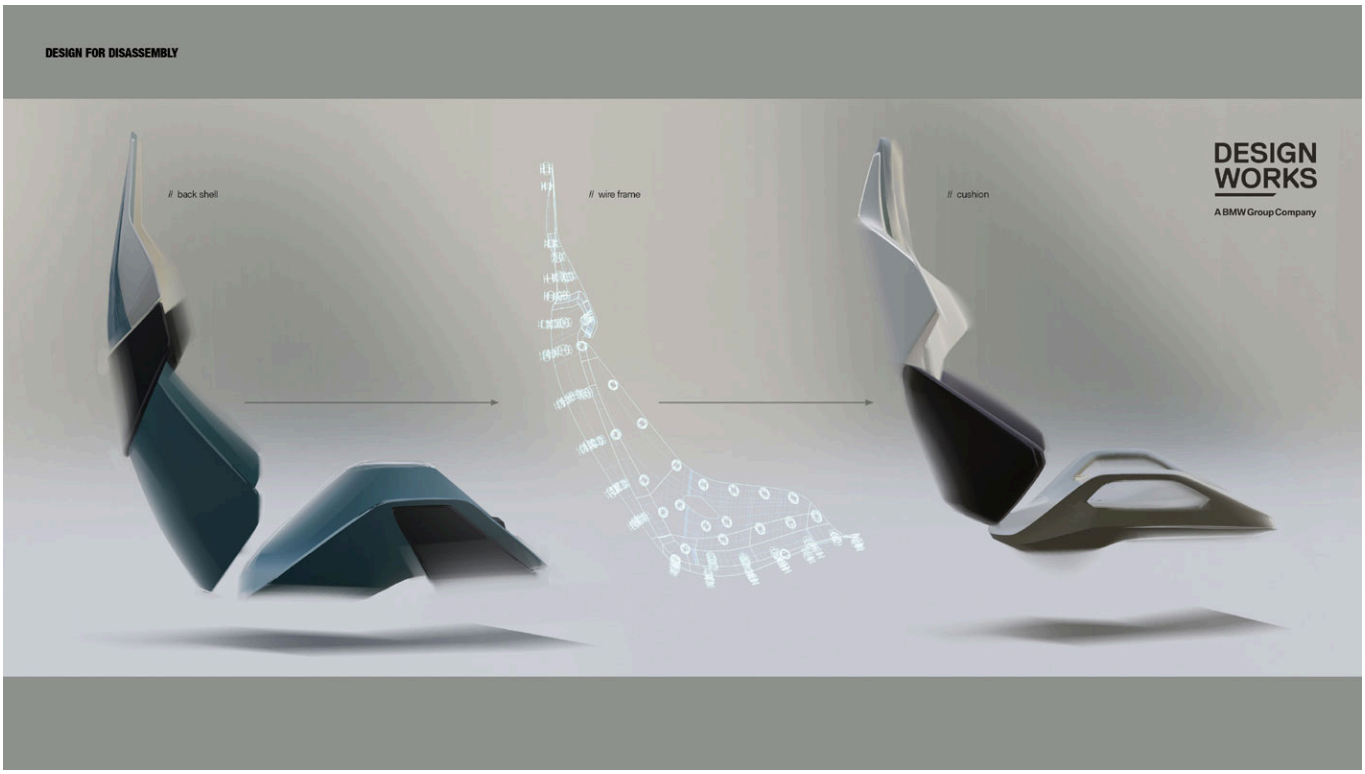
Thu, 13 February 2025
Weekly Newsletter

DVN
Interior

NEWSLETTER #248

Editorial

Seating, Sustainability Advance Together



BMW DESIGN WORKS IMAGE

Creating sustainable car seats is a crucial step towards making the entire vehicle more eco-friendly. Seats represent a significant chunk of vehicle weight—about five per cent, 80 out of 1,800 kg. They comprise numerous materials: metals, plastics, textiles, leather, foams, electronics, airbags, motors, and more, which makes them difficult at vehicle end of life. This week's in-depth piece looks at recent projects from seating tier-1s, includingAdient, Forvia, Hyundai Transys, Lear, Magna, and Toyota Boshoku.

Seating represents a significant chunk of the parts cost in a car, too, at six to seven per cent, plus development and tooling cost. That reflects the magnitude and diversity of the seating value chain, which deserves significant content in the DVN Interior newsletter.

The forthcoming DVN Interior workshop (**register here**) will include a seating session, and we will present the newsletter content evolution with four pillars: cockpit/HMI, seating, interior lighting, and CMF–materials–sustainability.

Sincerely yours,

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

Seating and Sustainability Move Forward Hand in Hand

BENTLEY EXP 100 GT CONCEPT 2019 (BENTLEY IMAGE)

While much of the attention devoted to lowering vehicles CO_2 footprint centers on electric powertrains, automakers are looking at other aspects of car design to achieve sustainability. A major one of them is the car seat.

Sustainable seating is not a new trend, but innovation in sustainable car seating has accelerated in recent years. Most manufacturers and suppliers have put out press releases about initiatives in sustainable products, which can be clustered around weight reduction, smart design, and sustainable materials.

Here's a look at recent happenings in the seating field, from some of the major makers:

Adient

ADIENT IMAGE

In 2023, Adient presented their lightweight Pure Essential seat made out of only two materials: sustainably-sourced steel and recycled polyester (PET). The seat is designed for disassembly and recycling. The environmentally conscious design approach also helps the bottom line, by reducing manufacturing complexity and costs.

Last year, Adient and Dow MobilityScience achieved a major technological breakthrough in the closed-loop recycling of waste polyurethane seat foam for Jaguar Land Rover.

Polyurethane foams are notoriously challenging to recycle and are designed to last, meaning they end up in landfills and can persist in the environment for a long time. By creating a closed-loop supply chain, JLR can reduce emissions, eliminate waste, and provide safe, low-carbon seat foams. Recycled polyurethane foam will form an integral part of the new 'circular seats', which are estimated to halve CO_2 equivalent emissions while maintaining high performance. They'll avoid more than 44 kg of CO_2 equivalent per seat, comparable to charging nearly three thousand smartphones. See our **previous coverage.**

Forvia

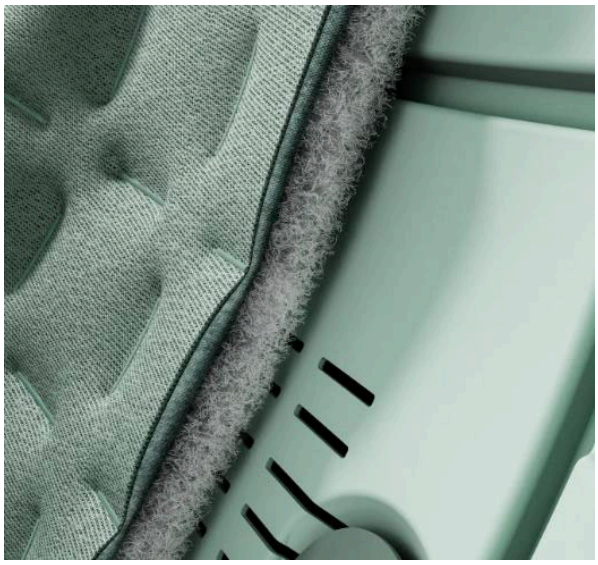
SUPREMO SEAT (FORVIA IMAGES)

Compared with traditional seats, the Supremo seat has a 68-per-cent lower carbon footprint. It uses a low-carbon steel structure, and has an Auraloop® cushion made of fully recyclable PET fiber, which sets a new performance for sustainable development in the automotive seating industry.

Inspired by interior furniture, the Supremo seat is designed to transform the car cockpit into an extension of the home. Designed for life and work on the go, this seat redefines the in-car experience and provides passengers with the comfort and familiarity of home.

The design of this seat embodies high technology and sustainability, and brings revolutionary changes to the riding experience of electric vehicles through its innovative structure and material selection.

Auraloop is a new sustainable cushioning material made from recyclable polyester fibers that should halve the carbon footprint compared to polyurethane (PU) foam products. Forvia developed Auraloop in partnership with Indorama Ventures, a company that produces and recycles polyethylene terephthalate (PET), also known as polyester.



Hyundai Transys

HYUNDAI TRANSYS IMAGE

Hyundai Transys, a Hyundai Motors affiliate, specializes in automotive seating and powertrains. In 2021, they were ranked № 34 by Automotive News magazine among global auto parts manufacturers based on sales revenue.

Hyundai Transys showed a future mobility seat concept, the 'color-material-finish concept seat', with sustainable leather and innovative materials under the theme 'Shift to Regenerative Mobility' at Lineapelle 2022, the leading world trade fair focusing on leather and the leather industry. They developed new sustainable leather and other regenerative materials in partnership with Italian and Korean manufacturers to create an innovative seat concept without tanning waste. Hyundai Transys selected the leather fair to showcase the concept in line with the company's push for a sustainable future.

The concept seat visualizes that value transcending time and space with a design concept called 'Seoul to Milan'. The concept links the cities through colors and patterns, particularly the two main hues, named 'Seoul Grey' for the Korean capital's metropolitan cityscape and granite peaks, and 'Milano Brown' for the Italian city's classical buildings and legendary tanneries. In addition, Seoul's city lights are translated as pixels while Milan's towering gothic Duomo cathedral is conveyed as stripes.

Tanned leathers are used in the seat sections where durability is required, and woven leathers are used in the seatback bolsters, giving a different textural twist while minimizing leather waste from cutting. Leather scraps were ground to powder and regenerated into yarn, which was later combined with yarn made from recycled PET bottles to create a unique regenerated fabric for the floor area.

Along with these innovative materials, Hyundai Transys used upcycled felt fabric and 3D printing to structure the headrest out of regenerated aluminum powder to give the model a cohesive look while demonstrating sustainable applications of such materials. The seat frame model is also an upcycled product from 2018, brought back to life for this project to provide a sustainable seat through-and-through.

Lear

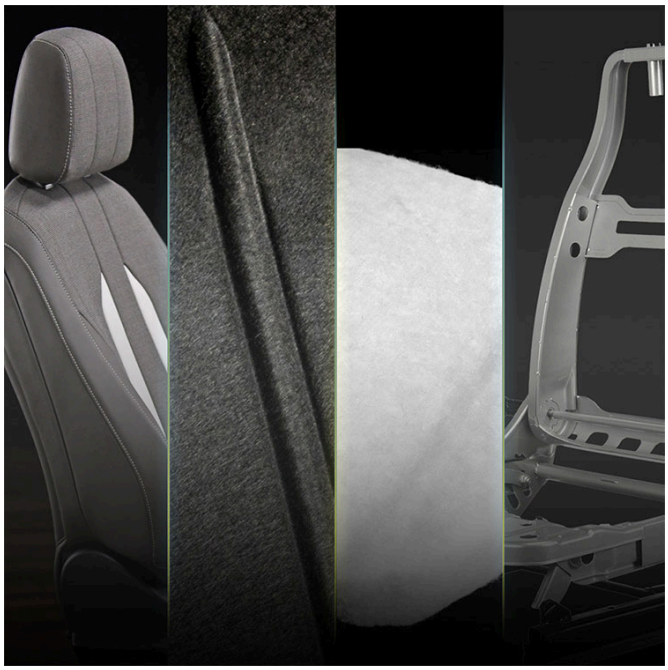
Lear has deep strength in integrating sustainable concepts into the entire process of product design and manufacturing, from surface materials to core components. Internal standards have been developed to quantify sustainable performance, including recycling ratio, bio-based content, and carbon and weight reduction.

Lear has more than 900 patented products related to sustainable development around the world. For example, they developed zeolite-tanned leather, which uses minerals extracted from natural substances, does not contain heavy metals, has a fast biodegradation rate, and has a bio-based content of more than 90 per cent. During the production process, it cuts water use by a quarter and energy consumption by 20 per cent. The product has been mass-produced and widely used in automotive interiors, and widely recognized by the industry.

Lear uses patented FlexAir™ 3D extruded polymer materials to make seat cushions and backrests. They meet physical-properties and comfort requirements, and have excellent sustainable performance. Compared with traditional foams, FlexAir can halve carbon dioxide emissions, reduce weight by 20 per cent, and make the entire product recyclable.

ReNewKnit™, an environmentally friendly suede material developed by Lear, is made entirely of renewable materials, achieving emission reduction, reuse, recycling and repeated innovation. Its unique knitting technology ensures excellent fit for multi-surface shapes and can be recycled with composite materials of the same material, providing an innovative option for automotive interiors.

Magna



MAGNA IMAGE

Magna recently launched the EcoSphere™ product series, which combines a single PET material with Magna's innovative melt-recyclable foam and trim system to keep automotive seat foam pads and trims out of landfills at the end of their useful life.

The EcoSphere product line consists of sustainable trim materials, trim pads, structures and foams. It integrates Magna's foaming chemistry, trim integration and other technologies to provide customers with affordable and seamless automotive foam pad solutions.

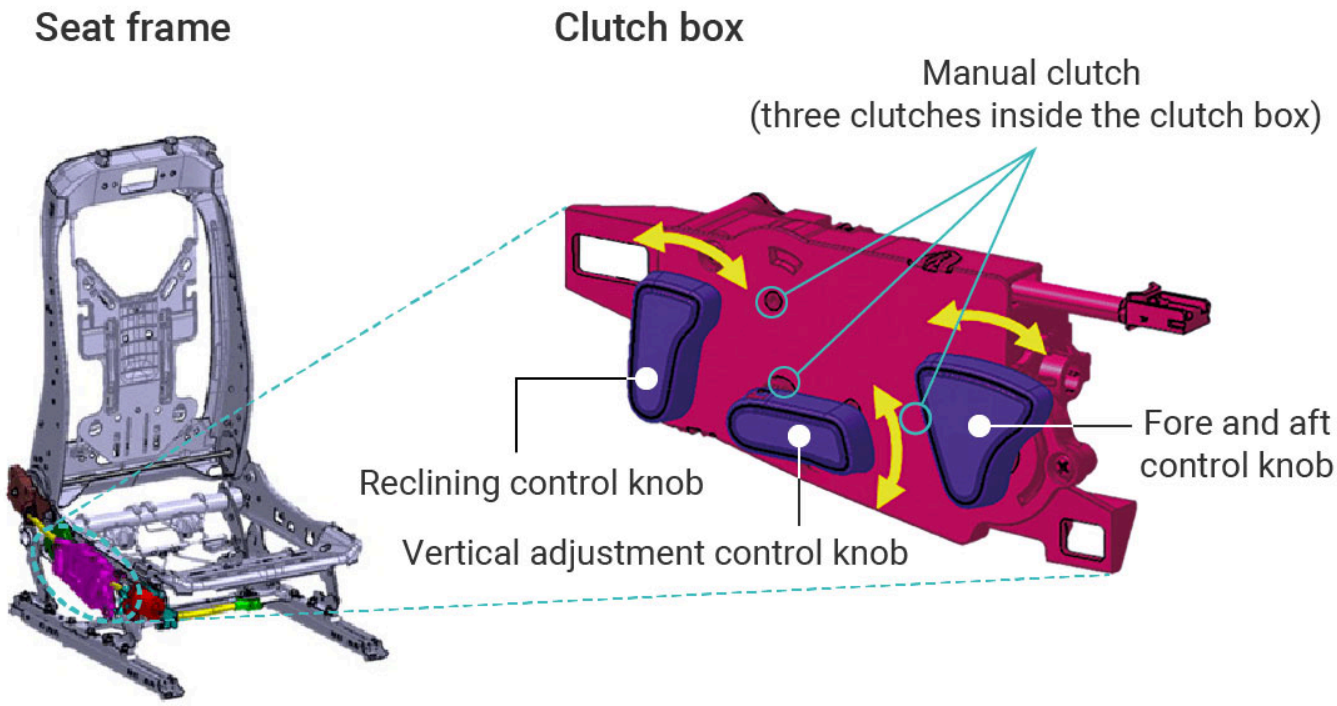
The melt-recyclable foam and trim technology ensures that the look and feel of the seat materials meet industry standards while significantly reducing the impact on the environment.

Magna's EcoSphere interior base is an important part of the recyclable foam and valve core technology. The interior base can be used on each seat, and is laminated to the back of the trim material to provide support and a fresh appearance.

To find recycled materials for EcoSphere products, Magna worked with TWE Group, a multinational company specializing in technical textiles and nonwovens. TWE provided the rePEaT® solution made of recycled and biodegradable fibers.

Magna says their sustainable seating development strategy helps achieve their net-zero goal, reduce greenhouse gas emissions, and lower Magna's carbon footprint by using recycled and bio-based materials, implementing energy-saving manufacturing processes and end-of-life management.

Toyota Boshoku



TOYOTA BOSHOKU IMAGE

Toyota Boshoku has a one-motor power seat, a system for manipulation of multiple functions with a single motor.

This product involves the addition of a newly developed power device to standard seat frames. The 6-way power seat enables fore/aft, reclining, and vertical adjustments with a single motor.
This is possible by dint of their clutch box, which can change the power transmission in the switch stroke.

Since this product allows manipulation of seat position via simple operation of the power seat switch, it can be put in space-limited compact cars, enabling power seats for a diverse range of customers.

This technology not only reduces the number of motors used, but also reduces wire harnesses, as well as substantially reducing overall mass and cost.

Yanfeng

RECO™ LOW CARBON SEAT – YANFENG IMAGE

Compared with conventional seats, Yanfeng's Reco seat uses innovative recyclable materials from foaming to steel frame, which can reduce product carbon emissions by up to 40 per cent.

The application of sustainable materials is a key area of Yanfeng's sustainable development strategy. The Reco seat uses a variety of materials, including polyethylene terephthalate (PET), polyurethane (PU) trim, recycled foam, thermoplastic foam, green steel frame, PET lightweight seat back and hybrid cushion.

Made from recycled soft drink bottles, the PET PU trim reduces carbon emissions by more than a fifth. It is translucent and soft to the touch. The Reco seat uses a combination of recycled foam and thermoplastic foam to provide better elasticity and support. In addition, this foam uses industrial wastewater steam during production and molding, which greatly reduces energy consumption and emissions.

The seat chassis uses high-strength recycled plastic instead of a traditional metal seat chassis. The frame uses scrap steel as a raw material, and uses green electricity to produce recycled steel frames, reducing carbon emissions by more than 60 per cent. The seat back panel uses recycled PET material, considering both lightweight and styling needs. The hybrid cushion uses high-strength recyclable composite materials instead of metal, reducing carbon emissions by 20 per cent and providing more options for surface treatment technology.

These examples are just a few of those demonstrating that when experts cross the seat with the objectives of weight and sustainability, the result is a shower of innovation!

Interior News

BMW Asks: Do Car Seats Have a Sustainable Future?

INTERIOR NEWS

BMW'S CONCEPT FOR A SUSTAINABLE CAR SEAT (BMW IMAGE)

As electric powertrains won't solve the problem on their own, BMW is looking at other aspects of car design to achieve sustainability. Such as the seats!

At last year's Climate Week event in New York City, the company sponsored an exhibit demonstrating the potential future of automotive car seats. BMW's Designworks (BMW Design Innovation Studio, located in Santa Monica, Ca), in collaboration with several other BMW teams, is researching the use of plant-based materials as well as increasing the amount of secondary raw materials and the use of recycling.

The demonstration car seat, named the BMW M Visionary Materials seat, incorporates an exterior and frame made from sustainable materials designed to be lightweight and easily recyclable. The frame is made of carbonized algae filament. Other seat materials include bio-based leathers made from chitosan (seafood waste), renewable bacterial nanocellulose, chemical-free foam alternatives made from mono-material additive manufactured silicone, and a natural fiber composite that reduces weight and carbon dioxide emissions.

A spokesperson for Designworks explained to *Design News* that the process of designing a sustainable car seat is quite involved, balancing not only environmental considerations but also user comfort and ergonomics, safety, weight, and costs. And, while technologies like modeling and computer-aided simulation do play a part, the design process also heavily involves human interaction. as it is difficult to simulate whether a human will ultimately be comfortable in a car seat whose design is a radical departure from the norm.

No specific timetable has been established as to nor when the environmentally sustainable car seats will emerge in BMW production vehicles, nor how and when the automotive value chain of all these new bio-materials are developed.

BMW Designworks was responsible for the design, color, and material concept of the seat in collaboration with the BMW design team. The project was realized in close cooperation with several partners: Automotive Management Consulting, Gradel Lightweight Sarl, and Lasso Ingenieurgesellschaft.

Mobis Monitors In-Car Behavior

INTERIOR NEWS

HYUNDAI MOBIS IMAGE

Hyundai Mobis has unveiled their In-Cabin Monitoring (ICM) system, which can detect body posture, actions, and bio-signals to assess the safety of passengers in the car in both the front and rear seats.

The new system is designed to prevent careless driving behavior such as drowsy driving, cell phone use, or wrong positioning. It can check whether children in the rear seats are properly belted in their child seats. Series production is to start this year, and mobis will take orders from customers all over the world.

The system has cameras to monitor the vehicle occupants, and software logic that analyzes the images. First, the camera recognizes the posture and position of the passengers as well as their bio-signals in real time. The software then analyzes the camera data to identify potential risks and warn passengers with audible and visual alerts.

For example, it can warn the driver if they close their eyes, and recommend that they take a break. More than ten scenarios have been developed in which the system can help prevent accidents, including talking on the phone or smoking while driving, taking your hands off the steering wheel, not wearing a seatbelt, and leaving small children unattended in the back seat.

The supplier will focus on developing "high-precision software that can analyze the different body structures of each passenger," said Shin Kyu-chul, head of the electronic control development group at Hyundai Mobis, who have achieved ASPICE certification, the European standard for automotive software, by developing this system and has reportedly exceeded the target set under NCAP.

Two New Tech Updates From Volvo

INTERIOR NEWS

NEW UX ON VOLVO V60 (VOLVO IMAGE)

Volvo Cars' ambition is to become a fully electric car maker, with a strong commitment to an ongoing reduction of its carbon footprint, aiming to achieve net-zero greenhouse gas emissions by 2040.

The company is also taking very good care of the user experience, constantly adding new technology features whose development is based on customer feedback and real-world data.

For example, recently Volvo revealed their new infotainment system, which will be rolled out over-the-air to models as old as 2020 after first appearing in the EX30 and EX90 electric SUVs.

The update, which will also appear in the new XC90, will be available on all Volvos compatible with an Android-based operating system and built in 2020 or later.

NEW UX ON VOLVO V60 (VOLVO IMAGE)

Volvo will be sending out the updates over the course of next year, with around 2.5 million vehicles expected to receive it worldwide.

The first update consists of the ultra-fast Snapdragon® Cockpit Platform from Qualcomm. This allows the existing Google Android Auto-based infotainment system to be much faster and more responsive. The infotainment system in these models will be more than twice as fast as the outgoing system, with a graphics generation that is up to 10 times faster.

The second update concerns the Plug & Charge service, an authentication and billing system that simplifies the charging experience.
“With Plug & Charge you just drive up to a compatible charging station, hop out, plug in and go about your day,” says Volvo representative Erik Severinson. “When you’re back, it’s the same carefree approach – everything is already sorted by the system.”

Plug & Charge is set up and activated via the car, and you can easily find compatible charging stations using Google Maps in your car’s centre display or the Volvo Cars app. These stations identify your car and its associated payment method as soon as you connect the charging cable to your car. The charging starts automatically, with no need for additional cards or authentication, and payment is processed seamlessly. The Plug & Charge update will be added on this year's EX30, EX40, and EC40 cars in Europe.

General Knowledge Function Added to Mercedes MBUX Voice Assistant

INTERIOR NEWS

MERCEDES-BENZ IMAGE

Mercedes-Benz, like the whole rest of the industry, is jumping onto the AI bandwagon extend the capabilities of their MBUX voice assistant by introducing a general knowledge function. This way, MBUX can now provide up-to-date answers to questions by initiating a Microsoft Bing search and generating naturalistic language responses using ChatGPT via the Microsoft Azure OpenAI service.

Mercedes-Benz was one of the first automakers to introduce ChatGPT as a beta program in the U.S., and is now bringing this functionality to production vehicles. Customers can ask a variety of general knowledge questions. The system can also respond to requests for additional information, even if the speaker uses vague wording.

Users can activate the assistant with a simple "Hey Mercedes". Alternatively, they can also press the voice button on the steering wheel. To maximize functionality, the dialogue history is saved for up to an hour so that the user can ask questions. The new function is available as a free update for over three million vehicles worldwide with the MBUX infotainment system.

The company also explained that they retain complete control over the IT processes in the background. All voice command data collected is stored in the Mercedes-Benz Intelligent Cloud, where it is anonymized and analyzed. To reduce the risk of customers accessing toxic, harmful, or illegal content, Mercedes-Benz has implemented a risk assessment tool to evaluate system responses and identify best practices to reduce the possibility of harmful responses.

Hyundai: Nearly 700K Connected Cars Sold in Last 5 Years

INTERIOR NEWS

HYUNDAI IONIQ 5 (HYUNDAI IMAGE)

Connected-car technology has become increasingly prevalent in the Indian automotive market, following the global trend toward more connected and intelligent vehicles, particularly as EVs gain prominence in India.

Hyundai India says they have sold over 675,000 cars with connected features since 2019. The company currently offers connected car features in 12 out of 14 models in India, including the electric Ioniq 5.

Hyundai's connected car journey in India began with the Venue model in 2019, offering 35 telematics features focused on performance, convenience, safety, and security.

HYUNDAI CRETA (HYUNDAI IMAGE)

Hyundai's connected cars in India feature Bluelink, an advanced platform that enables easy flow of critical information between the vehicle and the user's mobile device. It is an AI-based technology with an inbuilt SIM that enhances user safety, convenience and security. The company plans to expand their Bluelink service by adding new features and extending availability to more models.

Jae Wan Ryu, corporate planning head at Hyundai India, says "Bluelink has significantly uplifted user and ownership experience, transforming cars into lifestyle products, garnering the appreciation of customers from across the country. In 2025, Hyundai introduced the In-car Payment platform, which is an evolutionary technology that transforms the vehicle into a seamless payment platform, enhancing convenience and efficiency for customers".

Hyundai has also introduced in-car payments with the Hyundai Creta Electric, enabling users to pay for EV charging directly from the vehicle's infotainment system at around 1,500 charging points. Customers can locate over 10,000 charging points across India from the comfort of their infotainment screen.

With Bluelink, customers can access multiple aspects of their vehicles, such as remote services, real-time vehicle tracking and fuel-efficiency parameters. The app also hosts various other features such as locating the nearest Hyundai service center, fuel stations and restaurants, and navigation to these places.

According to Hyundai, some of the most used features of the convenience suite are remote vehicle start, remote climate control, find my car, and send destination to car.

Bluelink is offered with a free three-year package, which includes multifaceted safety features such as SOS, auto collision notification, roadside assistance (RSA), dedicated phone helpline, and emergency contact notification.

The service also offers a host of security features, including vehicle immobilization through the Bluelink call centre in case of theft, stolen vehicle notification, geo-fencing alerts, valet alerts, and high-speed alerts.

Bionside: Radici's Bio-Based Engineered Polymers

INTERIOR NEWS

GRUPPO RADICI IMAGE

Gruppo Radici is an Italian industrial group known for expertise in the production of synthetic fibers and advanced materials, focusing on the development of sustainable solutions and eco-friendly products, and using innovative materials and processes to minimize environmental impact.

The group emphasizes the use of biomimicry and other eco-conscious technologies to create materials with reduced carbon footprints, enhancing the sustainability of various sectors, including automotive, textiles, and industrial applications.

Complementing their Rencycle range of engineering polyamides made from recycled nylon, at Fakuma 2024 Radici launched Bionside, a line of bio-based products comprising innovative engineering polymers obtained from renewable source raw materials.

This new offering of bio-based grades is part of the Radilon® family of products and includes both the products being sold under the Radilon D (PA610) brand and the ones currently undergoing testing (PA56 – PA510 – PA1012).

Bionside is made using renewable raw materials, mainly derived from the oil extracted from castor beans. This plant is grown in semi-arid regions and requires a minimal amount of water to thrive. This approach not only reduces water consumption, but also supports sustainable agricultural practices, making Bionside an eco-friendly choice for industries that want to reduce their environmental impact without compromising quality and performance.

Thanks to their chemical conformation, the polyamides made from renewable source materials feature high technical characteristics, which make them suitable for many applications.

Radici also introduced new features of their Autoinsight tool, launched at Fakuma 2023. Autoinsight is a tool to navigate a car in 3D mode and targeted at all the operators in the automotive value chain. The information provided by the tool highlights the large number of components in all parts of a car manufactured using the Group's safe, innovative and sustainable materials.

AutoInsight is accessible from all smart devices. It has many features, including the ability to quickly and directly view the strong points of Radici materials, to save them as favorites, and to download the desired technical information. AutoInsight is a state-of-the-art digital tool suitable for every user profile, because it allows individual users to freely select among several levels of depth to accommodate their own interests and competencies.

Besides all the applications pertaining to the interior and exterior of a car and the most innovative materials developed for electric vehicles, the tool makes available ICE Powertrain, Chassis, and EE Lighting uses.

The Design Lounge

Cadillac Sollei Concept: CMF Focus and Mycellium Material

THE DESIGN LOUNGE

GM IMAGE

COFFEE CORNER
DVN
Interior

DVN Interior reported last year on Cadillac Sollei Concept. Let's add that GM was collaborating with MycoWorks to develop a new class of material for high-performance automotive interiors. This new material, intended to one day have the same applications as leather, incorporates mycelium, which is the renewable root structure of mushrooms, and other bio-based ingredients.

Grown using MycoWorks technology—Fine Mycelium™—this material may eventually enable Cadillac to deliver the high-end aesthetic the brand is known for today using renewable materials. Additionally, the future goal of Fine Mycelium is to provide superior strength, offering potential improvements in weight reduction and efficiency while still meeting the most stringent of quality requirements.

MycoWorks’ Fine Mycelium technology grows mycelium, the renewable root structure of mushrooms, to craft a range of customizable leather alternatives with the goal of matching the highest quality performance standards. The innovative process uses ingredients made from bio-based substances, such as wheat bran, water, and repurposed sawdust.

As part of the collaboration, GM designed a card holder accessory incorporating this innovative material to serve as proof of concept of its versatility.

The material reflects Cadillac’s mission to pioneer renewable automotive resources.

The Sollei conceptualizes an electric 2+2 convertible equipped with the brand’s signature 55-inch pillar-to-pillar screen, awe-inspiring interior, exterior lighting chorography for arrival and departure, and intuitive front and rear command console.

The car celebrates the optimism of travel and the celestial environment with its rich sensory engagement, unexpected discoveries, and sense of occasion. Sun themed features are pronounced in its color, materials, and finishes. Charging mats on the console, door map pockets and custom accessories are made from this MycoWorks’ premium bio-based material. This material is in an iridescent finish in a soft hue color palette.

In terms of CMF there's a lot of effort reflected in the Sollei Interior:

- Unique sunburst-themed lighting and graphic choreography.
- Sunburst motif perforation, quilting, and embroidery on seat patterns.
- Nappa leather featuring a pink iridescent pigment that creates a subtle color-changing sunrise effect.
- Pink iridescent hue on the beverage chiller door and glass tray in the rear compartment that reveals different sunlight exposures.
- 'Aurora' tint on primary metal finishes, which includes color shifting to reflect the phenomenon of the sun's solar winds reacting with the earth's atmosphere.
- Convertible metallic roof fabric called 'Daybreak', whose name ties to the functionality of the convertible roof; as the roof pulls back, sunlight can pour over the interior.
- Textured floormat material named 'Bask', a boucle fabric adding beautiful texture and subtle warmth, matching the color of the roof material keeping the whole interior very light.

News Mobility

Cupra Offers Parkopedia Park & Pay Feature

NEWS MOBILITY

Parkopedia, Created in 2007 with the aim of answering a common question for drivers around the world, is a free app available in various versions. Downloadable from the App Store for iPhones or from the Google Play Store for Android devices, there is also a web version, usable from a PC or any other terminal: all you need is a browser and internet access.

Parkopedia allows you to search and obtain information on parking lots in your vicinity or near a specific address, including 70 million parking spaces in 89 countries, There is no shortage of functions to reach or book one, to receive directions, to view opening hours, prices and availability in real time, but only available with the premium version, which costs €5.49 via in-app purchase.

Among the other available options, Parkopedia gives you the possibility to save parking lots in a list of favourites, consult extra information such as capacity or accepted payment methods, as well as filter the search based on specific parameters. The graphic interface is not particularly modern, but certainly easy to consult and accessible to anyone.

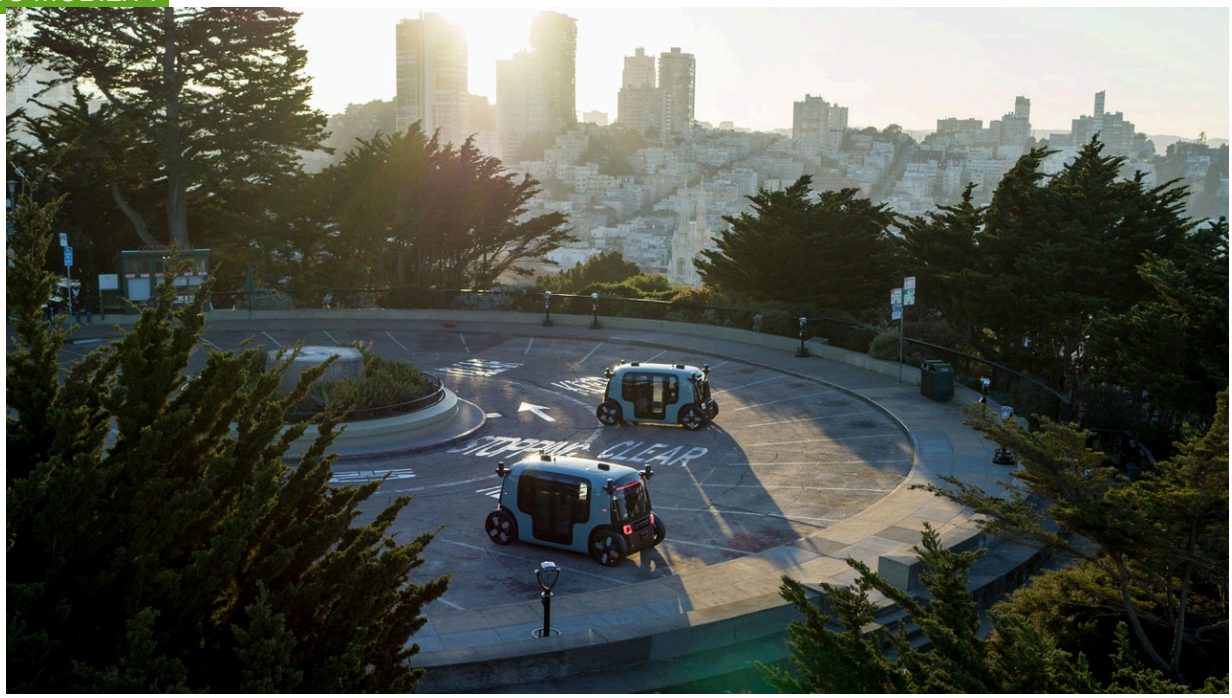
One of the strengths of Parkopedia lies though in the search function, which can be managed on the basis of various parameters. For this reason, there are filters with which to filter everything based on the time of entry, the duration of the stay, the type (whether in a garage or on the street for example), the payment methods, the presence of charging stations and so on.

It has now recently announced that Parkopedia and SEAT are working together to enable convenient in-car payments for parking. Cupra drivers can access seamless Park & Pay in-car payment, allowing them to make parking payments with ease, without leaving the vehicle.

This new functionality is currently available in the Cupra Born and Tavascan models with the Cupra Navi system across 17 European countries. The service is planned to be added to the remaining Cupra range and SEAT models during 2025.The decision to offer in-car payment for parking was driven by the strong interest expressed by European drivers in a recent Parkopedia Global Driver Survey. Nearly two-thirds of respondents indicated a desire to pay for parking through their in-car infotainment system, making it the most requested service for in-car payments.

Zoox, Amazon Launch Second Robotaxi Service in USA

NEWS MOBILITY



ZOOX IMAGE

The Zoox headquarters is located directly on San Francisco Bay. A small robotaxi whirs across the parking lot on a sunny January afternoon and opens the doors, which open to both sides like a subway train. The view falls into an unusual vehicle without a steering wheel or dashboard. It looks the same from the front as it does from the back—which is why it can travel in both directions.

In just a few months or even weeks, the startup wants to offer their ride service not just to employees, but to everyone, first in Las Vegas and shortly afterwards in San Francisco.

Zoox, acquired by Amazon in 2020, would be the second commercial cab service in the USA to operate without a driver. This is also surprising because competitors such as Uber and the General Motors subsidiary Cruise recently discontinued their own attempts despite investing billions of dollars. The long path to profitability seemed too costly for them, in view of the seemingly overwhelming competition from technology leader Waymo, a sister company of Google.

The design is reminiscent of a toaster on wheels. It travels at a maximum of 120 km/h and can turn all four wheels to steer. One of Zoox's strategies is to use inexpensive materials in their vehicles, like thin upholstery instead of soft leather seats. The benches are arranged opposite each other to make it easier for passengers to talk to each other. As with Waymo, passengers are greeted with relaxing music that can be adjusted just like the air conditioning.

In San Francisco, robotaxis are now even considered a premium alternative to Uber. They are generally cleaner and sometimes have a more pleasant driving style than some Uber drivers. It is easy for customers to forget that they are being chauffeured by a computer.

In the long term, Gartner analyst Davenport sees Zoox's strengths primarily in the financial strength and IT resources of its parent company Amazon, which has the largest cloud infrastructure in the world. What's more: "If they attack with very low prices, they could turn the market around," says Davenport. Amazon has experience in buying companies - and "turning them into something very valuable".

General News

Samsung OLED Display with Qualcomm CEDP

GENERAL NEWS

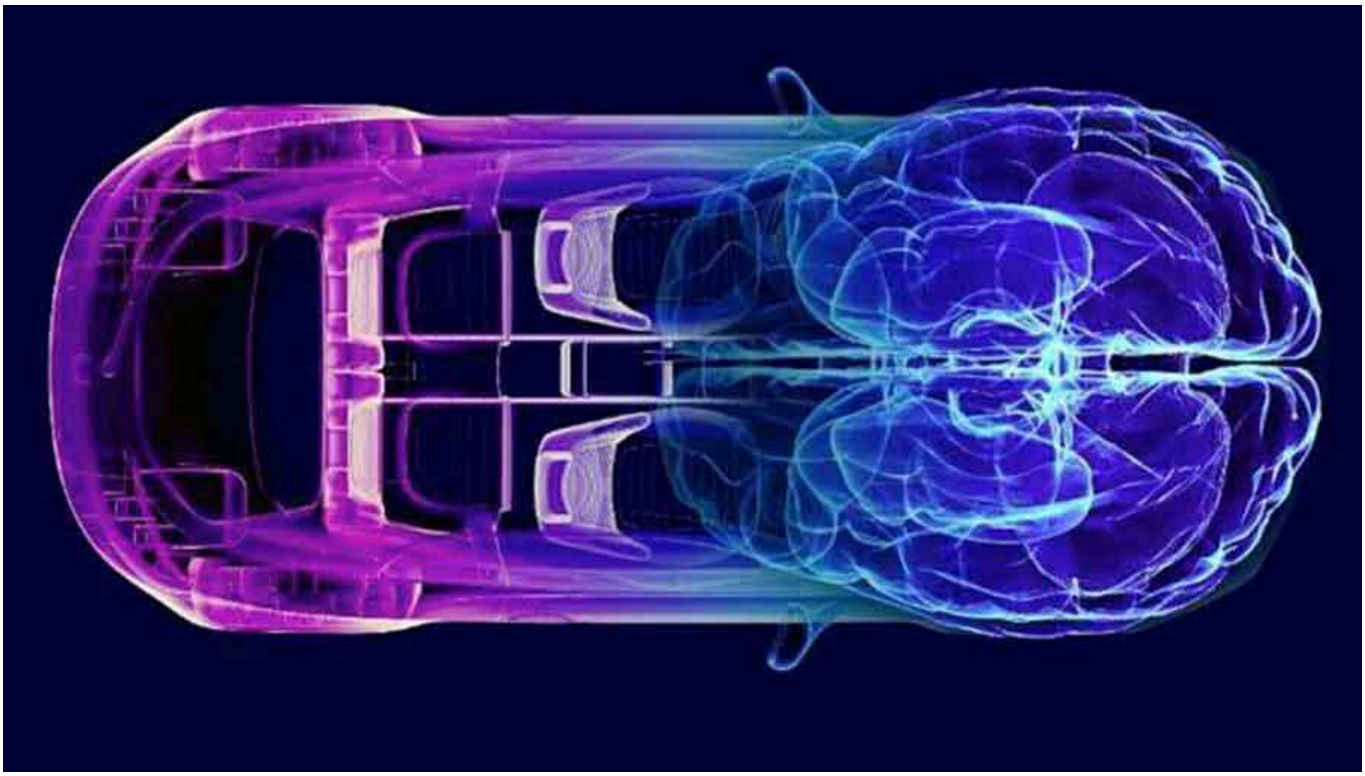
Last week Samsung Display announced they'd signed a memorandum of understanding (MoU) with Qualcomm, to strengthen their position in the automotive OLED market. The collaboration includes the potential supply of OLED displays for Qualcomm's Snapdragon® Cockpit Experience Development Platform (CEDP) to provide next generation in-cabin experiences.

Based on the next generation Snapdragon® Cockpit Platform, a key component of Snapdragon® Digital Chassis™ Solution, the Snapdragon CEDP is designed to deliver advanced functionality to help OEMs highly immersive, intuitive and sophisticated in-vehicle experiences. Samsung Display is providing a 34” 6K (6,008 × 934) wide OLED display for the CEDP demo kit, enabling the visual integration of advanced automotive software, including personalized artificial intelligence (AI) graphics, customized infotainment and autonomous driving information.

Through this collaboration, Samsung Display aims to actively promote the benefits of its OLED technology — such as high resolution, high brightness and low power consumption — tailored for automotive applications. In cooperation with Qualcomm Technologies, the company plans to showcase these advantages to global automakers, manufacturers and supplies.
"As autonomous driving and vehicle software become more sophisticated, the importance of displays in visualizing these functions is increasing", said Hojoong Lee, executive vice president and head of the Product Planning Team for Samsung Display’s Small and Medium-sized Display Division. At CES 2025, Samsung Display and Qualcomm showcased this Snapdragon CEDP demonstration kit featuring Samsung’s OLED displays.

DeepSeek AI: Pressure in the Autosphere?

GENERAL NEWS



AUTOBRAINS IMAGE

A new Chinese open-source language model for artificial intelligence plunged the stock prices of established US tech companies at the end of January. The AI assistant app from Chinese startup DeepSeek, which is just one year old, is now the most downloaded app on Apple's App Store platform in the USA—shoving ChatGPT from US provider OpenAI to second place, causing American technology companies to suffer heavy share price losses.

DeepSeek can answer complex questions and solve complicated problems, just as well as the US market leader OpenAI with ChatGPT or Google with their Gemini AI system. However, the Chinese startup is not only attacking AI chatbots that generate texts or create program code; DeepSeek can also keep up with AI image generators such as Dall-E and Stable Diffusion.

Deep Seek is an open source AI model, which means that the source code is accessible to everyone. The major US players such as OpenAI, Google, Microsoft and Anthropic, on the other hand, treat their AI code as proprietary and private. Among the major US tech companies, only Meta has published their AI model (Llama) as open source. Developers can freely use the model, modify it and integrate it into their applications. In principle, this also makes it easier for car manufacturers to adopt the model in order to optimize the voice control of vehicles, for example.

AI systems can create more personalized cabin environments by learning driver and passenger behaviors and preferences for climate control, seat positioning, entertainment, and ambient lighting.

In the future, established companies will have to expect tougher competition and increasing pressure to defend their role in the AI sector. DeepSeek makes one thing in particular clear: it is possible to develop cost-effective AI models more quickly than the previously-top US companies did.