# Kia leads automotive shift with mushroom-based, leather-free EV interiors



The automotive industry is witnessing a significant shift toward sustainability, particularly in the realm of electric vehicles (EVs). Recent innovations hint that the next frontier may lie in the adoption of non-plastic, leather-free interiors, championed by an unexpected champion — mushrooms. This significant development not only addresses environmental concerns but also embraces advancements in material science that could redefine vehicle manufacturing.

Leather has long been a contentious topic for animal rights activists, in addition to contributing to environmental degradation through livestock farming. Concurrently, traditional plastic interiors raise substantial concerns, as their lifecycle often ends in landfills, exacerbating the growing issue of waste. The burgeoning interest in mycelium — the root structure of mushrooms — as a viable alternative is reshaping this landscape.

Kia, in its latest concept SUV, the EV2, is at the forefront of this movement, integrating sustainable mycelium-based materials into its design. This vehicle showcases a streamlined dashboard and door panels constructed from Simplifyber Fybron, a cellulose compound derived from renewable sources such as wood, paper, and recycled textiles. This innovative approach significantly reduces reliance on traditional plastics, blending environmental consciousness with aesthetic appeal.

The concept vehicle incorporates not only mycelium-infused polyurethane but also a unique mycelium material formed by binding mycelium cells with cellulose sourced from agricultural waste. This dual-use effectively adds insulation to components like door armrests while minimising the carbon footprint typically associated with automotive manufacturing. Kia posits that by replacing standard synthetic materials, the overall weight of vehicles can be significantly reduced, thereby bolstering fuel efficiency — a goal crucial for any modern EV.

Kia's focus on sustainability is complemented by partnerships with companies like Bcomp, which developed ampliTex, a flax-fibre composite material used in structural components of the EV2. This collaboration aims to replace conventional materials with those that are not only lightweight but also fully recyclable, fostering a circular economy in automotive design. Over 180 samples were tested to ensure that the final materials met Kia's stringent standards for durability, aesthetics, and sustainability.

Incorporating biodegradable materials into the vehicle's design further enhances this eco-friendly ethos. These components, cultivated and precisely coloured to suit Kia's specifications, demonstrate how mycelium and hemp can replace synthetic, environmentally harmful materials. Moreover, the use of sustainable materials such as flax fibres and recycled textiles signifies a concerted effort to push forward a greener automotive future.

Kia's commitment to environmentally responsible design also addresses consumer demand for quality and sustainability. The brand's Colour, Materials, and Finish (CMF) team has meticulously developed a harmonious visual identity for the EV2, completing a cohesive interior that aligns with contemporary design trends.

As the EV industry evolves, embracing innovative materials like mycelium could signify a turning point in how automotive interiors are conceptualised and produced. With companies like Kia leading the charge, the future of automotive design seems increasingly intertwined with sustainability, paving the way for a new era of vehicles that not only meet consumer expectations for performance but also uphold a commitment to environmental stewardship.

As the automotive landscape continues to embrace advanced, sustainable materials, it is clear that the journey towards a greener future is not merely an aspiration, but an achievable reality, underscored by the remarkable innovations stemming from the natural world.

### Reference Map

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Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.thecooldown.com/green-tech/evs-kia-fungal-mycelium-interior-car/> - Please view link - unable to able to access data
2. <https://www.kianewscenter.com/news/kia-concept-ev2-blends-user-focused-design-with-material-innovations-as-a-vision-for-future-kia-inte/s/d854de85-eeba-4539-b8be-1050e93d18ec> - Kia's Concept EV2 integrates innovative materials like Simplifyber Fybron™, a cellulose-based compound made from renewable sources such as wood, paper, and recycled textiles, into its dashboard and door panels. This material reduces reliance on traditional plastics and ensures the vehicle’s interior is both environmentally aware and durable. Additionally, biodegradable mycelium-based components, including hemp, are cultivated and custom-colored to match Kia’s specific Pantone shades, creating a cohesive and visually refined interior. These mycelium materials are renewable, bio-based, and offer excellent insulation properties, contributing to a more comfortable cabin environment while reducing reliance on synthetic, non-biodegradable materials. The materials are grown with careful attention to environmental impact, with over 180 samples tested to find the optimal combination of coatings, paints, and additives. This thorough process ensures the final product meets Kia’s high standards for durability, aesthetics, and environmental responsibility, while aiming to meet the expectations of customers who prioritize both quality and environmental care.
3. <https://www.kianewscenter.com/news/global-news/kia-collaborates-with-bcomp--simplifyber-and-biomyc--bringing-innovative-components-to-kia-concept-e/s/c35fb76f-c716-45bd-8734-2dff5c537535> - Kia has partnered with Bcomp, Simplifyber, and Biomyc to incorporate sustainable materials into the Concept EV2. Bcomp's ampliTex™, a flax-based composite, is used in the back seat shell and front seat substructures, replacing conventional synthetic materials and reducing the vehicle's overall weight. Simplifyber developed the dashboard and door panels using its proprietary cellulose-based formulation, Simplifyber Fybron™, made from renewable sources like wood, paper, and recycled textiles. Biomyc provided biodegradable mycelium components, including hemp and mycelium-based materials, which were grown and colored to match Kia’s specific Pantone shades, creating a cohesive and visually refined interior. These collaborations aim to accelerate the development and production of bio-produced materials, replacing commonly used synthetics like plastic in future vehicles.
4. <https://www.automotiveinteriorsworld.com/news/concepts/kia-concept-ev2-blends-user-centric-design-with-innovative-materials.html> - Kia's Concept EV2 showcases an interior that combines innovation and responsible design. The vehicle's dashboard and door panels are made from Simplifyber Fybron™, a cellulose-based compound derived from renewable sources such as wood, paper, and recycled textiles. This material reduces reliance on traditional plastics and ensures the vehicle’s interior is both environmentally aware and durable. Additionally, biodegradable mycelium-based components, including hemp, are incorporated into the interior. These parts are carefully cultivated and custom-colored to match Kia’s specific Pantone shades, creating a cohesive and visually refined interior. Two distinct types of mycelium materials are used: mycelium-infused polyurethane applied across light blue surfaces, and a grown volume material created by mycelium cells binding cellulose from agricultural waste into a solid structure. Kia's collaboration with Bcomp introduces AmpliTex™, a bio-based composite material made from flax fibers, into key structural components within the cabin, such as the back seat shell and front seat substructures. Replacing conventional synthetic materials significantly reduces the overall weight, improving fuel efficiency while maintaining the strength and robustness required from a lifestyle-focused SUV. The material is fully recyclable and can be broken down and reprocessed into composite pellets for reuse. Kia’s Color, Materials, and Finish (CMF) team has also developed a custom dark-blue finish for the material to align with the vehicle’s overall design.
5. <https://www.bcomp.com/news/kia-and-bcomp-collaborate-to-bring-sustainable-materials-to-concept-ev2/> - Kia has collaborated with Swiss cleantech company Bcomp to incorporate ampliTex™, a flax-based composite material, into the interior of the Concept EV2. This material is used in the back seat shell and front seat substructures, replacing conventional synthetic materials and reducing the vehicle's overall weight. AmpliTex™ offers exceptional lightweighting benefits, enhanced durability, and a refined aesthetic that elevates the interior experience. The material is fully recyclable and can be processed into composite pellets for reuse, supporting Kia's vision of a circular economy. Bcomp worked closely with Kia's CMF (Color, Materials, Finish) designers to develop a custom dark blue color finish, enhancing the vehicle’s visual appeal with a vibrant colorway.
6. <https://www.designboom.com/technology/kia-hemp-mycelium-flax-fibers-recycled-textiles-electric-suv-ev2-milan-design-week-2025-04-11-2025/> - Kia's Concept EV2, unveiled at Milan Design Week 2025, features an interior made from sustainable materials such as hemp, mycelium, flax fibers, and recycled textiles. The dashboard and door panels are crafted from Simplifyber Fybron™, a cellulose-based compound made from renewable sources like wood, paper, and recycled textiles. This material reduces reliance on traditional plastics and ensures the vehicle’s interior is both environmentally aware and durable. Biodegradable mycelium-based components, including hemp and mycelium, are incorporated into the interior. These materials are grown and colored to match Kia’s specific Pantone shades, creating a cohesive and visually refined interior. Two types of mycelium materials are used: mycelium-infused polyurethane applied across light blue interior surfaces, and a grown volume material created by mycelium cells binding cellulose from agricultural waste into a solid structure. The use of these materials significantly reduces the overall weight of the vehicle while maintaining strength and robustness, enhancing fuel efficiency and supporting a more environmentally conscious vehicle lifecycle.
7. <https://autodesignmagazine.com/en/2025/03/kia-concept-ev2-picnic-in-the-city/> - Kia's Concept EV2 showcases an interior that combines innovative materials with user-centric design. The dashboard features a dark red strip made from cellulose fibers, which is compostable and over 95% organic. The insert at the bottom has a marbled appearance and is made from recovered leather, shredded and added to an organic resin in an upcycling process. The back of the seats is made from linen fibers, and the seat shells are made from a vacuum-packed and thermoformed composite in which the weave remains visible, similar to carbon fiber. The suspended elements that make up the central part of the backrests are made of 3D-printed polyurethane to obtain an elastic mesh. These materials contribute to the vehicle's lightweight and robust design, enhancing fuel efficiency and supporting a more environmentally conscious vehicle lifecycle.