
Audi A6 Avant e-tron concept – Premium Platform Electric

PPE - highbody styles and low ride height

The PPE is designed exclusively for battery-electric drive systems and can therefore take full advantage of all the benefits of this technology. The key element of the future PPE fleet is a battery module between the axles that holds around 100 kWh of energy in the Avant version of the A6 e-tron concept. Using the entire vehicle base makes it possible to achieve a relatively flat layout for the battery. This means that it will be possible to use this single platform both for vehicles with high body styles and vehicles with a decidedly dynamic, flat architecture – such as the Audi A6 Avant – without any changes to the basic architecture.

The battery size and wheelbase of PPE vehicles are scalable, making them suitable for use in different market segments. However, the proportions of a fairly long wheelbase and very short overhangs are something they will all have in common and this, together with the large wheels, results in basic proportions that are simply perfect – and not just in terms of design. This is because the occupants of the future PPE models will also benefit from the long wheelbase, which translates into a longer interior and more legroom in both rows of seats – a key benefit across all segments. In addition, electric vehicles are also generally more spacious thanks to the absence of a transmission tunnel, which is simply not needed due to the technology.

But even without the transmission tunnel, Audi customers will not have to give up the brand's trademark quattro drive system. The future range of PPE models will include versions with one electric motor each mounted to the front and rear axles that use electronic coordination to deliver all-wheel drive on demand and achieve a perfect balance between driving dynamics and energy efficiency. In addition, the e-tron family will also include basic versions optimized for minimum consumption and maximum range – in this case, propulsion will come from a single electric motor mounted to the rear axle.

The Audi A6 Avant e-tron concept's two electric motors are capable of delivering 350 kW of total output and 800 Newton meters of torque.

The front wheels of the Audi A6 e-tron concept are connected via a five-link axle specially optimized for electric vehicles with a multi-link axle in the rear. The concept car features Audi air suspension with adaptive dampers.

PPE - versatile, variable, electric

2018 saw the debut of the Audi's first fully electric production vehicle – the Audi e-tron. Since then the brand has systematically and rapidly pushed ahead with the widespread introduction of electric mobility across its entire product range. Following the Audi e-tron SUV and e-tron Sportback, the highly dynamic e-tron GT quattro¹ – based on a new technology platform developed jointly with Porsche AG – made its debut in February 2021. And just two months later, the Audi Q4 e-tron and Q4 Sportback e-tron premiered – two extremely unique SUVs in the compact segment with a common technological platform, the Volkswagen Group's MEB.

The Audi A6 e-tron Sportback and Avant concept cars are now the first members of a family of vehicles – initially in the C-segment and later also in the B- and D-segments – to be based on another innovative technology platform: the Premium Platform Electric, or PPE for short. This modular system is being developed under Audi's leadership together with Porsche AG. The first Audi production vehicles built on the PPE platform will be successively unveiled starting in 2023.

The PPE is the first platform designed to accommodate an unprecedented range of high-volume automobiles – including SUVs and CUVs with high ground clearance as well as cars with low ride height that are part of Audi's core product range, such as the Audi A6 series. But there are also plans to expand the PPE range into the B-segment, which has been the highest-volume market segment for Audi for decades. And even when it comes to the top-of-the-line D-segment, the PPE is an excellent technological platform to build on.

With the PPE, electric vehicles will now also be attractive to customers who prefer automobile concepts beyond the SUV segment – like an Avant, for example, which is characteristic of the brand.

As a result, Audi can effectively expand the range of electric vehicles in its portfolio – via the high-volume B- and C-segments. In addition, economies of scale will allow luxury-class technology and various different model versions to be incorporated into a wide-ranging lineup of models that is unrivaled in the premium market.

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