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April 2021

# Electric all-rounders in a compact form: the Audi Q4 e-tron and the Q4 Sportback e-tron

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The equipment, data and prices specified in this document refer to the model range offered in Germany. Subject to change without notice; errors and omissions excepted.

The collective fuel/electric power consumption values for all models named and available on the German market can be found in the list provided at the end of this press release.



Condensed information

# Electric, efficient and emotionally appealing: Audi Q4 e-tron and Q4 Sportback e-tron

Versatile all-rounders for everyday use that transfer the progressive design of the concept cars into series production and that can be driven locally without any  $CO_2$  emissions: The Audi Q4 e-tron and the Q4 Sportback e-tron are the first compact electric SUVs from the brand with the Four Rings. Both of them impress with a new spacious dimension in the interior and pioneering solutions when it comes to operation, display, and assist systems. The augmented reality head-up display connects the virtual and the real worlds in a totally new way.

The range comprises three drive versions, spearheaded by a quattro model with a maximum output of 220 kW (299 PS)\*\*\*. Attributes that they all share are zero local CO<sub>2</sub> emissions driving and high ranges, charging times of around ten minutes for sufficient power to travel about 130 kilometers (80.8 mi) in ideal conditions (WLTP) and convenient charging with the e-tron Charging Service. The rear-wheel drive Q4 Sportback 40 e-tron\*\* achieves a range of up to 534 kilometers (331.8 mi) in the WLTP cycle. It goes on sale in Europe in June 2021, with prices in Germany starting at EUR 41,900 – where the customer can claim a subsidy of EUR 9,000 (net).

## Audi's next step: the exterior design

With the Q4 e-tron and the Q4 Sportback e-tron, Audi is taking the next step in the design language of its electric models. The two compact SUVs bring into series production the body line that the Audi Q4 concept and Audi Q4 Sportback e-tron concept show cars demonstrated at the beginning of 2019. This body line impresses thanks to the striking proportions – short front overhangs, large wheels, and powerfully toned muscles. All lines are drawn with the greatest precision, and the surface treatment is clear and pared back. In the Audi Q4 Sportback e-tron, the especially low coupé-style roofline ends in an expressively designed rear where the spoiler sits deep on the two-part window. The brand's progressive design is typically Audi, as functional as it is aerodynamic: The Q4 e-tron achieves a drag coefficient of 0.28, and the Sportback gets to an even lower figure, with a drag coefficient of 0.26.

On request, both of these compact electric SUVs can be driven off the assembly line with Matrix LED headlights – they always illuminate the road as brightly as possible without blinding other road users. The digital light signatures are a world first: The driver can switch between four signatures in the MMI touch operating system. At the rear, a light strip links the taillight units to

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each other. A choice of eight colors is available for the paint finish, including the new metallic shade aurora violet. In addition to the basic version, there are the two advanced and S line exteriors.

## One vehicle for everything and everyone: everyday e-mobility for every situation

Thanks to their versatility, the Audi Q4 e-tron and the Q4 Sportback e-tron are the perfect companions in every situation. At 4.59 meters in length, they offer a package that gives the passengers on board new spaces and which goes beyond existing class boundaries. The available space in the interior is comparable with the full-size SUV class; there is no center tunnel. The feeling of spaciousness is not just confined to the front seats – with the generous legroom, passengers in the rear also benefit from the advantage of the technological platform, which is designed as electric-only. When it comes to storage compartments, the Q4 e-tron product line scores high grades with total storage space of around 25 liters, and the bottle holders integrated in the upper section of the doors are a further highlight. Even 1-liter bottles can be stored in them safely and in ergonomically ideal reach.

The luggage compartment also offers more space than is generally found in the compact class, matching that of the mid-size class: Depending on the positioning of the rear seat backs, the volume of the luggage compartment is 520 to 1,490 liters in the Q4 e-tron and 535 to 1,460 liters under a power trunk lid in the Sportback. Both models can tow trailers with a weight of up to 1,000 kilograms (braked, at 12% incline), with the quattro versions even able to pull up to 1,200 kilograms.

Another strength for everyday use is the high range – the Q4 Sportback 40 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.4 – 16.1 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) travels up to 534 kilometers (331.8 mi) (WLTP) on a single battery charge. Thanks to a maximum charging capacity of 125 kW, in ideal conditions it can charge enough power for about 130 kilometers (80.8 mi) (WLTP). Using the myAudi app, the owner can activate charging at home and pre-entry climate control from their smartphone.

## New ideas for a new era: the interior and operation

The interior of the Audi Q4 e-tron and the Q4 Sportback e-tron comes across as spacious and airy; the instrument panel is turned toward the driver. It is divided into separate areas and integrates two displays, which are design elements at the same time. The decorative trim panel on the front passenger side is available on request in an innovative technical fabric containing a proportion of recycled materials, which can be provided shortly after the market launch. A separate horizontal operating panel houses the shifter for selecting the gears. Seat upholstery

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that contains large amounts of recycled polyester is available for the sporty S line interior. Around 26 recycled 1.5-liter PET bottles are used for each seat.

Also totally new is the steering wheel with its seamless touch surfaces, which the driver uses to control the digital instrument cluster. Infotainment and navigation are operated primarily using the central MMI touch display, which will also be available in the largest configuration level of 11.6 inches towards the end of the year. Natural voice control provides the third operating interface.

On request, the Audi Q4 e-tron and the Q4 Sportback e-tron can be equipped with another innovation on board – the augmented reality head-up display. It superimposes the information provided by some of the assist systems and the navigation symbols on the real-life external world conveniently for the driver to see. This information is displayed dynamically in a large field of view, where it appears in a virtual, floating image at a distance of roughly ten meters or more from the driver – creating a fascinating effect.

## Fully digital: the Q4 e-tron is an e-mobility device

The Q4 e-tron models offer a fully digital user experience. The infotainment package in the electric compact SUV is structured in three levels – from MMI through MMI plus to MMI pro. Different functions are provided depending on the configuration level, including the augmented reality head-up display and the Audi virtual cockpit plus. The optional levels provide the online services of Audi connect, including the intelligent e-tron route planner for working out the optimal route that stays close to the public charging infrastructure. For premium sound, we have a new partner in the vehicle – the Sonos sound system which combines lifestyle, technology and design in a new dimension.

## For urban commuters and long-distance drivers: battery, drive and charging options

The drive portfolio of the two compact electric models lives up to the expectations of very different groups of customers – from the urban commuter to the long-distance driver. It includes two battery variants and three drive variants. The compact battery for the Q4 35 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 16.7 – 15.8 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) has a net energy content of 51,5 kWh (55 kWh gross), while the figures for the large battery in the Q4 40 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.7 – 16.3 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) and Q4 50 e-tron quattro (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.8 – 16.5 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) are 76,6 (82) kWh.

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The Q4 35 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*:16.7 – 15.8 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) and the Q4 40 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.7 – 16.3 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) have an electric motor that drives the rear wheels, with an output of 125 kW (170 PS) and 150 kW (204 PS) respectively. The top-of-the-range version Q4 50 e-tron quattro (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.8 – 16.5 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) has two electric motors for the electric all-wheel drive. They give it a maximum output of 220 kW (299 PS)\*\*\* – sufficient for a sprint from 0 to 100 km/h (62.1 mph) in 6.2 seconds and an electronically limited top speed of 180 km/h (111.8 mph). For efficiency, the motor on the front axle comes into action only when high power or a strong grip is needed. Another important factor in energy-saving driving is intelligent recuperation, which also incorporates navigation and topographical data.

The optional heat pump uses the waste heat from the high-voltage modules and the ambient air to control the climate in the interior. This makes another contribution to increasing efficiency, especially on longer drives.

Audi's two new electric SUVs can be charged with different outputs using alternating current (AC) and direct current (DC) depending on the battery. The compact battery can get up to 7.2 kW with AC charging and up to 100 kW when using HPC charging (high-power charging) with direct current. As standard, the larger battery allows for up to 11 kW with AC and up to 125 kW with HPC.

The Audi e-tron Charging Service provides access to around 210,000 public charging points in 26 European countries, 4,400 of which are HPC fast-charging points (as of April 2021), using just one charging card. In the transit tariff, customers buying the Q4 e-tron do not pay any basic fee in the first year. They benefit here especially from the preferential conditions in the IONITY network: The charged kilowatt hour costs 31 cents, which corresponds to the price level when charging at home in Germany.

## Intelligent connectivity: the suspension and the driver assist systems

The high-voltage battery of the Audi Q4 e-tron and the Q4 Sportback e-tron lies between the axles, which ensures a low center of gravity and a balanced distribution of weight. The control systems for the drive and suspension work closely together – driving the compact electric SUVs is

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safe, sporty, and comfortable all at the same time.

On request, Audi will supply a sport suspension for all Q4 e-tron versions that lowers the body by 15 millimeters (standard feature in the S line). What's more, the Audi drive select system with different driving profiles can be installed (standard feature in the Sportback), as can progressive steering, which operates more and more directly as the steering angle increases (as standard in the quattro models). Audi drive select also features in the Sportback with rear-wheel drive. The suspension with damper control – an option for all motor line-ups – provides for an even more versatile driving experience. Wheels ranging in diameter from 19 to 21 inches form part of the offering, which contains several aero designs – their largely closed rim design also plays its part in improving efficiency.

The compact electric SUVs roll off the assembly line with a number of assist systems as standard. These include predictive efficiency assist, which supports a forward-looking driving style that optimizes the consumption of energy. The optional systems – like many other equipment features – are divided into packages. The highlight of these is the adaptive cruise assist, which assists the driver with longitudinal and lateral guidance over the entire speed range. The surround view cameras are an especially great help when driving in the city and when parking.

## Summer market introduction: prices and Edition models

The Audi Q4 e-tron will appear in June 2021 on European markets, with the Q4 Sportback e-tron following in the late summer. In Germany the list prices start at EUR 41,900 for the Q4 35 e-tron\*\*, and all versions of the Sportback cost approximately EUR 2,000 extra. Two Edition models accompany the market launch: The elegant Edition One in geyser blue embodies the design of the Q4 e-tron concept show car in a production model, while the progressive Edition One in typhoon gray turns heads thanks to its distinctly sporty and dynamic looks. The Edition models all come with a EUR 9,490 higher price tag than the regular models.

# Sustainability in the spotlight: The Q4 e-tron arrives at the customer with a CO<sub>2</sub>-neutral footprint

Avoid, minimize, or offset unavoidable emissions: Audi produces the Q4 e-tron and the Q4 Sportback e-tron with a neutral carbon footprint. The plant in Zwickau uses eco-electricity, while the battery cell suppliers are also required to use only green electricity in their production processes. Emissions that cannot be avoided at the moment are offset by climate protection projects certified by the TÜV. They meet the strict requirements of the Gold Standard Foundation.

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Together with its suppliers, Audi is firmly and systematically committed to acting responsibly in all vehicle projects. Starting in 2017, the company now reviews its partners using a sustainability rating it has developed itself to ensure resource-saving production processes and adherence to social standards.

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Facts and figures

# The Audi Q4 e-tron and the Q4 Sportback e-tron

## Positioning, exterior design, and lighting technology

- Attractive entry point into the premium world of e-mobility at Audi; first electric product line in the compact segment, and thus an important element of the brand's electric strategy
- A high front, a powerful body, an expressive rear; flat A-pillars, precise lines, pared-back and clear surface treatment, short front overhang, and large wheels
- > Q4 Sportback e-tron with a dynamic roofline and spoiler on split rear window
- Sophisticated design details are given tangible form in sheet metal by the Audi toolmaking shop
- > e-tron embossing in the Singleframe and on the rear bumper
- > For both models eight colors and three exterior trims: basic, advanced and S line
- Optional <u>Matrix LED headlights</u>, daylight running light with four individually selectable signatures in a world first; taillight signature with continuous lighting strip

## **Everyday usability**

- Range up to 534 kilometers (331.8 mi) (WLTP) depending on drive version and battery size; using <u>direct-current charging</u> (HPC, high-power charging) with 125 kW capacity in ideal conditions, just ten minutes required for a range of approx. 130 kilometers (80.8 mi) in WLTP (Q4 40 e-tron\*\*)
- > Alternating current charging with power output of up to 11 kW
- e-tron Charging Service for access to around 210,000 charging points in Europe with just one card, including 4,400 HPC charging points for fast direct-current charging
- > myAudi app for charging and pre-entry climate control by smartphone
- Innovative package: long wheelbase from 2.76 meters to 4.59 meters in length; small space required for the drive components
- Interior length matching that of a full-size class SUV, both models with a large number of storage compartments (just under 25 liters) and generous knee room in the rear; luggage compartment with a volume of more than 520 liters; Sportback with electric tailgate as standard
- Turning circle just 10.2 meters (model with rear-wheel drive), optional trailer hitch for a towing capacity of up to 1.2 metric tons (model with quattro drive) and nose weight of 75 kilograms
- > Audi Q4 e-tron with roof rails, roof load of up to 75 kg

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## Interior design and interior

- Progressive cockpit geared toward the driver, floor with no center tunnel; airy, spacious feel; central operating panel with gear shifter in a black-panel look
- Various inlays and accent surfaces for the instrument panel, inlay with innovative technical fabric on request (available shortly after market launch)
- New steering wheel generation with backlit touch surfaces for sliding and scrolling, steering wheel rim flattened for the first time at the top and bottom on request

## Operation and augmented reality head-up display

- Fully digital operating and display concept; 10.25-inch display for the driver as standard, <u>Audi virtual cockpit</u> in two configuration levels on request
- Standard <u>MMI touch display</u> (10.1 inches), also available in 11.6-inch version as an option toward the end of the year
- Augmented reality head-up display as a pioneering innovation: Navigation symbols that "float" on the road make route guidance easier, dynamic overlays of the assist systems are superimposed on the real world outside and make it easier to see things even when visibility is poor
- > Natural voice control, also with online function as an option

## Infotainment and connectivity

- > Three levels with different modules: MMI as standard, MMI plus and MMI pro on request
- Navigation with additional functions in MMI plus and MMI pro; plus <u>Audi connect</u> with online services, including the <u>e-tron route planner</u> for intelligent in-car planning of stops for charging
- Optional premium sound system by the sound experience company Sonos; Audi smartphone interface for wireless connection of Apple CarPlay and Android Auto

## Body and aerodynamics

- Torsionally rigid body with high proportion of ultra-high-strength steel in the passenger cell; side sills in hybrid construction design using aluminum; high acoustic comfort
- Sophisticated aerodynamics concept: drag coefficient just 0.28 (or 0.26 in the Sportback); adjustable cooling air inlets and paneled underbody with three-dimensional wheel spoilers
- > Turbulator edge on side mirror housing for optimized aerodynamics and aeroacoustics

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## Electric motors and electric quattro drive

- Three drive variants for different customer groups: entry level with 125 kW (170 PS) and rear-wheel drive; mid-range version with 150 kW (204 PS); top model with 220 kW (299 PS)\*\*\* maximum output; permanently excited synchronous machine (PSM) as a highefficiency rear motor
- Electric all-wheel drive featuring temporary on-demand asynchronous motor (ASM) for the front wheels; Q4 50 e-tron quattro (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.8 -16.5 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) from 0 to 100 km/h (62.1 mi) in 6.2 seconds, top speed 180 km/h (111.8 mph)
- Recuperation concept with coasting mode for maximum efficiency; three-stage operation using paddles on the steering wheel on request; recuperation also when decelerating with the brake or in position B

## Battery and thermal management

- Two battery sizes: 51,5 kWh net (55 kWh gross) and 76,6 kWh net (82 kWh gross), nine or 12 cell modules
- Active thermal management of the battery with external cooling through base plate, coolant circuits that can be flexibly combined with each other
- On request, <u>heat pump</u> with CO<sub>2</sub> technology for efficient climate control of the interior especially on longer journeys

## Suspension

- Balanced character; low center of gravity and even axle load distribution because the drive components are installed in a low and central position
- > McPherson front axle; rear suspension in sophisticated five-link design
- Wheels from 19 to 21 inches, some with aero design; mixed-size tires with slightly wider rear tires for high driving stability and a sporty feel
- Optional sport suspension (standard in S line), progressive steering (standard in quattro models), Audi drive select (standard in the Sportback), and suspension with damper control (option available for all models); close networking between the control systems

## Driver assist systems and equipment

- Wide range of standard assist systems offers, such as predictive efficiency assist
- > Plus systems such as <u>adaptive cruise assist</u> and <u>surround view cameras</u> in several packages

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- Market launch in Europe in June 2021; base prices in Germany: Q4 e-tron from EUR 41,900, Sportback from EUR 43,900
- > Two Edition One models in geyser blue and typhoon gray with exclusive equipment

## Sustainability

- Net zero manufacturing at Zwickau plant using eco-electricity; unavoidable emissions offset by climate protection measures certified to "The Gold Standard" or "Verified Carbon Standard"
- Mandatory sustainability rating for Audi suppliers in order to ensure environmentally friendly production processes and fair working conditions
- If desired, seat upholstery and trim strip with high recycled polyester content from PET bottles; in all, 27 components such as floor covering and floor mats contain recycled material

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The models in detail

# Electric SUVs in the premium compact segment: the Audi Q4 e-tron and the Q4 Sportback e-tron

With the Audi Q4 e-tron and the Q4 Sportback e-tron, the brand with the Four Rings presents its first purely electric cars in the compact segment. Under the expressively designed body, both SUVs offer a large interior, a high level of everyday usability, and a strong charging and driving performance. Depending on the motor version, they achieve ranges of up to 534 kilometers (*331.8 mi*) (WLTP), and the top versions come with a maximum output of 220 kW (299 PS)\*\*\* and electric all-wheel drive. The augmented reality head-up display brings a pioneering operating innovation on board on request.

# Exterior design and lighting technology

The electric offensive at Audi continues to pick up steam. The large SUV models e-tron and e-tron Sportback as well as the sporty e-tron GT quattro\*\* and RS e-tron GT\*\* are now followed by the Q4 e-tron and Q4 Sportback e-tron. The two new models play a central role in the brand's electrification strategy, as they are being launched in a market segment that is experiencing especially quick growth – the compact SUV class. For Audi customers, they offer an attractively priced entry point into the world of premium electric mobility.

## Strong presence: the exterior design

A powerful body, a high front, an expressive rear section – the Q4 e-tron and the Q4 Sportback e-tron exude a strong presence, they announce themselves as electric Audi SUVs at first glance. The two compact electric SUVs bring the progressive design that the brand introduced at the beginning of 2019 with the Q4 e-tron concept and the Q4 Sportback e-tron concept to series production and represent the next step in the design language of the electric Audi models. Its sporty character emerges from the striking proportions – thanks to short front overhangs, large wheels, a broad track and powerfully toned muscles. All lines are drawn with the maximum precision, and the surface treatment has a clear, pared-back effect.

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The high, upright front symbolizes the robustness and strength of the Audi Q4 e-tron and the Q4 Sportback e-tron. Their dominant element is the large Singleframe – with its eight corners, it is characteristic of an SUV from Audi. A new feature that is typical for electric vehicles is the enclosed Singleframe and the inverted color design: The chrome frame is bordered by a wide mask in a dark contrasting paint finish, a structured surface with horizontal inserts forms the insert for the radiator grille. The Four Rings integrate various sensors as a full-surface element which then disappear behind the brand logo – a new feature at Audi. A powerfully contoured, curved blade extends under the Singleframe, running sharply up at the ends.

## Sporty flow: the roofline

When viewed from the side, the unusually flat A-pillars catch the eye – and provide the entire greenhouse with an elegant flow. The roofline stretches low over the body, ending on the Sportback in a long D-pillar. The third side window rises up in an opposing direction – a typical feature of the Sportback. The top of the window points toward the spoiler, which sits on the lower section of the split rear window. On the Q4 e-tron, which has a roof edge spoiler that finishes off the powerful D-pillar, a black insert strip runs across the whole of the roofline. It separates the rear end of the roof visually from the rest of the body and makes it appear to float – an effect that accentuates the sporty character of the vehicle.

The sides of both electric SUVs feature taut contours. In both models, the external mirrors sit on the door rail in the style of a sports car. The doors feature overlapping horizontal edges that create an interplay of light and shadow. In the lower area of the doors, striking contours hint at the high-voltage battery pack, the vehicle's beating heart. The muscular blisters, which extend across the wheel housings, highlight the wheels in a powerful expression and point to Audi's quattro expertise. They feature a slightly softer and more flowing design than on the models with a combustion engine. The rear blisters run around the D-pillars and into the luggage compartment cover.

Horizontal lines emphasize the width across the whole of the rear section, while the raised diffusor creates a powerful, sporty accent. An e-tron logo is embossed in the bumper, another one in the Singleframe.

## Eight colors, two exterior lines: color and trim

The color swatch for the Audi Q4 e-tron and Q4 Sportback e-tron contains eight colors. Their restrained character is inspired by the colors and hues found in nature. The solid paint color is called stone gray, the metallic shades are named aurora violet (new), floret silver, geyser blue, glacier white, mythos black, Navarra blue, and typhoon gray. Aurora violet is a color that has

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been taken from Audi Sport.

Audi supplies both models with the advanced and S line exterior lines as an alternative to the basic version. On the basic vehicle, the wheel arches, the lower section of the bumper, and the diffusor feature an anthracite grain, the gloss package accentuates the side windows. The Singleframe also differs depending on the line – on the S line, chrome elements lend it its own distinctive look. Here, and also in the advanced line, the lower add-on parts feature a contrasting paint finish in metallic Manhattan gray; in the optional full paint finish customers can choose between four colors, while there are also 19- and 20-inch aluminum wheels. The black styling package, which includes the black caps for the exterior mirrors, creates an even sportier appearance. The Four Rings on the Singleframe and the type designation are also available in black. A roof rail comes as standard on the Q4 e-tron.

# The headlights: a choice of four individual and individually selectable daylight driving light signatures

The headlights of the Q4 e-tron and the Q4 Sportback e-tron are fully equipped with LEDs as standard. On request, Audi also offers the <u>Matrix LED headlights</u> – they lend the two electric compact SUVs a look that is full of character and unmistakable, day and night. The next stage of evolution in daytime running lights is totally new among the competition. Using the MMI touch operating system, the driver can switch between four digital light signatures at any time. Each of them generates its own theme and lends the daytime running lights an individual expression. The variant selected is activated the next time the vehicle is started.

The Matrix LED headlights are divided into two sections in terms of optics and technology. The completely black lower half conceals the units for the low beam and the Matrix LED high beam. The 16 individual LEDs that comprise it are regulated so that they always illuminate the road as brightly as possible without blinding other road users.

The upper half forms a bright eye. A flat segment runs across the headlights here, serving a dual function in generating a fixed daytime running light and the dynamic turn signals. Above and below it are a total of nine flat daytime running light segments, which, together with the large vertical anchor segment at the outer edge, can be configured into four digital light signatures. Two slat trims made of brushed stainless steel divide the digital daytime running light segments into 49 small sections. Seen from the side, they appear to be well shielded, lying one on top of the other like the slats of vertical blinds; the full power of the individual light segments is easily visible from the front – creating a fascinating effect that plays with light and shadows.

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## Striking taillight signature: the light strip at the rear

In combination with the Matrix LED headlights, there is also a particularly elegant light solution at the rear of the compact electric SUV. A light strip runs across its full width; at its center the taillight beams out in a fine line that splits into separate segments at its ends. Each individual segment is modeled as a three-dimensional body, resulting in a light sculpture that is expressive from all perspectives. The light signature opens up into a large light anchor segment on the sides of the vehicle. Its dynamic graphic is inspired by intricate electric circuits and bears the Four Rings radiating in signature red as the central detail. The dynamic turn signals add a further highlight in the reversing lights.

When the car is unlocked and exited, dynamic "leaving home" and "coming home" light sequences are played in the rear lights and the headlights. The sequences in the headlights vary depending on which daytime running light signature is selected.

## Maximum precision as a principle: the toolmaking shop

The Q4 e-tron models fascinate with their expressive design from every angle and in every part. The complexity of the production can be illustrated by the side wall frame of the Sportback in its rear section. Major challenges converge here in a small area. At the top, the D-pillar runs into the side of the car, while the rear spoiler also starts in the opposite direction, and the blister extends further below with its tight radii and the deep undercut over the rear light. All of these curves and shapes are executed with a flawless surface finish and the highest level of precision.

Responsibility for this is attributed to Audi's toolmaking shop – which transforms the emotional appeal into a metal body and the designers' ideas into series production. The shop's method planners take their seat at the table in the early phase of development and review the proposals to ensure they are feasible. In other areas, coordination and development are carried out in digital form on the computer. For the Q4 e-tron and the Q4 Sportback e-tron, the toolmakers from the two German Audi sites shared the work – the specialists from Ingolstadt took care of the side wall frames, the doors and the roof, and their colleagues in Neckarsulm handled the hood and the tailgate.

## Cast iron giants: 4.5 meters long and weighing 47 metric tons

Highly complex function meets uncompromising precision and heavy metal in the toolmaking shop. The pressing dies for the side wall frames are cast iron giants – around 4.5 meters long, 2.4 meters wide and 1.35 meters tall and weighing up to 47 metric tons. Tens of thousands of

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hours of manual work have been invested and several hundred individual parts have been installed in them – from the filler and work sliders that weigh tons, the hold-down clamps and mold blocks, to the cutters and punches. It takes several months to set up one set of these massive tools.

When ready, the tools are first run with single-stage presses and then on the large transfer press lines – most of them initially at the Audi plant in Ingolstadt, before they are transported to the Volkswagen Zwickau plant, where the Q4 e-tron and Q4 Sportback e-tron are being built. Before that can happen, there are countless optimization loops that are often a matter of a few thousandths of a millimeter. Is there a tiny sink mark or an inadmissible increase in the curvature of the sheet metal part? Are the individual process steps causing any barely visible thinning or minute wrinkles? Modern optical measuring systems keep an exact record of everything – but they are still not always a substitute for a human's keen eye, sensitive fingertips and sense of how the sheet metal is behaving in the press.

## Six strokes: series production in the press shop

When series production is running, with the Zwickau press lines shaping the side panel frame at pressures of up to 1,600 metric tons, six production steps are needed. At each one, the component is machined by a specific tool, before grabs pass it on to the next tool. The first draws the sheet metal into the required form, the next tools make the cuts – for example in the area of the side windows, the fine edges and lines, the assembly holes, and the complicated undercuts – folds, and geometries on the inside of the metal sheets that are required for later connection in the body shop. Because the panel always has a slight tendency to spring back, it is also deliberately reshaped at each working step. The forming process starts with a flat blank and ends with a three-dimensional, high-precision component with an emotionally charged design.

# **Everyday usability**

With the Q4 e-tron and the Q4 Sportback e-tron, Audi presents two genuine all-rounders – they are confident companions for sports and leisure and are suitable in every way as a household's main car. At 4,588 millimeters long, 1,865 millimeters wide, and 1,632 millimeters tall (values for the Q4 e-tron), their external dimensions place them in the larger compact SUV segment.

The architecture of the modular electric drive system (MEB) on which the compact electric SUVs from Audi are based enables a completely new division of space. The technology components need only a little space: The high-voltage battery pack is designed as a flat block underneath the

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passenger compartment, while the drive unit is located in a compact arrangement on the rear axle – and on the front axle in the <u>quattro</u> models. The short front section houses the radiator, the electric brake booster and major components of the air-conditioning system.

While the front overhang measures just 86 centimeters, the wheelbase measures a generous 2.76 meters – even more than in the medium-sized SUV segment. The resulting interior measures 1.83 meters in length, which is similar to a large full-size class SUV.

## Welcome on board: comfortable entry, more than generous space to enjoy

Even climbing on board the Audi Q4 e-tron and the Q4 Sportback e-tron is comfortable: The doors open wide, and the seats are in a comfortably high position. When it's dark, projection lights in the exterior mirrors cast islands of light with the e-tron logo onto the road outside the front doors (option). The projection picks up on the design idea of the fine horizontal lines in the headlights and taillights.

On board the electric SUV, the driver and up to four passengers enjoy a generously spacious interior, made possible in part by the fact that there is only a flat step instead of a center tunnel. The seat position in the second row is almost seven centimeters higher than at the front, while still offering plenty of headroom – and the knee room is positively luxurious. When it comes to spaciousness, the compact electric SUVs from Audi surpass their direct competitors in the premium segment.

On request, Audi will supply the panorama glass sunroof, which extends over a large area of the roof surface. Its dark tint and a virtually opaque electric blind stop the interior from heating up. Automatic air-conditioning is standard in all Q4 e-tron models; there are options of a version with three-zone control and a heated windscreen. Both features are also available as part of the climate control package – Audi has bundled many options into packages. This is also true for the areas relating to comfort, suspension, functions, infotainment, charging, driver assist systems, and the interior. For the customer, this philosophy simplifies the selection of favorite items of equipment, because it reduces the complexity by half.

## A wealth of storage compartments: 24.8 liters of space and ergonomic bottle storage

As genuine all-rounders and family cars, the Audi Q4 e-tron and the Q4 Sportback e-tron come with a generous amount of storage compartments – including the glove compartment, they add up to a volume of 24.8 liters. The center console integrates two cup holders, a 4.4-liter stowage compartment with a cover, two (or four as an option) USB type-C sockets, and, on request, the Audi phone box for the mobile phone. All four door trims feature holders for bottles holding up

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to one liter that are located far up in the front section of the armrest and are therefore very easy to reach. The upper bottle holders were developed in close cooperation between designers and engineers; finding a spot for them in the limited door space was a real challenge.

The luggage compartment of the Q4 e-tron provides 520 liters of space for luggage. Folding down the backrests, which are divided at a ratio of 40:20:40, creates a virtually level surface; when loaded to the roof, the luggage compartment provides a volume of 1,490 liters. In the Sportback, the rear compartment holds 535 and 1,460 liters – these dimensions also match the level of the next SUV class up. On request, Audi supplies a partition net (for the Q4 e-tron) and the storage and luggage compartment package. It includes a loading floor that can be inserted at two height levels, for example.

The Q4 Sportback e-tron incorporates an electric luggage compartment door as standard, which, in combination with the optional convenience key, responds to foot gestures. With the optional trailer hitch, the compact electric SUVs with rear-wheel drive can pull a weight of 1,000 kilograms, the quattro models can even pull 1,200 kilograms (both braked, at a 12 percent incline).

## For the city and easy off-road terrain: small turning circle and good ground clearance

The compact layout of the front drive unit of the quattro models has allowed the developers to move the longitudinal members of the Q4 e-tron and the Q4 Sportback e-tron quite a long way back in the direction of the center of the vehicle. This has created space for large wheel arches, in which the wheels can turn a long way. In the variants with rear-wheel drive, the turning circle of the Q4 e-tron and the Q4 Sportback e-tron measures just 10.2 meters. With their ground clearance of approximately 18 centimeters, both models also perform well on easy off-road terrain. A trim covers the drive units underneath.

# Quick HPC charging: enough power for about 130 kilometers (80.8 mi) in ten minutes in ideal conditions

Charging with direct current is another strength that qualifies the Q4 e-tron and Q4 Sportback e-tron as all-rounders fit for everyday use. Depending on battery size they can be charged at HPC (high-power charging) stations at a charging capacity of up to 100 or 125 kW. At 125 kW and under ideal conditions, the battery gets from a state of charge (SOC) of five to 80 percent in 38 minutes. The Q4 40 e-tron\*\* can recharge enough electricity – again in ideal conditions – to cover a distance of about 130 kilometers (80.8 mi) (WLTP) in around ten minutes. In the WLTP cycle it achieves a range of up to 534 kilometers (331.8 mi).

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# Interior design and interior

The new era of technology on which Audi has embarked can also be experienced in the interior of the Q4 e-tron and the Q4 Sportback e-tron. The instrument panel introduces itself with progressive elegance and underlines the airy feeling of spaciousness. The cockpit features a distinctly three-dimensional design, and its geometric volumes are interrelated in an electrifying way.

In both the electric SUVs, the operating and display units take on the function of design elements more than ever. The digital instrument for the driver is embedded like a diamond between two volumes – a short one on the left-hand side, which incorporates an air vent, and a long one on the right-hand side. It extends all the way to the front passenger door and integrates further air vents. The central <u>MMI touch</u> display, which appears clean and light, occupies the space in front of it. It is tilted toward the driver and is positioned within ergonomically easy reach.

A lean inlay, known as the tech layer, lies above the display and connects it with the instrument panel. The choice of surface materials for this panel includes open-pore lime wood, aluminum in two different designs, and plastic. The inlay in the S line interior will also be available as an alternative shortly after market launch with an innovative, anthracite-colored technical fabric that is made partly of recycled materials.

Depending on the equipment package, the further contours of the instrument panel, which are known as accent surfaces, are designed in various silver and gray tones to match the inlay. The most striking of these runs across horizontally, dividing the instrument panel into two zones, and is decorated with an e-tron badge. Below this contour, also facing the driver, lies the climate control operating unit. Below it, a large operating panel with a black-panel look extends into the space. It features the compact shifter for selecting the gears, a capacitive rotary volume control and the start/stop button. The hazard warning light switch as well as the Audi drive select buttons and the ESC stabilization control are designed as seamless touch surfaces in a black panel look and backlit with white backlighting.

## The future in our hands: steering wheels with touch operation

The steering wheels in the Audi Q4 e-tron and Q4 Sportback e-tron are also setting a course for the future of mobility. With their double-spoke design, they belong to a new generation. The

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Four Rings on the impact absorber feature a flat design, in the S line interior an S emblem adorns the bottom spoke. The upper spokes feature touch surfaces in a black-panel look, where the functional areas are also backlit to indicate the active buttons.

Slight protrusions separate them from each other, making them easier to use, while the buttons provide feedback that is soft to the touch when pressed. Just as on a smartphone, there are not only touch gestures but also swipe gestures, for example for scrolling through lists.

The steering wheels are available in different versions. The top-of-the-range version features paddles affixed to the steering wheel for <u>coasting recuperation</u> and a two-part trim on the spokes. The heated rim is flattened at the top and bottom here – a solution that prominently underlines the futuristic character of the interior. Be it look, function, or feel – the new steering wheel clearly expresses the progressive character of the Q4 e-tron.

## Excellent safety: the front seats

The front seats in the Q4 e-tron models represent the state of the art in safety technology. In the event of a side impact, what is known as the center airbag deploys from the right-hand bolster of the driver's seat in addition to the side airbags to ensure that the driver and front passenger do not collide with one another. Seat heating, electric adjustment, and electric lumbar support are available as an option. The seats are available in a basic version and a sport version with visually integrated head restraints, and optionally with a rhombus pattern.

When it comes to the seat colors, customers can choose between black, steel gray, Santos brown, and pergament beige. The total of nine equipment packages also includes a stitching package. Five packages are available for the basic version, while the other four are available for the S line interior. They have different door sill trims, paint colors for the accent surfaces, materials for the armrests, and headlining. All optional equipment packages for the interior include white LED lighting, or, alternatively, the multi-color ambient lighting package plus. Some features are reserved exclusively for the S line interior: illuminated aluminum door sill trims with S logo, pedals with stainless steel supports, a black headlining, S embossing in the seat backrests, a steering wheel rim made of perforated leather with contrasting stitching, and S badges.

## Dinamica and Puls: seat upholstery made with recycled polyester

The S line interior also has a great deal to offer in terms of upholstery materials. Customers who prefer traditional materials can choose between a leather/artificial leather mixture and the premium fine Nappa leather. The combination of artificial leather and the microfiber material Dinamica offers an innovative variant. The Puls upholstery, also in combination with artificial

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leather, is another option for the S line interior. As with Dinamica, secondary raw materials, for example made from old PET bottles, are also used here.

## Operation

Just as in all of its models, Audi relies on a fully digital operating and display concept with a flat menu structure in the Q4 e-tron and the Q4 Sportback e-tron. It comprises four levels: the digital instrument cluster or <u>Audi virtual cockpit</u> for the driver, the central <u>MMI touch</u> display, the <u>natural-language voice control</u>, and the optional augmented reality head-up display – it is a new, pioneering piece of technology.

## Three variants: the digital cockpit

The standard digital instrument cluster measures 10.25 inches on the diagonal and is operated from the multifunction steering wheel. The power meter, which is located next to the speedometer on the display, summarizes all important information about the drive, from the output and the state of charge of the battery in percent and all the way to recuperation. The Audi virtual cockpit is the first option level. It integrates the navigation map and infotainment control and can be switched between two views. The Audi virtual cockpit is the top-of-the-line version. It offers the "classic," "sport," and "e-tron" layouts, where the power meter plays the main part. Various displays can be configured freely here.

## 10.1 or 11.6 inches: the central MMI touch display

The MMI touch display with acoustic feedback has a 10.1-inch diagonal and a resolution of 1,540 x 720 pixels. It is used to control the infotainment system as well as a number of comfort functions. In addition, it allows text input in handwriting. In the optional large version, the display comes with an 11.6-inch diagonal and a resolution of 1,764 x 824 pixels. It is the largest display in the Audi portfolio to date and is expected to be available for order this year.

## Good understanding: voice control

The natural-language voice control, which is activated with the key phrase "Hey Audi," functions as the third control level in the Audi Q4 e-tron and the Q4 Sportback e-tron. It also understands a large number of inputs and queries in everyday language, such as "Where's the nearest Italian restaurant?" If <u>Audi connect</u> Navigation & Infotainment plus is included, in many cases the information is processed online.

# Augmented reality head-up display

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With the optional augmented reality head-up display in the Q4 e-tron and Q4 Sportback e-tron, Audi is taking a huge step forward in display technology. The display reflects important information via the windshield on two separate levels, the status section and the augmented reality (AR) section. The information provided by some of the assist systems and the turning arrows of the navigation system as well as its starting points and destinations are visually superimposed in the corresponding place on the real-life outside world as content of the AR section and displayed dynamically. They appear to be floating at a distance of roughly ten meters from the driver. Depending on the situation, they can appear considerably further ahead in some cases. The driver can understand the displays very quickly without being confused or distracted by them, and they are extremely helpful in poor visibility conditions.

The field of view for the AR content from the driver's perspective is equivalent to a diagonal of around 70 inches. Below it is a flat near-field area window, known as the status section. It displays the speed driven and the traffic signs as well as the assist system and navigation symbols as static displays. It appears to hover about three meters in front of the driver.

## The heart of the system: the picture generation unit

The technical heart of the augmented reality head-up display is the picture generation unit (PGU), which is located deep inside the long instrument panel. A particularly bright LCD directs the light beams it generates onto two level mirrors, and special optical components separate the portions for the near-field and distant areas. The level mirrors direct the beams onto a large concave mirror that can be adjusted electrically. From there, they reach the windshield, which reflects them into what is known as the eyebox and thus onto the driver's eyes. At an apparent distance of ten meters, or even further away depending on the situation, the driver sees the symbols just as clearly as their real-life environment.

## Predictive picture generator: the AR Creator

What is known as the AR Creator serves as the mastermind and picture generator on the software side – this is a processing unit in the <u>modular infotainment platform</u> (MIB 3) that is comprised of multiple individual modules. The AR Creator renders the display symbols at a rate of 60 frames per second and adapts them to the geometry of the projection optics. At the same time, it calculates their location in relation to the environment, on which it obtains information via the raw data of the front camera, the radar sensor, and the GPS navigation. Its software consists of roughly 600,000 lines of programming code, around 50 percent more than the entire control system of the first version of the Space Shuttle.

While performing its computing work, the AR Creator takes into account that there are always a

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few fractions of a second between the identification of an object by the sensors and the output of the graphic content. During these brief time windows, the Q4 e-tron can change its position considerably, whether due to braking or a pothole. Multiple computations are performed continuously to ensure that the display in the eyebox does not jump into the wrong position. One of them takes place in the camera software. For another, the AR Creator uses the most recent data to make a predictive calculation of the car's continued forward movement. In a further computation, it estimates the vertical movement on the basis of data supplied by the camera, the radar, and the sensors of the stabilization control (ESC). These insights are incorporated into the "shake compensation," which takes place a few milliseconds before the picture is output and whose task is to prevent any disruptive shaking of the display.

## Navigation: the drone flies ahead

The augmented reality head-up display demonstrates its strengths in a particularly impressive way during navigation. On the road, what is known as the drone – a floating arrow – shows the next point of action on the route. It is dynamic: When approaching an intersection, for example, the floating arrow first announces the turning maneuver before an animated arrow steers the driver onto the road with precision. If the route then continues straight ahead, the drone flies ahead and disappears in order to then reappear with sufficient time before the next point of action. The distance to the turning point is displayed in meters in the lower window of the near-field area.

Even if the driver has activated the <u>adaptive cruise assist</u>, which keeps the car in the center of the lane, the augmented reality head-up display assists them with visual hints. As soon as the Q4 e-tron approaches a lane marking without the turn signal having been activated, the lane departure warning superimposes the real-life lane marking with a red line. Another example is regulation in relation to a vehicle driving in front: If it is active, the car is marked on the display with a colored stripe – this allows the driver to understand the status of the adaptive cruise assist or adaptive cruise control without being distracted. A red marking and a warning symbol appear if the adaptive cruise assist prompts the driver to verify that they are paying attention.

# Infotainment and connectivity

The infotainment offering in the Audi Q4 e-tron and the Q4 Sportback e-tron is designed with three levels: MMI, MMI plus, and MMI pro. At each level, the powerful MIB 3, the control center for media, telephony, and navigation, serves as the technical backbone. The MMI basis system installed as standard brings with it a DAB+ tuner and the 10.1-inch MMI touch display. The free myAudi app connects the car with the customer's smartphone.

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#### Top-of-the-line connectivity: MMI plus and MMI pro

The MMI plus version brings the Audi virtual cockpit, the 11.6-inch display (anticipated late 2021), a Wi-Fi hotspot for passenger devices and the basic services of Audi connect Navigation & Infotainment on board the compact electric SUV. These also include online traffic information. The navigation system gives the driver destination suggestions and provides lane-specific information on the traffic flow. The computation is carried out on the servers of the service provider HERE using predictive data about the overall traffic situation.

Another customized Audi connect service is the <u>e-tron route planner</u>, which calculates the fastest route with as few charging stops as possible at powerful DC charging terminals. While doing so, it calculates the overall travel time – driving time and charging time – and takes into account forecasts about how the traffic situation is developing. The directory of charging points is updated every day.

The top-of-the-line version MMI pro brings the Audi virtual cockpit plus, the <u>Audi smartphone</u> <u>interface</u> with wireless connectivity, and the augmented reality head-up-display into the car. Added to these are the "plus" services of Audi connect Navigation & Infotainment, including navigation with Google Earth<sup>™</sup>, online speech entry, the online radio, and the hybrid radio.

## New sound experience partner: Sonos supplies the sound system

Individually available hardware components make the infotainment offering in the Q4 e-tron even more interesting. As a new and exclusive partner of Audi, the world's leading sound experience company Sonos supplies the premium sound system. It is incorporated into the Audi soundCube, a fully integrated software environment. It forms an audio system architecture that can be easily adapted to all requirements and can integrate sound systems of different suppliers effortlessly. The Audi soundCube implements a uniform control and sound philosophy across the entire model range. Thanks to its flexibility, it leaves room for customers' wishes.

In the Q4 e-tron and the Q4 Sportback e-tron, the Sonamic Panorama algorithm, which was developed by the Fraunhofer Institute, distributes the signals to ten loudspeakers. It uses stereo recordings to generate a three-dimensional surround sound, where it places the individual sound sources on a virtual U-shaped sound stage. This gives the listener the impression they are sitting in the middle of the orchestra or band. The four tweeters and the center speaker are driven by an amplifier that is integrated in the MIB 3. A separate eight-channel booster is responsible for the four bass loudspeakers and the subwoofer in the luggage compartment. Together, the two

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amplifiers offer an output of 580 watts.

Another attractive hardware module is the <u>Audi phone box</u>. It charges smartphones inductively and allows data transfer via the vehicle's antenna at LTE advanced speed.

# Body and aerodynamics

Crash-resistant, torsionally rigid, aerodynamic – the body of the Q4 e-tron and the Q4 Sportback e-tron combines a great many strengths. Large parts made of hot-formed steel provide the strong backbone of the passenger cell and account for 26 percent of the weight. They combine a light weight with very high tensile strength and are used everywhere that strong forces have to be absorbed in the event of a collision – in the transition between the longitudinal members and the passenger cell, in the A- and B-pillars, in the roof members, as double cross-bracing under the front seats, and in the side sills.

# High level of protection in the event of a side impact collision: the B-pillars and the hybrid sills

The B-pillars are designed so that they deform more in the lower section than in the upper section in a side impact collision in order to dissipate the energy in a targeted way here. The sills are also given a challenging task: to protect the high-voltage battery.

That is why they are designed in an innovative hybrid construction method: An extruded aluminum section serves as the core, bars inside stiffen it and divide it into several chambers. An outer layer of high-strength hot-formed steel encloses the profile. The aluminum material accounts for just under ten percent of the body cell of the Q4 e-tron and the Q4 Sportback e-tron.

Throughout the body, sophisticated insulation measures reduce the transmission of road and tire noise. The large cavities, such as the longitudinal members and the metal roof, contain foam elements, and acoustic capsules made of lightweight foam are fitted above the rear electric motor and at the bulkhead. Parts such as the instrument cross beam, the wheel arches, the pillars, and even the rear bumper are also fitted with insulating and damping elements. The windshield is made as standard of acoustic glass, which can also be used for the front side windows on request. Dark privacy glazing is available for the rear sections as a further option. In the final analysis, Audi's electric compact SUVs are among the best cars in their class when it comes to the noise level in the interior.

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## Great aerodynamics: drag coefficient of just 0.26

Form follows function: The design of the two compact electric SUVs is full of character and impresses with the high quality of its aerodynamics. The Audi Q4 e-tron and the Q4 Sportback e-tron generate drag coefficients of 0.28 and 0.26 respectively, with the efficiency and range reaping the benefits.

One key factor for this is the main section of the body – the greenhouse on both models is drawn in sharply towards the rear. The <u>adjustable cooling air inlet</u> forms another important factor in the concept. Sitting in front of the package comprising radiator and compressor, which is supplied by the central lower air inlet, is a frame with an electric louver. Depending on the situation, it is opened if the major assemblies require cool air, such as when the vehicle is charging. In the majority of situations, the louver remains closed to minimize the energy losses that occur when air flows through the narrow cooling ducts. The benefit this generates for the range is around six kilometers.

The underbody design of the Q4 e-tron is almost completely smooth. Three-dimensional spoilers in front of the front wheels optimize the airflow – the advantage they give through their aerodynamics adds no less than 14 kilometers to the range. The control arms of the rear axle are partially covered, which means another four kilometers. The underbody ends in a wide diffusor, which reduces the lift of the rear axle.

Detailed solutions, on which the Audi aerodynamics experts have worked closely with the designers, provide another gain in range. At the front of the vehicle, there are narrow vertical bars below the headlights, which act as pre-spoilers and direct the airstream so it flows smoothly along the vehicle's side. The effect is a gain of five kilometers. A minute step on the exterior mirror housings with a radius of 0.5 millimeters allows the airflow to cling there for longer.

Known as the turbulator edge, this produces a similar effect to the dimples on a golf ball: They allow the air to swirl in a targeted way, which has a positive impact on the aerodynamics and is good for another two kilometers of range.

The 19-inch Aero wheels with their flat designs are likewise optimized to ensure low-loss air flows – a gain of five kilometers. On the Q4 e-tron, the tailgate seal is carefully designed to handle the pressure conditions generated by the roof edge spoiler – which adds four kilometers

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to the range. The Aero trims, which extend the D-pillars, produce a defined separation of the airflow.

On the Q4 Sportback e-tron, the spoiler sits much lower – low down on the split and steeply raked rear window. The area in which the air swirls as it comes off the vehicle is restricted to the zone beneath the spoiler and is significantly smaller than on the Q4 e-tron. The spoiler solution not only highlights the unique design of the SUV coupés – it also provides around 12 kilometers in range and additionally reduces the lift on the rear axle in a particularly effective way.

# Electric motors and electric all-wheel drive

The Audi Q4 e-tron and the Q4 Sportback e-tron include a wide range of drives – from the city cruiser to the powerful quattro. They are being launched on the European markets with two different battery sizes and three motor line-ups. In the Q4 35 e-tron\*\* and Q4 40 e-tron\*\* a permanently excited synchronous machine (PSM) on the rear wheels provides the drive – these two models, along with the R8 V10 RWD high-performance sports car, are the only series-production Audi models with purely rear-wheel drive. The Q4 50 e-tron quattro\*\* as the sporty top model uses two electric motors for its electric all-wheel drive.

## Entry-level model: the Q4 35 e-tron\*\*

The entry-level models Audi Q4 35 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 16.7 – 15.8 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) and the Q4 Sportback 35 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 16.6 – 15.6 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) are equipped with the compact battery that has a net energy content of 51,5 kWh (55 kWh gross). An electric motor with an output of 125 kW (170 PS) and torque of 310 Nm provides the drive. In both body variants, it accelerates the electric SUV from 0 to 100 km/h in 9.0 seconds and produces a governed top speed of 160 km/h. The Q4 35 e-tron\*\* can cover up to 341 kilometers (211.9 mi) (WLTP cycle) on a single battery charge, while the Q4 Sportback 35 e-tron\*\* does up to 349 kilometers (216.9 mi) (WLTP). The average energy consumption in WLTP, depending on trim version, is 19.1 to 17.0 kWh per 100 kilometers (62.1 mi) (WLTP) for the Q4 35 e-tron\*\* and 18.6 to 16.6 kWh for the Q4 Sportback 35 e-tron\*\*.

## Range of up to 534 kilometers (331.8 mi): the Q4 Sportback 40 e-tron\*\*

The Audi Q4 Sportback 40 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 17.4 – 16.1 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) features the large battery, which stores a net 76,6 kWh of energy (82 kWh gross). The electric motor generates 150 kW (204 PS)

\* Information on electric power consumption and CO<sub>2</sub> emissions figures given in ranges depend on the equipment selected for the vehicle.

\*\* The collective fuel/electric power consumption values for all models named and available on the German market can be found in the list provided at the end of this press release.





and 310 Nm here. A standard sprint takes 8.5 seconds, and here, too, the propulsion tops out at a speed of 160 km/h. One charge is enough for up to 534 kilometers (WLTP). The Audi Q4 40 e-tron has a range of up to 521 kilometers in the WLTP cycle. According to WLTP the Audi Q4 Sportback 40 e-tron\*\* uses an average of 19.6 to 16.8 kWh per 100 kilometers (*62.1 mi*).

## Top model with two electric motors: the Q4 50 e-tron quattro\*\*

The top models Q4 50 e-tron quattro (combined electric power consumption in kWh/100 km  $(62.1 \text{ mi})^*$ : 17.8 – 16.5 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) and Q4 Sportback 50 e-tron quattro (combined electric power consumption in kWh/100 km  $(62.1 \text{ mi})^*$ : 17.9 – 16.4 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) also run on the 76,6 kWh battery (82 kWh gross). It supplies two electric motors that combine to produce a maximum output of 220 kW (299 PS)\*\*\* and 460 Nm (339.3 lb-ft) of torque, while making electric all-wheel drive become a reality. The rear motor generates 150 kW (204 PS) and 310 Nm, the front motor 80 kW (109 PS) and 162 Nm. The electric motors keep reserves available for certain driving situations, which is why the sum of their individual outputs exceeds the drive's total output.

Both model variants sprint from a standing start to highway speed in 6.2 seconds and continue on to reach a top speed of 180 km/h. They have ranges of up to 488 and 497 (Sportback) kilometers respectively in WLTP. The average energy consumption for the Q4 50 e-tron quattro\*\* in WLTP is 20.0 to 17.9 kWh. The Sportback\*\*, which is available optionally with distinctly sporty tires, consumes 20.9 to 17.6 kWh.

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Audi Q4 Sportback e-tron	35 e-tron	40 e-tron
Battery energy in kWh net/gross	51,5/55	76,6/82
Maximum charging capacity kW AC/DC	7.2/100	11/125
Maximum output (peak/60 s) in kW (PS)	125 (170)	150 (204)
Maximum torque in Nm	310	310
Top speed in km/h	160	160
Acceleration 0 to 100 km/h in s	e-tron: 9.0	e-tron: 8.5
	Sportback e-tron: 9.0	Sportback e-tron: 8,5
Range in km	e-tron: 341	e-tron: 521
	Sportback e-tron: 349	Sportback e-tron: 534
Unladen weight in kg (without driver)	e-tron: 1,890	e-tron: 2,020
	Sportback e-tron: 1,895	Sportback e-tron: 2.045

Audi Q4 e-tron	
Audi Q4 Sportback e-tron	50 e-tron quattro
Battery energy in kWh net/gross	76,6/82
Maximum charging capacity kW AC/DC	11/125
Maximum output (peak/60 s) in kW (PS)	220 (299)***
Maximum torque in Nm	460
Top speed in km/h	180
Acceleration 0 to 100 km/h in s	e-tron: 6.2 Sportback e-tron: 6.2
Range in km	e-tron: 488 Sportback e-tron: 497
Unladen weight in kg (without driver)	e-tron: 2,135 Sportback e-tron: 2,140

## Greater efficiency: synchronous motor on the rear axle

Whether it's a rear-wheel or all-wheel drive – a permanently excited synchronous motor (PSM) gets to work on the rear axle in all models. It lies parallel to the axle just in front of the wheel center and sends its torque to a one-speed transmission with a differential. Its ratio in the models with rear-wheel drive is 13:1, in the electric all-wheel drive it is 11.5:1.

Including the transmission and the <u>power electronics</u>, which output the current values at intervals of milliseconds, the water-cooled electric motor weighs only around 90 kilograms. It has a maximum speed of 16,000 rpm. Thanks to the soft way in which it works, it also can hardly be heard outside the car – which is why the AVAS (acoustic vehicle alerting system) warning signal that is prescribed by law sounds at low speeds. To start driving, the driver has only to step on the brake and switch to gear D (drive) or B (brake) on the gear selector switch. As soon as

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they take their foot off the brake pedal, the car starts to roll at low speed.

A major strength of the PSM motor is its efficiency – which is substantially greater than 90 percent in the vast majority of driving situations. During their production, a high-tech solution known as hairpin winding comes into play. The coils of the stator consist of rectangular copper wires that resemble hairpins after they have been bent. This makes it possible to pack the wire more tightly and to add more copper to the stator. As a result, the output and torque increase.

## Intelligent control: electric all-wheel drive

The electric all-wheel drive in the Q4 e-tron top models\*\* has an <u>asynchronous motor</u> (ASM) on the front wheels that can rev at up to 14,000 rpm. It is installed coaxially and has combined cooling with coolant and oil. The principal advantages of the ASM are its short-term overload capacity and the minimal drag losses when it is inactive – these are important because the front motor does not contribute to the drive in the majority of driving situations for reasons of efficiency. Its one-speed transmission has a ratio of 10.0:1, and the whole unit comes in at around 60 kilograms on the scales.

In the electric all-wheel drive, the two electric motors work together with maximum efficiency. During moderate driving, the PSM in the rear works the drive on its own for reasons to do with efficiency and traction. When the driver asks for more power than it can offer, the front electric motor is activated – in just a few hundredths of a second. The same happens predictively when driving on slippery roads or cornering at high speed even before the car starts to noticeably understeer or oversteer. The <u>wheel-selective torque control</u>, a software function, rounds off the work of the electric all-wheel drive with finely metered brake interventions at the wheels under a reduced load on the inside of a curve.

The electric all-wheel drive shows off its strengths very clearly at low coefficients of friction, such as on very wet or snow-covered roads or on a loose surface. High stability, sporty handling, and secure grip give the Q4 e-tron quattro\*\* a crucial advantage. Following its debut in the Audi e-tron, the electric quattro now makes its way into the compact class.

## For maximum efficiency: coast or recuperate?

When the Audi Q4 e-tron is on the move in gear D (drive) and the driver takes their foot off the accelerator pedal, the drive switches to coasting mode. Both electric motors – or the rear motor in the rear-wheel drive models – run freely and largely without energy. Coasting takes priority, because it is the most efficient. If the driver prefers recuperation, however, they have a variety of

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options for this. In gear B (brake), the drive almost always recuperates when coasting but not when the car is at a standstill. The limit is hit at 0.15 *g* of deceleration. If "dynamic" mode is set in the optional Audi drive select dynamic handling system (standard in the Sportback), recuperation also takes place in gear D but at a slightly weaker rate than in B.

The optional shift paddles on the steering wheel enable the driver to select three different manual recuperation levels in position D – 0.06 g, 0.10 g, and 0.15 g. The driver can also choose automatic recuperation in the MMI system. When the car enters a zone that enforces a lower speed or when it comes up behind a slower car in front, the drive management system attempts to reduce speed by coasting. If the distance available is too short, it switches to coasting recuperation up to a maximum of 0.10 g. For automatic recuperation to cut in, the predictive efficiency assist system must be activated.

When braking, the PSM at the rear alone performs the deceleration in the majority of everyday driving situations. The quattro models\*\* can brake electrically at up to almost 0.3 *g*, equivalent to a recuperation performance of up to 145 kW. The electric brake booster only activates the hydraulic wheel brakes as well if greater deceleration is required. The transition is almost unnoticeable, and recuperation remains active almost until the vehicle is at a standstill. The quattro models prioritize recuperation on the rear axle but also use the front electric motor in a few situations.

# Battery, thermal management, and charging

Both the compact electric SUVs from Audi have a battery that comes in two different sizes, depending on the variant of the model. The Q4 35 e-tron\*\* uses a compact battery that stores a net energy content of 51,5 kWh (55 kWh gross). It consists of eight modules and weighs about 350 kilograms (*771.6 lb*). The Q4 40 e-tron\*\* and Q4 50 e-tron quattro\*\* have the large battery on board, with a net energy content of 76,6 kWh (82 kW gross). This version comprises 12 modules and weighs about 500 kilograms (*1,102.3 lb*).

## The battery housing: strong aluminum structure

The battery housing is an aluminum construction and is scalable in size. The smaller housing has ten compartments and is 144 centimeters long. The larger one has 12 compartments over a length of 182 centimeters, and weighs around 100 kilograms. Both housings measure 145 centimeters in width and 16 centimeters in height. The battery housing is permanently bolted to the body of the Q4 e-tron and increases its rigidity as a result. A strong surrounding frame made

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of extruded aluminum sections protects the battery system in an accident, while replaceable aluminum underfloor protection isolates it from the road.

Both batteries operate at a rated voltage of 352 volts. Controllers sitting in the longitudinal member of the housing monitor the voltage and temperature of the modules and the cells. Working in cooperation with the central battery management controller, they compensate for small deviations in the capacity of the individual cells. The main controller and the connection box with its fuses are mounted in the rear area of the battery system. In the event of a serious accident, the flow of electricity to all other high-voltage components is cut immediately.

#### Two circuits: the thermal management system

The thermal management system of the compact electric SUVs consists of two coolant circuits. One of them controls the temperature of the electric motors, their power electronics, the onboard charger, and the DC/DC converter, which connects the 12-volt on-board electrical system to the high-voltage system. This medium-temperature circuit is connected to a low-temperature circuit that only supplies the traction battery. The cooling medium – a water/glycol mix – circulates through the flat channels lying in the floor plate and thus controls the temperature of the cell compartments from below. A heat-conducting paste creates the thermal connection. When the temperature outside is low, a high-voltage heater ensures that the coolant heats up quickly.

#### Stable temperature conditions: more power when driving and charging

The thermal management system aims to get the battery up to the ideal temperature range of around 30 degrees Celsius quickly after it is started and to keep it there until the end of the journey. This ensures that its full power – and therefore the power of the entire drive system – is available after a short time even in extremely cold conditions. Thanks to the stable thermal conditions, the driver can also call on it repeatedly or charge the battery at an HPC charging terminal with high output. The sophisticated thermal management system also gives the battery a long life cycle – Audi guarantees that it will still have at least 70 percent capacity after eight years of operation or after 160,000 kilometers.

The interior climate is controlled using a coolant circuit with a compressor, condenser, and evaporator. Valves connect it to the drive circuits when these require an unusually high level of cooling. This can happen during high power requirements but also during fast HPC charging with direct current, which causes the battery to heat up significantly.

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## Even more efficiency: the heat pump

An option for the Q4 e-tron and the Q4 Sportback e-tron is a highly efficient <u>heat pump</u>, which heats and cools the interior very quickly using the thermal losses from the electric components and the temperature of the outside air. It uses eco-friendly  $CO_2$  as a refrigerant, which flows through the circuit at high pressure.

The heat pump can reduce the loss of range that the climate control causes, especially in winter. Its strengths come to the fore on long drives.

In addition to charging, the customers of the Q4 e-tron can also control the pre-entry climate of the interior from their smartphones using the myAudi app. This also functions if the car is not charging via the power grid – although this will impact the range. The vehicle can start even when the outside temperature has fallen to minus 25 degrees Celsius. The optional comfort pre-entry climate control also includes a function to heat the seats, the exterior mirrors and the rear window, while the exact interior temperature that is desired can also be set here.

## Strengths for every day: range and high charging capacity

All model and motor versions of the Audi Q4 e-tron and the Q4 Sportback e-tron have a CCS (combined charging system) on board. This system enables the SUVs to be charged with alternating current (AC) and direct current (DC), the latter at powerful HPC (high-power charging) terminals. In ideal conditions the Q4 40 e-tron\*\* can recharge enough electricity to cover about 130 kilometers (80.8 miles) (WLTP) in around ten minutes.

The optional compact e-tron charging system can be used for <u>alternating current charging</u> at home using 230 volts or the 400 volts recommended by Audi. The Q4 35 e-tron (combined electric power consumption in kWh/100 km (62.1 mi)\*: 16.7 – 15.8 (NEDC), combined CO<sub>2</sub> emissions in g/km\*: 0) can charge at a capacity of up to 7.2 kW, and the other models at up to 11 kW. The e-tron charging system connect, which will be released toward the end of the year, features smart charging functions in interaction with a home energy management system. These include charging at times when electricity is less expensive or using solar power if a photovoltaic system is installed.

On the road, the standard mode 3 cable is used for charging with alternating current at AC terminals. The option of the convenient Audi e-tron Charging Service provides access to around 210,000 public charging points in 26 countries throughout Europe, including 4,400 HPC (high-power charging) points. And all of that using just one charging card. Audi customers can choose between the city tariff for the urban area and the transit tariff for long-distance driving, where Audi pays the basic fee for the first year of the transit tariff. Customers also pay just 31 cents per

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kilowatt hour of direct current in the Ionity network – a similar price to what it costs to charge a car at home. The high-speed HPC points that IONITY and other providers have installed across Europe charge Audi's electric SUVs with a capacity of up to 100 kW (Q4 35 e-tron\*\*) or up to 125 kW (all other models).

# Suspension

The Q4 e-tron and the Q4 Sportback e-tron integrate the best conditions for high levels of comfort, driving pleasure, and unshakable stability. In the models with up to 150 kW (204 PS) of power, the rear-wheel drive ensures excellent traction – which the customer can experience in many situations, starting with driving on wet roads. The high-voltage battery is located beneath the passenger compartment, at the lowest point of the car. This is a great advantage for the center of gravity and the distribution of the axle loads: In all drive variants, this distribution is close to the ideal value of 50:50.

The front axle of the compact electric SUVs is designed in the classic McPherson construction method, the steering is located underneath at the front. A compact five-link design featuring similarities with the rear axle of the large Audi models works at the rear. As with the front axle, it is mounted on a subframe. Several parts of the suspension are made of lightweight aluminum. The track widths are 1,587 millimeters at the front and 1,565 millimeters at the rear.

## Large wheels: 19- to 21-inch with mixed-sized tires

The Audi Q4 e-tron and Q4 Sportback e-tron are well-grounded – their wheels comprise eleven versions ranging in size from 19 to 21 inches. Apart from the basic version, these are aluminum wheels, and each size includes especially aerodynamic designs. In the 20-inch category, two wheels come from Audi Sport GmbH, which provides all four in the 21-inch class. One of them comes in a matte bronze finish, another in platin gray. The third is an Aero wheel, which is largely covered with black plastic inlays.

All motor line-ups drive off the assembly line with a mix of tires, which further enhances stability and the sporty character. The front tires are 235 millimeters wide throughout, the rear tires 255 millimeters, while the cross sections differ depending on the rim size. All tires are optimized for rolling resistance, the 21-inch class includes a decidedly sporty tire variant for the Sportback.

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<sup>\*\*\*</sup> Further information about maximum electric power of the Q4 50 e-tron can be found at the end of this press release.





Mounted behind the large wheels are powerful brakes. Depending on motor output, the disks on the front wheels measure between 330 and 358 millimeters (13.0–14.1 in) in diameter; there are extra-low-wear, low-maintenance drum brakes on the rear wheels. The drums reduce the risk of corrosion. This is because in a purely electric drive the wheel brakes are used only rarely in everyday driving – most decelerations are performed by the electric motor in the rear, which converts kinetic energy to electrical energy in the process.

## Even more fun to drive: two dynamic packages

On request, Audi can equip the two compact electric SUVs with the dynamic package or the dynamic package plus. In the dynamic package, the sport suspension (standard in the S line) lowers the body by 15 millimeters, while the conventional steering is replaced here by progressive steering (standard in the quattro models), which operates more directly the further the steering is turned.

The third element of the dynamic package is the <u>Audi drive select</u> dynamic handling system (standard in the Sportback), which brings new dimensions to the driving experience. With Audi drive select, the driver can switch the characteristics of the steering, the electric motors, and (in the quattro models) the electric all-wheel drive between the "comfort," "auto," "efficiency," "individual," and "dynamic" modes. In the MMI touch operating system, they can also activate "range" mode, in which the car drives at maximum energy efficiency. The maximum speed is limited here to 90 km/h, or to 130 km/h in "efficiency" mode.

#### In the dynamic package plus: suspension with damper control

The dynamic package plus adds another component on board the Audi Q4 e-tron and the Q4 Sportback e-tron – the <u>suspension with damper control</u>. Its control unit manages the characteristics of the dampers in line with the driving situation at five-millisecond intervals by regulating the oil flow. So the suspension caters to a wide field – from smooth cruising to snappily sporty handling.

The suspension with damper control is connected both to Audi drive select and to the electronic dynamic handling system. In addition to the adaptive dampers, it also controls the brake interventions of the wheel-selective torque control, where it works closely together with the ESC stabilization control. The system aims to harmonize the real behavior of the car with a digital target model so that the transverse dynamics and driving safety are always at the optimum level.

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The ESC in turn works closely together with the control units for the electric motor and its power electronics. It produces especially effective performance in the rear-wheel drive models. Although a car of this kind has a tendency in principle to oversteer, the networking ensures that the Q4 e-tron finds a secure grip in every situation – during full acceleration, when cornering fast, and during brake recuperation. The control signals are issued every millisecond – that's so quick and smooth that the driver barely notices them. They can set the ESC to sport mode and deactivate the traction control at the flick of a switch.

# Driver assist systems

One front radar, one front camera, four surround-view cameras, two rear radars and eight ultrasonic sensors: When fully equipped, the sensor system of the Audi Q4 e-tron and the Q4 Sportback e-tron covers a large sensing field and a large number of traffic situations. Important driver assist systems come as standard, the optional systems are subdivided into four packages: the assist package, the assist package plus, the assist package pro, and the safety package.

## Safety first: extensive range of driver assist systems

One of the systems equipped as standard is the lane departure warning – its steering interventions can prevent the car from inadvertently straying out of the lane. Using the radar and the camera, <u>Audi pre sense front</u> safety system can identify impending collisions in front of the car, warn the driver, and initiate braking in an emergency. The <u>turn assist system</u> supports the driver in the same way when turning left, the <u>collision avoidance assist</u> helps them steer around obstacles by providing steering movements. The acoustic and optical <u>parking system</u> measures the distance to the rear.

The <u>predictive efficiency assist</u>, which evaluates navigation data and traffic signs, helps the driver save energy. When the car is approaching a zone that demands a slow speed – a built-up area, an intersection, or a curve for example – it indicates to the driver that they should take their foot off the right-hand pedal. When they do that, the system manages the coasting and recuperation without the driver having to take any action. Fatigue assist uses defined patterns to continuously check whether the driver is in good shape. The traffic sign recognition system and the predictive <u>speed limiter</u> round off the range of the standard systems.

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## Even greater comfort and confidence: the optional systems

The optional systems include <u>adaptive cruise control</u>, which is specially designed for longitudinal guidance. Working in close cooperation with the predictive efficiency assist system, it controls the distance to the vehicle ahead by accelerating and braking. The <u>adaptive cruise assist</u> system enhances adaptive cruise control by adding lateral guidance: The system performs light steering intervention to help the drive remain in the center of the lane. In order to maintain lateral guidance, drivers need only gently touch the capacitive steering wheel, which is part of the system, to prove that they are paying attention. The driver always remains responsible for steering the vehicle here, however.

The <u>side assist</u> monitors traffic behind and beside the car and warns drivers if they wish to change lanes in a critical situation. It uses the signals from the rear radar sensors as well as the <u>exit warning</u> for this. It warns drivers and passengers not to open a door if a cyclist or another vehicle is approaching from the rear. The <u>rear cross-traffic assist</u> increases safety during reversing maneuvers. The <u>emergency assist</u> brings the car to a stop if the driver is no longer able to do so. <u>Audi pre sense basic</u> and <u>Audi pre sense rear</u> supplement the standard Audi pre sense front safety system. For convenient and safe parking, Audi offers the <u>surround view cameras</u> – they provide detailed pictures of the immediate surroundings from different perspectives.

# Prices and Edition models

The Audi Q4 e-tron will be launched on the European markets in June 2021, with the Sportback models following in the late summer. In Germany, prices start at EUR 41,900 for the Q4 35 e-tron\*\*. The Q4 40 e-tron\*\* starts at EUR 47,500 and the Q4 50 e-tron quattro\*\* – including advanced exterior – at EUR 52,900. The Sportback will be around EUR 2,000 more.

Two Edition models, each available in two body variants and all drive variants, accompany the market launch – the elegant Edition One in geyser blue and the progressive and sporty Edition One in typhoon gray. Its exterior is distinguished by the S line, dark privacy glazing in the rear, and black attachments highlight the vehicle's features. The Matrix LED headlights and the rear lights are also darkened. The Edition models come with 21-inch wheels in the Aero design on the geyser blue Edition One. On the typhoon gray Edition One, the wheels are finished in bronze, as are the laminated Audi rings on the C-pillars.

The interior design is based on the S line interior, in the geyser blue Edition model the sport seats come in a mix of black artificial leather and leather. The Q4 e-tron in typhoon gray has

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steel-gray upholstery with bronze-colored contrasting stitching. On the German market, the Edition models all come with a EUR 9,490 higher price tag than the regular models.

# Sustainability

Audi builds the Q4 e-tron and Q4 Sportback e-tron for the Europe and United States markets on a net zero basis. When it comes to emissions, the brand with the Four Rings follows the principle of "avoid and reduce." The Volkswagen plant in Zwickau, the largest and most efficient electric car plant in Europe, uses eco-electricity. The production of battery cells is energy-intensive – which is why Audi has required its cell suppliers to use only green electricity in their production processes.

All emissions that cannot be avoided are offset by climate protection measures with carbon credits, which are also certified by the non-profit organizations "The Gold Standard" and "Verified Carbon Standard." The objective is that the Q4 e-tron and Q4 Sportback e-tron should achieve net zero carbon emissions when handed over to customers in Europe and the United States. When the car has reached the end of its life cycle, its battery is intended to be reused in second-life concepts or – if that is no longer economically viable – recycled in a sustainable way as a source of raw materials. Initial pilot and research projects in this area have already been successfully completed.

## Reducing CO<sub>2</sub> in the utilization phase: charging with eco-electricity

To complement its net zero production approach, going forward Audi will also bring the utilization phase more sharply into focus. Even today, owners of the Q4 e-tron can already charge their car in their garage at home with eco-electricity – for example from Elli, a subsidiary of the Volkswagen Group, which supplies certified Volkswagen Naturstrom. For charging when out and about, networks such as IONITY also offer renewably generated electricity.

Together with its suppliers, Audi is firmly and systematically committed to acting responsibly in all vehicle projects. Since 2017, the company has been reviewing its partners using a sustainability rating – this aims at ensuring resource-saving production processes and adherence to social standards. This rating has been a mandatory selection criterion when it comes to awarding contracts since 2019. The Volkswagen Group has also instituted the Sustainability Rating worldwide since 2019.

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<sup>\*\*\*</sup> Further information about maximum electric power of the Q4 50 e-tron can be found at the end of this press release.

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# Altogether, 27 components contain a share of recycled resources: sustainable materials in the electric SUV

Sustainability and the conservation of resources also play an important role in the whole vehicle. The electric SUV features 27 components that contain recycled materials. For the exterior, this means components such as the assembly carrier – a part that has to meet especially high requirements when it comes to its mechanical properties.

What's more, a large proportion of the headlight mounts, the wheel arch liners, the fender covers, the floor trim, and the wheel spoilers is made from secondary raw materials.

In the interior, recycled materials are used in the insulation and damping materials. Moreover, many of the visible surfaces contain recycled materials. These include the floor covering and parts of the luggage compartment trim. In the S line interior, the customer can enjoy the Dinamica microfiber material, which is used in combination with artificial leather as the upholstery for the sport seats. Polyester fibers make up 45 percent of the Dinamica material. They are obtained from recycled PET bottles, old textiles, or residual fibers.

The Puls fabric, also combined with artificial leather, contains recycled materials that make up around 50% of its composition. For the seat trim, around 26 1.5-liter PET bottles are transformed into yarn using an elaborate processing procedure – the end result is a material that features the same quality standards, to the eye and to the touch, as classic textile upholstery. The inlay technical fabric for the instrument panel, which will follow shortly after the market launch, also consists partly of recycled materials

\* Information on electric power consumption and CO<sub>2</sub> emissions figures given in ranges depend on the equipment selected for the vehicle.

\*\* The collective fuel/electric power consumption values for all models named and available on the German market can be found in the list provided at the end of this press release.





## Fuel/electric power consumption of the models named

Information depends on the equipment selected.

Audi Q4 35 e-tron Combined electric power consumption in kWh/100 km (62.1 mi)\*: 19.1–17.0 (WLTP); 16.7 – 15.8 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi Q4 Sportback 35 e-tron Combined electric power consumption in kWh/100 km (62.1 mi)\*: 18.6 – 16.6 (WLTP); 16.6 – 15.6 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi Q4 40 e-tron Combined electric power consumption in kWh/100 km (62.1 mi)\*: 20.0 –17.3 (WLTP); 17.7 – 16.3 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi Q4 Sportback 40 e-tron Combined electric power consumption in kWh/100 km (62.1 mi)\*: 19.6 – 16.8 (WLTP); 17.4 – 16.1 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi Q4 50 e-tron quattro Combined electric power consumption in kWh/100 km (62.1 mi)\*: 20.0 –17.9 (WLTP); 17.8 – 16.5 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi Q4 Sportback 50 e-tron quattro Combined electric power consumption in kWh/100 km (62.1 mi)\*: 20.9 – 17.6 (WLTP); 17.9 – 16.4 (NEDC) Combined CO<sub>2</sub> emissions in g/km: 0

Audi e-tron GT quattro Combined electric power consumption in kWh/100 km (62.1 mi)\*: 19.6 – 18.8 (NEDC), 21.6–19.9 (WLTP) Combined CO<sub>2</sub> emissions in g/km\*: 0

Audi RS e-tron GT Combined electric power consumption in kWh/100 km (62.1 mi)\*: 20.2 – 19.3 (NEDC), 22.5 – 20.6 (WLTP) Combined CO<sub>2</sub> emissions in g/km\*: 0



# Further information about maximum electric power of the Audi Q4 50 e-tron

#### Maximum electric power: 220 kW\*

\* **Maximum power** determined in accordance with UN GTR.21; up to 25 kW of this is accounted for by the overboost, which can be called up for max. **30 seconds**.

The power output available in individual driving situations depends on **variable factors** such as **ambient temperature, charging/temperature/conditioning status** or **physical ageing** of the high-voltage battery.

In particular, for the maximum power (overboost) to be available a high-voltage battery temperature between 23 and 50°C and a battery charge level > 88% are required. Any deviations from the parameters specified above in particular can lead to reduced power output and even to the overboost not being available at all. To a certain extent, the battery temperature can be indirectly influenced via the auxiliary air conditioning function and the charge level and other parameters can be set in the vehicle. The power output currently available is displayed on the vehicle's power meter. To maintain the high-voltage battery's usable capacity as far as possible, it is recommended to set a charging target of 80% for the battery for day-to-day use (can be adjusted to 100% e.g. before long journeys).

The Audi Group, with its brands Audi, Ducati and Lamborghini, is one of the most successful manufacturers of automobiles and motorcycles in the premium segment. It is present in more than 100 markets worldwide and produces at 19 locations in 12 countries. 100 percent subsidiaries of AUDI AG include Audi Sport GmbH (Neckarsulm, Germany), Automobili Lamborghini S.p.A. (Sant'Agata Bolognese, Italy), and Ducati Motor Holding S.p.A. (Bologna/Italy).

In 2020, the Audi Group delivered to customers about 1.693 million automobiles of the Audi brand, 7,430 sports cars of the Lamborghini brand and 48,042 motorcycles of the Ducati brand. In the 2020 fiscal year, AUDI AG achieved total revenue of  $\in$ 50.0 billion and an operating profit before special items of  $\in$ 2.7 billion. At present, 87,000 people work for the company all over the world, 60,000 of them in Germany. With new models, innovative mobility offerings and other attractive services, Audi is becoming a provider of sustainable, individual premium mobility.

The indicated consumption and emissions values were determined according to the legally specified measuring methods. Since September 1, 2017, type approval for certain new vehicles has been performed in accordance with the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), a more realistic test procedure for measuring fuel consumption and  $CO_2$  emissions. Since September 1, 2018, the WLTP has gradually replaced the New European Driving Cycle (NEDC). Due to the realistic test conditions, the fuel consumption and  $CO_2$  emission values measured are in many cases higher than the values measured according to the NEDC. Vehicle taxation could change accordingly as of September 1, 2018. Additional information about the differences between WLTP and NEDC is available at www.audi.de/wltp.

At the moment, it is still mandatory to communicate the NEDC values. In the case of new vehicles for which type approval was performed using WLTP, the NEDC values are derived from the WLTP values. WLTP values can be provided voluntarily until their use becomes mandatory. If NEDC values are indicated as a range, they do not refer to one, specific vehicle and are not an integral element of the offer. They are provided only for the purpose of comparison between the various vehicle types. Additional equipment and accessories (attachment parts, tire size, etc.) can change relevant vehicle parameters, such as weight, rolling resistance and aerodynamics and, like weather and traffic conditions as well as individual driving style, influence a vehicle's electrical consumption, CO<sub>2</sub> emissions and performance figures.





Further information on official fuel consumption figures and the official specific CO<sub>2</sub> emissions of new passenger cars can be found in the "Guide on the fuel economy, CO<sub>2</sub> emissions and power consumption of all new passenger car models," which is available free of charge at all sales dealerships and from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, Germany (www.dat.de).