

The New Passat – The Update
International vehicle presentation
Frankfurt, June 2019

Note: This press release, image motif and films regarding the Passat can be found online under www.volkswagen-newsroom.com

All equipment specifications apply to the German market.

- 1 = The consumption and emission values of this model are forecasts / see page 41 onwards for values.
- 2 = The vehicle is a prototype and is not available for sale at this point..



#### Contents

# The New Passat - The Update

<u>In brief</u>	
News at a glance	Page 03
Highlights of the new Passat	Page 04
Key aspects	
Maximum individuality	
Standard and optional equipment	Page 09
Independent model variants	Page 11
Innovative drive and running gear systems	
All petrol <sup>1</sup> and diesel <sup>1</sup> engines are fitted with particulate filters	Page 14
Plug-in hybrid drive <sup>2</sup> with long electrical range	Page 14
Three TSI engines with 150 PS <sup>2</sup> , 190 PS <sup>1</sup> and 272 PS <sup>1</sup>	Page 19
Four TDI engines with 120 PS <sup>1</sup> , 150 PS <sup>2</sup> , 190 PS and 240 PS <sup>1</sup>	Page 20
Adaptive chassis control perfects comfort and dynamics	Page 22
Integrated assistance and interactive lighting systems	
New assistance systems enable partially assisted driving	Page 24
Intelligent lighting systems look ahead	Page 28
Connected community	
A new generation of information and entertainment systems	Page 31
Volkswagen We is the new world for mobility products	Page 35
Technical data	
Overview of consumption and emission values	Page 40



In brief

# Electric, automated, integrated: the new Passat becomes an electric car part-time, has a partially assisted driving option and is online if desired

#### News at a glance

- Starting in September: The most innovative Passat yet continues the success story of the best-seller that has sold over 30 million units
- **Zero emissions in the city:** The electric range of the new Passat GTE has been increased to up to 56 km\*\* on the WLTP<sup>2</sup> cycle (ap-prox. 70 km\*\* in NEDC 1/2)
- New Travel Assist: The Passat is the world's first Volkswagen that can drive at up to 210 km/h in partially assisted mode
- MIB3 goes online: The new infotainment systems bring connectivity onboard as standard
- IQ.LIGHT: Following the latest Touareg, the Passat will also be offered with IQ.LIGHT - LED matrix headlights.
- **Capacitive steering wheel:** The first capacitive steering wheel from Volkswagen reacts to touch as a new interface.
- **Digital Cockpit:** The latest generation of digital instruments can be configured via the steering wheel at the touch of a button.
- We Connect: Infotainment brings Apple Music and other streaming music services, Internet radio and web app technology to the
- We Connect Fleet: Digital Logbook, fuel consumption monitoring and Service Manager save time and money in vehicle fleet operation.
- Open to new partners: Integration of new services such as "We Deliver", "We Experience" and "We Park" opens the door to the future of mobility.

#### Contact:

Volkswagen Group Communications **Product Communications** 

Martin Hube Spokesperson for mid-size/full-size Tel.: +49 5361 9-49874 martin.hube@volkswagen.de







More under

volkswagen-media-services.com



#### The highlights of the new Passat

Wolfsburg / Frankfurt, June 2019. The countdown has begun – in September, Volkswagen is launching a major technological update for the Passat. The update fundamentally changes the world's most successful mid-range car, which has already sold more than 30 million units: with the next generation of Infotainment systems (MIB3), Volkswagen can be permanently online if desired, bringing ground-breaking new functions and services on board. New assistance systems such as Travel Assist perfect safety and comfort and make it the first Passat with the potential to drive up to 210 km/h in partially assisted mode. Once again, the bestseller will be launched as a saloon and estate.

GTE<sup>2</sup> – temporarily a zero emission vehicle. One of the highlights in the range is the new version of the Passat GTE. It is the first model of a new generation of Volkswagen plug-in hybrid models with a significantly bigger range. Crucial feature: a battery with a higher energy content. For the Passat, it is boosted by 31 percent. With 13 kWh of stored energy, the electric range in the new WLTP cycle is now extended to up to 55 km for the Estate and to 56 km for the Saloon. These values correspond to around 70 NEDC km – 20 km more than with the predecessor. This completely changes automotive life with the Passat GTE. Even in large cities such as Berlin or Paris, the increased energy content of the battery is enough to cover most everyday distances completely electrically and thus emission-free. Thanks to a newly configured hybrid mode, it is now also much easier to store sufficient electrical energy even during long journeys in order to travel emission-free in the urban destination area.

GTE<sup>2</sup> – also predestined for long-distance travel. For longer distances and above 140 km/h, the powerful electric motor supports the Passat GTE's efficient petrol engine (TSI). The electric thrust acts like an additional booster, offering a very special way of developing power, especially in sporty "GTE" mode, as electric motors deliver maximum torque from one second to the



next. One thing is certain: the Passat GTE's current plug-in hybrid drive is a key technology component for the new era of electric mobility. The Passat GTE combines the advantages of the electric drive with the qualities of a long-distance vehicle to create one of the most efficient mid-range models available today – zero emissions in the city, clean efficiency on long-distance journeys: the 160 kW / 218 PS Passat GTE is one of the first vehicles in its class to meet the limits of the Euro 6d emission standard – which will not apply to new cars until 2021. In addition, the Passat GTE – for example in Germany – is particularly economically attractive for company car drivers as they only have to pay tax on 0.5 instead of 1.0 percent of the gross new car price per month.

2.0 TDI Evo<sup>2</sup> – Forerunner of a new generation of diesel engines. The newly developed 2.0 TDI Evo with 110 kW / 150 PS<sup>2</sup> is making its début within the Passat's turbo diesel engine range. The innovative four-cylinder generates significantly less CO<sub>2</sub> than the comparable engine in its predecessor and is regarded as a pioneer of a new generation of diesel engines. The 2.0 TDI Evo in the new Passat features a dual catalytic converter SCR system and dual AdBlue dosing on the emissions side. The three other Passat diesel engines develop 88 kW / 120 PS<sup>1</sup>, 140 kW / 190 PS<sup>1</sup> and 176 kW / 240 PS<sup>1</sup>. The range of petrol engines includes three TSIs with 110 kW / 150 PS<sup>2</sup>, 140 kW / 190 PS<sup>1</sup> and 200 kW / 272 PS<sup>1</sup>. All TSI and TDI units fulfil the requirements of the Euro 6d-TEMP emission standard. In addition, every new Passat – whether a petrol, diesel or hybrid engine – is equipped with a particulate filter.

Passat, Business and Elegance – new equipment matrix. The Passat of the Year 2019 is being launched on the market with a new equipment structure. The basic version is now called Passat. Above this follows the mid equipment level Business. The top level is called Elegance. Business and Elegance can also be ordered with R-Line personalisation. As well as these versions, the new model will also again be available as a separate Alltrack model (all-wheel drive all-rounder with offroad capabilities). The Passat GTE also features model-specific equipment. Volkswagen has also designed an exclusive



special-edition model limited to 2,000 units: the Passat R-Line Edition in the exclusive colour Moonstone Grey. This edition is available with the two top engines (176 kW TDI or 200 kW TSI), four-wheel drive (4MOTION) and the new assistance system Travel Assist.

Travel Assist – ground-breaking IQ.DRIVE technology. IQ.DRIVE, the umbrella brand for Volkswagen driver assist systems, brings together technologies that pave the way toward assisted driving. This includes the new Travel Assist: the Passat will be the first Volkswagen that is capable of partially assisted driving across practically the whole speed range (0 to 210 km/h / 30 to 210 km/h with manual gearbox). Along with its assistance system, the Passat therefore represents the most advanced version of IQ.DRIVE yet seen.

Capacitive steering wheel – new interface. Volkswagen builds on intuitive operation and technologies that function largely automatically. The new Passat will be the first Volkswagen worldwide with a capacitive steering wheel. This detects touch by the driver, providing an interactive interface to systems such as Travel Assist.

Lane Assist and IQ.LIGHT – see and be seen. The lane guidance with Lane Assist has been optimised with a new multifunction camera. The new IQ.LIGHT - LED matrix headlights also enhance safety and comfort. After the luxury SUV Touareg, it is the first other model of the brand with an interactive matrix system of headlights. The new Passat Elegance has the IQ.LIGHT – LED matrix headlights on board as standard.

MIB3 – permanently online on request. The third generation of the Modular Infotainment Matrix (MIB3) also has its début alongside the new Passat. It brings about a host of new functions. For instance, App-Connect Wireless – the interface that lets drivers access select smartphone apps directly from the built-in Infotainment display – now enables wireless Apple CarPlay support for the first time in a Volkswagen thanks to the MIB3. If required, the Passat is now also permanently online as the new MIB3 Infotainment systems also come with an integrated online



connectivity unit (OCU) including eSIM as standard. In addition to improved navigation-related services with real-time information, Volkswagen We and the mobile online services of We Connect and We Connect Plus (both standard in Germany) as well as We Connect Fleet (available in Germany and France upon market launch of the Passat) integrated in MIB3 enable new technologies and offers. This includes built-in streaming music services such as Apple Music and TIDAL, the integration of updatable web app technologies, natural voice control enriched with online content, and the future cloud-based for vehicle settings. Also, personalization of the first time, smartphones (compatible Samsung models) can also be used as a mobile key for opening and starting the Passat.

Volkswagen We - open to new ideas. With the new Passat, Volkswagen We gathers more momentum. Volkswagen has developed a digital platform called Volkswagen We, offering and supplying bundled mobile online services in a very simple manner. It is an open system that is continuously being enhanced. At this point, Volkswagen is therefore open to specialist partners and develops new services in conjunction with them. Collaboration with lo-cal start-ups, companies and authorities creates space for new concepts such as We Park (cashless parking) or We Deliver (car access-based services - simple and safe access of service partners to the vehicle). The individual Volkswagen ID gives all the customers central access to all Volkswagen services - and therefore to a completely new spectrum of In-ternet-based information and services.

Digital Cockpit – integrated with the MIB3. The hardware and software in the MIB3 form a digitally linked unit with the Passat's new Digital Cockpit. The digital instruments have been considerably enhanced compared to the previous system (Active Info Display). The enhanced high-contrast graphics display is clear and high-quality. The range of functions has been lifted to a whole new level. Three different display configurations can now be custom-ised via a multifunction steering wheel (which is also new) at the touch of a



button (View). Detailed settings can also be conveniently adapted individually using MIB. For instance, the colour highlights in the display reflect the current ambient lighting colour.

Exterior design – LEDs as light sources. Volkswagen has sharpened and refined the design of the Passat. The front and rear bumpers, the radiator grille and the Passat logo, now located centrally at the rear, have all been redesigned. In addition, new LED headlights, LED daytime running lights, LED fog lights and LED tail light clusters ensure a distinctive design. Colours like Lapiz Blue, Bottlegreen and Sea Shell Gold are also new to the Passat. In addition, four new styles of 17, 18 and 19-inch alloy wheels extend the wheel range.

Interior design – aesthetics of the digital world. The Passat sets itself apart in the interior with new trim finishes and fabrics, redesigned door trims, a new trim colour, new instruments and the standard multifunction steering wheel which is also new. There is now a stylish backlit Passat logo in the dash panel instead of an analogue clock. The centre console has a large, open storage compartment with an optional inductive interface for smartphones and adjacent, illuminated USB-C connection. The screens of the Digital Cockpit and the Infotainment systems merge at night with the illuminated buttons on the capacitive multifunction steering wheel and the background lighting (up to 30 colours) to create a well-lit, aesthetic and functional platform for providing information. The ambient lighting's colour highlights are also reflected in the Infotainment system and Digital Cockpit.

**Dynaudio sound system – finely tuned 700 watts.** Danish hi-fi specialist Dynaudio has carefully adapted the 700-watt sound system to fit the interior of the new Passat perfectly. This ensures that the music on board – regardless of the source – has the best sound ever heard in a Passat.



#### Maximum individuality

Standard and optional equipment

New matrix of equipment. As well as the Passat's technical update, Volkswagen has also reconfigured the equipment structure. The basic version is now called Passat. Above this follows the mid equipment level Business. The top level is called Elegance. Business and Elegance can also be ordered with R-Line personalisation. The Passat GTE features model-specific equipment. In addition, the new Passat is once again available as an Alltrack all-wheel-drive all-rounder with off-road capabilities. Volkswagen has also designed an exclusive special-edition model limited to 2,000 units: the all-wheel-drive Passat R-Line Edition in the exclusive colour Moonstone Grey. The R-Line Edition is available exclusively with the top engines (176 kW TDI or 200 kW TSI) and in this case the standard Travel Assist.

Passat: With standard equipment details such as LED headlights and LED tail light clusters, the Front Assist emergency brake assistant plus pedestrian detection, the Adaptive Cruise Control (ACC), the Keyless Start system, the Composition radio system (MIB2), a telephone interface, smartphone integration via App Connect (wired) or mobile online services via We Connect and We Connect Plus, the new Passat equipment variant offers an even better price/performance ratio than the replaced Trendline version.

Business. The first possible level of customisation for the Passat is the new Business medium equipment level. In addition to the Passat level, the standard equipment here also includes details such as 16-inch alloy wheels (Sepang), chrome strips on the side windows, front comfort seats with lumbar supports (electrically adjustable on the driver's side), LED fog lights, customised applications in the vehicle interior, a rain sensor or the automatic head-lamp control including the Leaving home and Coming Home functions. In addition, the Business variant differs from the Passat version in the vehicle interior by other fabrics and applications. Leather refines the steering wheel



and the gear knob. Business replaces the Comfortline equipment line in the new Passat.

Elegance: The new top version of the Passat bears the name Elegance. Compared to the Business variant, it is quickly recognisable from the outside by features such as 17-inch alloy wheels (Istanbul), side strips in chrome in the lower body area, a chrome strip plus chrome trim in the rear bumper, the IQ.LIGHT – LED matrix headlights and LED tail light clusters with dynamic flashing light animation. In the Passat Elegance, the driver and front passenger sit on sport comfort seats; the centre seat sections of the front seats and the outer rear seats are covered with Alcantara, the side bolsters with leather (Vienna). The front seats can also be heated. In addition, the standard equipment also includes adaptive chassis control (DCC; for 176 kW and 200 kW only) including driving profile selection (not for 140 kW TDI), the 3-zone Air Care Climatronic automatic air conditioner and exterior mirrors with surround lighting and the front passenger exterior mirror lowering function (foldable and heated, and dimming on the driver's side). Elegance replaces the Highline equipment line in the Passat.

R-Line. The Business and Elegance equipment levels can be further customised with R-Line packages. These packages were developed by Volkswagen R. The R-Line exterior package includes bumpers and sill extensions in R styling. Alternatively, the complete R-Line package can be ordered: in addition to the exterior scopes, it includes features such as a headliner in Titanium Black, decorative trims in Dark Diamond Flag (Business) or Silver Rise (Elegance) for the dash panel and door trims, pedals in brushed stainless steel and particularly sporty seat covers. The Passat Business' sport comfort seats are refined in this case by seat centre panels (front and outer rear seats) in Carbon Flag fabric and leather side bolsters (Vienna). In the Passat Elegance, leather (Nappa) is used for the seat centre panels (front and outer rear seats); the seat bolsters are customised here with a leather in the Carbon Style. The Passat Business and Passat Elegance can also be ordered with an R-Line sports package including XDS electronic differential lock, progressive



steering, darkened rear windows and sports running gear (body approx. 15 mm lower).

Optional details and packages. In addition to the equipment versions and R-Line packages, the new Passat can also be individually adapted through a wide range of individual options and various packages. These include four new optional alloy wheels: the 17-inch Sebring wheel rim, the 18-inch Liverpool or Bonneville wheel rims and the 19-inch Pretoria wheel. Additional equipment highlights include the head-up display, background lighting in up to 30 colours, a tilting and sliding panoramic sunroof, a wide range of driver assist systems, the adaptive chassis control (DCC), the new Discover Media and Discover Pro Infotainment systems, the 700-watt Dynaudio Confidence sound system, the new IQ.LIGHT LED matrix headlights (Elegance series), the Easy Open locking system (unlocking the tailgate or boot lid from the outside, including Keyless Access locking and starting system) and an auxiliary heater. The Business Premium special package was specifically tailored to professional frequent drivers. It includes details such as Air Care Climatronic, App Connect Wireless for the first time, a 230 V socket on the rear centre console, the Rear View camera system, the Lane Assist lane departure warning system and Traffic Jam Assist, the Comfort mobile phone interface with inductive charging function in the centre console as well as a USB-C interface and USB charging sockets.

#### Independent model variants

**R-Line edition:** The exclusive special series of the Passat Estate R-Line Edition is limited to 2,000 units. On board the special series are the top engines with 176 kW / 240 PS (TDI) or 200 kW / 272 PS (TSI) and thus also the 4MO-TION four-wheel drive and a 7-gear dual clutch gearbox (DSG). The high-tech all-rounder is painted in the new colour Moonstone Grey. Numerous black features are matched to this as a contrast. The roof is painted by hand in a complex process and set off in high-gloss black. The roof-edge spoiler, roof



rail, and wing mirror caps are also black. The side window frames, rear diffuser, headlight rims and all trim also come in high-gloss black. The dark LED tail lights and high-gloss black 19-inch alloy wheels (Pretoria) have also been consistently integrated into this colour scheme. Black also dominates the interior: driver and passengers sit on R-Line sports seats, with seat centre panels covered with fine-quality Nappa leather, and the side bolsters with carbon leather. Pedals are finished in stainless steel (brushed), and the side sills (with R-Line logo) also come in stainless steel. Ambient lighting brings a wide range of colours into play. The limited edition also features almost all the new technologies on board as standard, including the Digital Cockpit and the 9.2-inch Discover Pro navigation system with R-Line start screen. Another highlight is the standard Travel Assist, IQ.LIGHT LED Matrix headlight system and Rear View reversing camera system. The latest version of the DCC adaptive damper control system also forms part of the standard equipment. The sporty positioning of the model designed by Volkswagen R is underlined by the ESC off function, which is used to disable the electronic stabilisation programme when driving on closed roads.

GTE: The Passat GTE with the plug-in hybrid drive is an independent model variant. From the outside, the GTE can be recognised by 17-inch alloy wheels (Montpellier) specially designed for the hybrid version, trapezoidal exhaust system trims and side runners (around the A-pillar) with the GTE lettering. On the inside, the Passat GTE is characterised by details such as the Discover Media Infotainment system, the 3-zone Air Care Climatronic air conditioning system, fabric seats with blue elements and a perforated leather steering wheel. (Further details on the Passat GTE from page 15).

Alltrack. The all-wheel-drive Passat Alltrack is also an independent model variant. This was developed for private and business high-mileage drivers who do not just drive the Passat on surfaced roads, who want to hitch a trailer to it or who also value the perfect grip when on a skiing holiday. A progressive all-rounder that comes into its own when the going gets tough



on the basis of the Passat Estate – a crossover from the estate and SUV models. The standard specification of the Passat Alltrack includes bumpers adapted for offroad driving with underbody protection, sill extensions also featuring underbody protection, and robust wheel arch extensions. Thanks to a special off-road mode, modified running gear with greater ground clearance and the permanent 4MOTION four-wheel drive, the Passat Alltrack is just as much at home when driving off-road on terrain otherwise reserved for four-wheel drive SUVs. At the same time, the Passat Alltrack is also a comfortable and fast touring car. The Passat Alltrack is available with a 2.0 TSI with 200 kW / 272 PS or a choice of two TDIs with 140 kW / 190 PS and 176 kW / 240 PS respectively. A 7-speed dual clutch gearbox (DSG) is standard for all variants. The standard equipment also includes 17-inch alloy wheels (Ancona), electrically folding exterior mirrors, a sports steering wheel with perforated leather, trapezoidal exhaust system trims and Alltrack lettering on the front wings.



#### Innovative drive and running gear systems

All petrol (TSI)<sup>1</sup> and diesel (TDI)<sup>1</sup> engines operate with a particulate filter

Enhanced GTE<sup>2</sup> and new 2.0 TDI Evo<sup>2</sup>. Eight drive variants with a power spectrum from 88 kW / 120 PS to 200 kW / 272 PS will be available for the new Passat. A special focus is on the Passat GTE's<sup>2</sup> significantly enhanced plugin hybrid drive: the latest generation has a battery with 31 percent higher energy content (13 kWh). Result: the electrical range has been increased to up to 56 km (WLTP). This means that most of the daily distances in the city can be covered emission-free. With the 160 kW / 218 PS plug-in hybrid drive - a combination of battery, DSG, electric motor and turbocharged petrol engine (TSI) - the saloon and estate already comply with Euro 6d emission standard, which will not apply to new cars until 2021. In addition, there are three fully fledged TSI engines with 110 kW / 150<sup>2</sup> PS, 140 kW / 190 PS<sup>1</sup> and 200 kW / 272 PS<sup>1</sup>. The new highly efficient turbo diesel engine 2.0 TDI Evo with 110 kW / 150 PS<sup>2</sup> is making its début in the Passat. The four-cylinder generates significantly less CO<sub>2</sub> than the comparable engine in its predecessor and is regarded as a pioneer of a new TDI generation. The 2.0 TDI Evo in the new Passat features a dual catalytic converter SCR system and dual Ad-Blue dosing on the emissions side. The three other Passat diesel engines develop 88 kW / 120 PS1, 140 kW / 190 PS1 and 176 kW / 240 PS1. All TSI and TDI units fulfil the requirements of the Euro 6d-TEMP emission standard. In addition, every new Passat - whether a petrol or diesel engine - is equipped with a particulate filter. The TDIs also have an SCR catalytic converter.

#### Plug-in hybrid drive with longer electrical range

Passat GTE and Passat Estate GTE. Volkswagen has significantly increased the electric range of the Passat GTE, which is equipped with a plug-in hybrid drive. According to WLTP measurements, the Passat GTE now covers up to 55 km (Estate) and 56 km (Saloon) respectively in both emission-free and



silent enhanced electrical driving mode. The purely electric range of the predecessor – determined as the NEDC value (New European Driving Cycle) – was 50 km. The new Passat GTE has a range of around 70 km in this cycle. The advantages of electric mobility and the qualities of a long-distance vehicle are merged in the new Passat GTE into one of the most efficient midrange models of our time.

Starting in E-MODE. The Volkswagen is designed to complete the short distances in urban areas purely electrically. That's why the Passat GTE always starts purely electrically in E-mode when the battery is sufficiently charged and thus becomes a zero-emission vehicle in urban regions. As a result of the greater zero-emissions radius, the new plug-in hybrid drive is particularly recommended to all motorists living in cities or commuting to work in cities as the ideal form of transport. Even in large cities such as Berlin or Paris, the 31 percent increase in the energy content of the battery from 9.9 kWh to 13.0 kWh is now enough to cover most daily distances electrically and thus emission-free. Thanks to a newly configured hybrid mode, it is now also much easier to store sufficient electrical energy even during long journeys in order to travel emission-free in the urban destination area.

Combination of electric engine and TSI engine. For longer distances and above 140 km/h, the powerful electric motor supports the Passat GTE's efficient petrol engine (TSI) with the objective of optimising drivability and efficiency. In this context, the more efficient interaction between electric motor and combustion engine boosts efficiency. Electric energy can be used in the Passat GTE for fully electric driving, but also to improve drivability. The electric thrust acts like an additional booster, unfolding its very own dynamic, especially in sporty GTE mode. The TSI engine delivers 115 kW / 156 PS. The electric motor generates precisely 85kW / 115 PS. This results in a system output of 160 kW / 218 PS. The new high-voltage battery – located in the vehicle floor in front of the rear axle – supplies the electric motor with power. Power electronics convert the direct current of the battery into alternating current for the electric motor. For power transmission, the



Volkswagen is equipped with an automatic 6-speed dual-clutch gearbox (DQ400E) developed especially for use in hybrid vehicles. The front axle is powered.

Newly configured hybrid mode. As outlined, the Passat GTE always starts in E-MODE if the lithium-ion battery is sufficiently charged. The high-voltage battery in the Passat GTE and Passat GTE Estate can be charged via the external electricity grid or via the internal TSI engine and recuperation during the journey. In order to be able to travel in E-MODE in town at the end of a longer trip, Volkswagen has reconfigured the operating modes of the hybrid system and therefore simplified battery recharging during the journey. Instead of the previous five operating modes, there are now only three:

- E-MODE (purely electric driving)
- GTE (sporty driving with full system power)
- Hybrid (automatic switchover between electric motor and TSI engine)

The two previous modes Battery Hold (maintaining battery charge level) and Battery Charge (charge battery via TSI) were integrated into the Hybrid mode in the new Passat GTE.

Hybrid mode – with scalable memory. To charge the battery while driving, the driver needs to activate the Drive mode selection menu either via the E-MODE button (next to the gear knob) or via the Infotainment system. E-MODE and Hybrid modes are available for selection here. If the Hybrid field is pressed, a battery scaled in ten stages (0 to 100 percent) appears; it indicates the current state of charge. The driver can intuitively identify the respective state of charge by the corresponding number of battery segments lit up in light blue; if the state of charge is 40 percent, for example, four segments would light up in light blue. Next to the battery is a symbol with two stylised gears. If the driver taps on this symbol, this switches it to manual mode. The battery's current state of charge is then maintained for the time being. As outlined, if the remaining energy content of the battery is 40



percent, four of the ten battery segments would light up. The driver now has the option of maintaining the state of charge (via the equal sign "=") or increasing it in 20 percent increments (up arrow "^") or lowering it to a defined level (down arrow "\"). If the driver selects "^" and increases to 80 percent (eight segments), for example, the battery is charged via the TSI and the brake energy is recuperated according to the set level on the scale; if, however, the driver selects "\" and only marks two segments, for example, the energy can be used up to the set minimum of 20 percent. Whenever route guidance is active the battery manager also predictively takes into account route data to guarantee you have the desired battery energy content available at the destination. In this process, battery use is adapted on the basis of the route data.

**E-MODE** – **zero emission vehicle**. As outlined, the Passat GTE starts automatically in E-MODE (unless the battery is not sufficiently charged or the temperature outside is extremely low, in which case the TSI engine is selected). The drive system will automatically switch to Hybrid mode once the battery reaches its minimum charge level or if very high performance is required. Using the E-MODE button, the driver can manually switch back to emission-free operation below 140 km/h when required. As the Passat GTE is almost noiseless in E-MODE, passers-by in the city are made aware of the car by means of electronic engine sound; the electronic engine noise is activated automatically when the ignition is switched on. The electronic engine sound can be deactivated via a switch in the lower part of the centre console – for example when manoeuvring at night in a residential area.

GTE mode – the sporty side of the Passat. The driver can use the GTE button to switch to GTE mode (to the left of the gear knob) and take full advantage of the Passat GTE's exceptionally agile characteristics. The driver will now immediately notice the enhanced dynamic performance of the accelerator pedal, gearbox and steering wheel. Furthermore, the TSI is calibrated to be more oriented toward performance. In GTE mode, the TSI and electric motor work together to provide an extra boost, enabling the vehicle to make full



use of the system power and benefit from maximum system torque. The sound also changes inside the vehicle, as GTE mode produces a corresponding GTE sound when activated. Finally, GTE mode tunes the vehicle chassis to make it tauter when used in conjunction with the optional adaptive chassis control (DCC).

Driving profile selection. Between the buttons for GTE and E-MODE mode, there is a button for optionally selecting the driving profile (vehicle symbol plus Mode lettering). The driving profile selection is not an exclusive feature of the Passat GTE. The Eco (supports an energy-saving driving style), Comfort, Normal, Sport and Individual (individual adaptation of various vehicle parameters) profiles are available for selection.

Charging by plug – with 2.3 or 3.6 kW. By default, the Passat GTE's battery is charged externally via an interface in the front end (plug-in). If the battery were completely empty, charging would be completed in five hours and 30 minutes\* when connected to the 230 volt electricity grid via the standard charging cable for 2.3 kW alternating current. The charging time falls to four hours and 30 minutes\* with a wall box or a charging station with 360 volts and optional charging cable for 3.6 kW alternating current (\* = preliminary values). The battery charger integrated in the car manages charging fully automatically; the driver only has to connect the plugs – plug and play in the best sense of the word.



Three TSIs with 150 PS, 190 PS and 272 PS

1.5 TSI with 110 kW / 150 PS<sup>2</sup>. The Passat's TSI engine, which delivers 150 PS between 5,000 and 6,000 rpm, offers pure high-tech – a four-cylinder turbocharged petrol engine with a displacement of 1.5 litres and variable Active Cylinder Management (ACT). The TSI is particularly agile and cultivated; in a speed range of only 1,500 rpm it develops its maximum torque of 250 Nm (up to 3,500 rpm). The NEDC consumption for the variant with a manual gearbox is 5.2 I/100 km (118 g/km CO<sub>2</sub>). The optional 7-speed DSG achieves 5.1 I/100 km and 117 g/km CO<sub>2</sub>. The corresponding values for the Estate: 5.3 I/100 and 121 g/km CO<sub>2</sub> (switch) and 5.3 I/100 and 120 g/km CO<sub>2</sub> (DSG). All Passat 1.5 TSIs are front-wheel drive.

**2.0 TSI with 140 kW / 190 PS.** In the next output stage Volkswagen uses a 2.0-litre TSI engine generating 140 kW / 190 PS (4,200 to 6,000 rpm). As a rule, this engine is also available in conjunction with a 7-speed DSG. This four-cylinder engine is characterised by a high maximum torque of 320 Nm, available within an ample engine speed range between 1,500 and 4,100 rpm. The Saloon with the 190-PS TSI engine reaches a top speed of up to 238 km/h. The combined NEDC consumption amounts to 6.3 I/100 km and the corresponding  $CO_2$  emissions total 144 g/km. The Passat Estate with this engine reaches a top speed of 232 km/h. Its NEDC consumption and  $CO_2$  values (combined) are: 6.4 I/100 km and 146 g/km.

**2.0 TSI with 200 KW / 272 PS.** The Passat's most powerful engine variant generates 200 kW / 272 PS (5,500 to 6,200 rpm). Just like in all other 2.0 TSI engines installed in the mid-range best-seller, its displacement is exactly 1,984 cm<sup>3</sup>. It delivers its maximum torque of 350 Nm as of 2,000 rpm and constantly maintains this high level up to 5,400 rpm. The top speed of the Saloon and Estate has been electronically limited to 250 km/h, which is also the top speed of the Passat Alltrack that is available with this engine. All versions within this output stage feature 7-speed DSG and four-wheel drive.



The Saloon's NEDC consumption value amounts to 7.0 I/100 km (corresponding  $CO_2$  emissions: 160 g/km). Respective values for the Passat Estate and Passat Alltrack: 7.1 I/100 km and 163 g/km.

Four TDI engines generating 120 PS, 150 PS, 190 PS and 240 PS

2.0 TDI Evo with 110 kW / 150 PS<sup>2</sup>. With an output of 110 kW / 150 PS, the new 2.0 TDI Evo (1,968 cm<sup>3</sup>) will become one of the most important high-volume engines of the Passat. The most recent assembly within the EA288 TDI engine family is anticipated to enhance the Passat's power unit range during the second half of the year. The output and torque development values differ slightly depending on the gearbox combination – either a manual 6-speed gearbox or an automatic 7-speed dual clutch gearbox (DSG). In conjunction with the manual 6-speed gearbox the unit generates its maximum output between 3,250 rpm and 4,200 rpm. The maximum torque of 340 Nm is available between 1,600 and 3,000 rpm. The version featuring 7-speed DSG generates 150 PS between 3,000 and 4,200 rpm and in this variant, the maximum torque increases to 360 Nm (between 1,600 and 2,750 rpm).

Technology of the 2.0 TDI Evo in detail: The four-cylinder Evo engine merges the thermodynamic benefits of 2.0-litre engines with the lower internal friction of 1.6-litre engines from the EA288 range. In terms of technology, the new TDI differs from the previous EA288 engines by elements including a so-called efficiency crankshaft group, a dethrottled intake section, dual-circuit thermal management as well as a dethrottled emission control module. The new efficiency crankshaft group is characterised by reduced main bearing and conrod bearing diameters as well as a new piston ring package. On-demand piston cooling nozzles, optimised valves and a fully variable oil pump represent other measures to reduce the engine's frictional loss. The engine's thermal dynamics have been improved by new steel pistons and extended conrods. The



gas exchange has become more efficient thanks to a reduction in exhaust gas back pressure, a dethrottled intake section and an optimised turbocharger. The engine's weight has additionally been cut thanks to the newly developed crankshaft. The new dual-circuit cooling (separate engine block and engine head cooling) is supplemented by enhanced thermal management: an on-demand main coolant pump and volume-flow controlled, electric coolant circulation pump guarantees added efficiency. Compared with the predecessor engine all measures result in a significant reduction in  $CO_2$  emissions. The 2.0 TDI Evo in the new Passat features a dual catalytic converter SCR system and dual AdBlue dosing on the emissions side. The consumption and emission values of the Passat 2.0 TDI Evo and Passat Estate 2.0 TDI Evo will be published upon market launch in the second half of the year.

**1.6 TDI** with 88 kW / 120 PS. The TDI engine with a displacement of 1,598 cm³ marks the start of the Passat's turbo diesel engine range. As a rule, this engine is available in combination with a 7-speed DSG. The engine generates its maximum output between 3,600 and 4,000 rpm and its maximum torque of 250 Nm is available between 1,600 and 3,250 rpm. With this engine, the Saloon reaches a top speed of 205 km/h (Estate: 199 km/h). The Saloon's combined NEDC consumption value is between 4.2 and 4.1 l/100 km (Estate: 4.4 l/100 km); NEDC CO<sub>2</sub> emissions total values between 109 and 107 g/km (Estate: 116 g/km).

2.0 TDI with 140 kW / 190 PS. The Passat 2.0 TDI with 190 PS is also available as standard with a 7-speed DSG. This engine can optionally also be combined with 4MOTION four-wheel drive. The 2.0 TDI engine generates its maximum output between 3,500 and 4,000 rpm. From 1,900 rpm the engine produces its maximum torque of 400 Nm and it maintains this high value up to 3,250 rpm. Combined NEDC values for the front-wheel drive Saloon amount to 4.5 I/100 km and 117 g/km CO<sub>2</sub> (4MOTION: 4.9 I/100 km and 129 g/km). The front-wheel drive Estate consumes 4.6 I/100 km and generates 120 g/km CO<sub>2</sub> (4MOTION: 5.0 I/100 km and 132 g/km). The independent



Passat Alltrack variant with permanent four-wheel drive is also available with the 190 PS TDI engine. Its combined consumption is 5.1 I/100 km and the  $\text{CO}_2$  value totals 133 g/km.

2.0 TDI with 176 kW / 240 PS. The 2.0 TDI with 240 PS (at 4,000 rpm) is the most powerful turbo diesel direct-injection engine within the Passat range. The engine's technology is characterised by a twin turbo module featuring a high-pressure and low-pressure turbocharger. Fitted with the top-of-therange TDI, the Saloon reaches a top speed of 247 km/h and the Estate delivers a top speed of 241 km/h. As a result of the high maximum torque amounting to 500 Nm (1,750 to 2,500 rpm) the Passat and Passat Estate generating 240 PS are equipped with 4MOTION four-wheel drive and 7-speed DSG as standard. Its low consumption values are remarkable in light of the high output: 5.8 I/100 (Saloon) and 5.9 I/100 km (Estate). CO<sub>2</sub> emissions: 151 and 156 g/km. This engine version is also available for the Passat Alltrack. Here are its corresponding top speed, consumption and CO<sub>2</sub> emission values: 239 km/h, 5.9 I/100 km and 157g /km.

#### Adaptive chassis control (DCC) perfects comfort and dynamics

Individually configurable "DCC". The new Passat is optionally available in connection with the adaptive chassis control DCC (standard for some engine variants). The DCC system has also been further developed so that drivers can more individually customise the system to their personal driving style and comfort requirements. The newly tuned dampers can now also be continuously configured over an extended range – in parallel to the familiar settings ("Comfort", "Normal," and "Sport"). Using a slider, it is possible to set a personalised DCC mode individually and precisely over the whole range and then save this. Intermediate settings are therefore now also possible as a result. The known adjustment range is supplemented with new levels: the vehicle body is decoupled to its maximum extent below Comfort and vehicle comfort is enhanced further. Above Sport, there is an extended range with



maximum damping for minimised body movement and particularly direct vehicle reactions.



#### Integrated assistance and lighting systems

New assistance systems enable partially assisted driving

**IQ.DRIVE**. With the new IQ.DRIVE umbrella brand, Volkswagen bundles up the driver assistance systems of today and tomorrow on a path towards autonomous driving. The new Passat boasts the most advanced versions of IQ.DRIVE. The innovative network behind the systems makes the Volkswagen, which is tailored to the needs of high-mileage drivers, more comfortable and safer than ever before.

Partially assisted up to 210 km/h. The new assistance systems in the Passat include Travel Assist, Emergency Steering Assist, and ACC with predictive cruise control. The Travel Assist feature, available in a Volkswagen for the first time, allows for partially assisted driving across practically the whole speed range up to 210 km/h – a milestone on the way to autonomous driving. An integral part of Travel Assist is the ACC with predictive speed control. The adaptive cruise control reacts to speed limits, towns, bends, roundabouts and junctions with corresponding speed adaptation.

Armada of assistance systems. The IQ.DRIVE spectrum is supplemented by known technologies which are partially integrated in the new assistance systems. These include the lane change system Side Assist plus Rear Traffic Alert, the lane keeping system Lane Assist, Front Assist with Pedestrian Monitoring, the trailer manoeuvring system Trailer Assist, and the Park Assist system. If the driver no longer reacts for health reasons, Emergency Assist takes over. The system brakes the Passat to a standstill.



#### **Travel Assist**

Partially assisted up to 210 km/h. Like with Traffic Jam Assist, the Adaptive Cruise Control (ACC) is responsible for longitudinal guidance in Travel Assist, while the Lane Assist adaptive lane guidance system handles lateral guidance Whereas this automatic longitudinal and lateral guidance system was only available up to a maximum of 60 km/h in connection with Traffic Jam Assist, the Travel Assist option in the new Passat enables partially automated driving up to 210 km/h. Travel Assist is activated via the multifunction steering wheel in a matter of seconds with a single button on the left-hand steering wheel clip. If Travel Assist is active, it enables partially assisted driving on Level 2 of the spectrum of the official degrees of automation between 0 and 5. The driver must permanently monitor the system in Level 2 for legal and safety reasons. To ensure this, Travel Assist monitors whether the driver has hands on the steering wheel. This is more convenient in the new Passat than ever before as a direct result of the first capacitive steering wheel from Volkswagen. It is now sufficient that the driver merely touches the steering wheel; the capacitive surface recognises that the driver is still controlling the vehicle by means of 'hands-off detection'. In the past, feedback was required from the driver in the form of a slight movement of the steering wheel. Furthermore, the following applies: if the driver lets go of the steering wheel for more than around 10 seconds, then a series of warning signals (visual, acoustic, braking jolt) are issued. The driver must react by this point at the latest and touch the steering wheel, otherwise Emergency Assist is activated and the Passat is automatically brought to a stop.

#### New electromechanical brake servo as standard

**Optimised for short braking distances.** Volkswagen has considerably enhanced the electromechanical brake servo. The system, previously used only in the GTE with plug-in hybrid drive, can now be found across the whole product line as standard. This is a considerable improvement in comfort and



safety. On the one hand, the electromechanical brake servo ensures that the Passat's brakes react even quicker. Furthermore, the new electromechanical brake servo also improves assisted driving – with tremendous benefits: Adaptive Cruise Control ACC reacts in a more effective manner, as braking interventions with the electromechanical brake servo can be controlled more precisely. In conjunction with "Front Assist" including pedestrian detection, a standard feature in the Passat, the braking distance is cut by up to 33 percent (within system limits) as part of a deceleration manoeuvre from 30 km/h to 0 km/h. In an ideal scenario, the risk of an accident involving a pedestrian and the impact speed both fall considerably.

#### **ACC** with predictive cruise control

Partially assisted longitudinal guidance. The latest generation of adaptive cruise control – ACC – incorporates predictive cruise control. Up until now, the system in the Passat was a pure Adaptive Cruise Control system: just set the desired speed – braking and accelerating was then carried out by the Adaptive Cruise Control. This proven feature will also be offered in the new Passat. From now on, the new, predictive ACC will be available as an additional option. In combination with the navigation system and Dynamic Road Sign Display, the system can also react to variable parameters such as speed limits.

Integrated sensors. ACC with predictive cruise control calculates the vehicle position based on the route and GPS data and reduces the vehicle speed before reaching bends, roundabouts, junctions, speed limits and towns. At the same time, ACC accesses the Dynamic Road Sign Display via the front camera (new generation MFK 3.0) and adjusts the speed as soon as a speed limit is detected. On leaving an area with a lower speed limit, ACC once again automatically accelerates the Passat with predictive cruise control until it reaches the maximum speed limit valid for a given section of road. The radar sensor from the current ACC takes over the safety function in the front and



adapts the distance to the vehicle in front. If the Passat is fitted with DSG, the ACC becomes a traffic jam and stop-and-go assistant, as the vehicle also moves off again automatically when equipped with the dual clutch gearbox. The latest generation ACC is no longer a passive system. Instead, it is an active system that improves convenience and safety. The driver can override the predictive ACC at any time by operating the accelerator pedal or brake.

#### **Lane Assist**

Partially assisted lateral guidance. The Passat is offered with the Lane Assist lane keeping system as standard. The system correctively steers if the vehicle is about to leave the lane. Lane Assist recognises the relevant road lane markings using a camera that is integrated at the top of the windscreen. The new MFK 3.0 multifunction camera is used in the Passat to further improve lateral guidance. Background: the system can recognise both grass and the boundary lines of the lane via the newly integrated "Road Edge Recognition" system.

#### **Emergency Steering Assist**

Evasive manoeuvres become safer. The new Emergency Steering Assist in the Passat is available for the first time ever in a Volkswagen. It is automatically activated as soon as the driver has to avoid an obstacle. If the radar sensor integrated in the front end of the Passat recognises an obstacle, then the driver will be visually and acoustically warned about a collision. A typical example of such a situation is a vehicle driving on a country road before braking to a sudden stop. The driver behind intuitively carries out an evasive manoeuvre in response. Such evasion is more agile and controlled in the new Passat due to targeted braking intervention from the assistance system. The vehicle is also stabilised when quickly pulling back into lane and potential turning in is prevented within the system limits. The new Emergency Steering Assist enhances active safety on country roads and motorways.



#### Intelligent lighting systems look ahead

IQ.LIGHT LED matrix headlight. The Passat is the second model after the current Touareg to be equipped with the new IQ.LIGHT LED matrix headlights as optional equipment. Amongst other things, they impress with interactive light control that makes night driving more comfortable and safer. The LED headlights use a matrix made of light dots - individual LEDs that can be activated. Dipped beam and main beam are generated via two LED projection systems. The inner module has seven LEDs for basic illumination; an additional main beam is also realised via five additional LEDs. The outer module is the interactive LED matrix headlight – known as a pixel module. Its light is generated via a total of 32 individually controllable LEDs on a printed circuit. They form the LED matrix. The turn signal, daytime running light, and side light are also realised with LEDs. The LEDs on the turn signal with their "wipe" effect are arranged as a narrow horizontal stripe at the top within the headlight. If the turn signal is inactive then they form the daytime running light, supplemented by four additional LED elements that can be found in the LED projection systems. The LEDs in the daytime running light also form the side light when dimmed. The LED matrix system can be recognised by the IQ.LIGHT logo on the outside of the headlight housing.

Interactive light functions. Various, partially interactive light functions are activated via a total of 44 LEDs in both projection systems. The responsible control unit uses signals from the front camera, the digital map data of the navigation system, the GPS signals, the steering angle as well as the current speed to precisely activate the individual LEDS for optimum light in fractions of a second. The driver activates the automatic continuous main beam function via Dynamic Light Assist by simply pushing the left-hand steering column switch forwards. The rest – dimming, main beam activation, city lighting, motorway light – is done by the Passat. Automatically. As the new matrix headlights operate with the highest light output, people, objects, other vehicles and animals are made visible that would be less recognisable and less visible previously with conventional headlight systems. The new IQ.LIGHT



LED matrix headlights offer a total of eight light functions: city lighting, dipped headlight, motorway light, dynamic cornering light, partial matrix main beam, main beam headlights, sign glare control and a travel mode (when driving in countries with left-hand traffic).

#### **LED tail light clusters**

Distinctive switchover function. LED technology is used for the new tail light clusters in the Passat as standard. The design and the LED contours give the rear area a distinctive night time light signature. In the top-of-the-range version of the full LED tail light clusters, the inner LED elements create six small angles known as wings. They are bordered by LED strips for the tail light (above, below, outside) and a LED strip for the turn signal (right at the top). The three wings for the tail light function are aligned with the longitudinal side facing downwards, and the three wings for the brake light face upwards. If the brake is actuated, then the three LED tail light wings switch off and the three LED brake lights switch on – resulting in a recognisable click-clack effect. This feature was taken directly from the Touareg and is only provided by Volkswagen. As is the case with the LED matrix headlights, the LED tail light clusters in the top version are also equipped with a wiper function for the turn signals.

Coming Home / Leaving Home animation. Last, but not least, an animation as a Coming Home and Leaving Home scenario runs when opening and closing the Passat in the dark. To begin with, the turn signal starts by wiping twice in an in-and-out motion, then the three red LED tail light cluster wings are activated, followed by the red LED peripheral areas on the tail light clusters. All red LEDs then go out in succession after the animation has finished.



#### LED technology in standard equipment

**LED** as standard in the Passat. LEDs are the preferred light source even in the basic variants. The dipped beam and main beam as well as the daytime running lights and side lights are realised with daylight white LEDs in the standard headlight. Furthermore, the combined fog and cornering light in the bumper optimises visibility using LED technology. The tail light clusters at the rear are equipped exclusively with LEDs.



#### **Connected community**

A new generation of Infotainment and entertainment systems

More digital, more networked, more intuitive. Volkswagen has largely digitalised the world of operation and information in the new Passat as the first brand model to be fitted with the third generation of the Modular Infotainment Matrix (MIB3). At the same time, the Passat also features the latest development stage of the Digital Cockpit; the digital instruments and the Infotainment systems of the MIB3 are merged into a new unit. On request, MIB3 systems in the Passat can also be "always on" via the online connectivity unit (OCU) as it features its own eSIM. This OCU is the interface to Volkswagen We for the vehicle and all passengers on board – and thus a new Internet-based world of mobility with numerous mobile online services as standard.

#### **Digital Cockpit**

Considerably easier to use. The new Passat optionally offers the second generation of the Volkswagen "Active Info Display": the new "Digital Cockpit". The digital instruments have been considerably enhanced compared with the previous system. The display graphics are clear and high-quality. The range of functions has been lifted to a whole new level. The 11.7-inch Digital Cockpit provides better graphic performance, greater pixel density, improved brightness and contrast as well as more intense colours. The driver can also quickly and easily switch between three basic layouts via a View button on the multifunction steering wheel:

**Layout 1 / dials.** RPM (left) and speed (right) are shown interactively in round instruments. Information fields can be freely configured within the dials. An individually customisable display is shown in the middle between the rev counter and speedometer.



**Layout 2 / information fields.** The driver can click the View button to change to a digital view without dials and with configurable information fields. A freely customisable display is integrated in the middle once again.

**Layout 3** / **display with a function.** Another click means the map is shown across the whole display. Information such as the speed is shown at the bottom of the screen.

#### Third-generation Modular Infotainment Matrix

Optionally always online. The third generation of the Modular Infotainment Matrix (MIB3) has been enhanced in several areas. Upon market launch, the "Discover Media" (8.0 inch) and "Discover Pro" (9.2 inch) MIB3 radio navigation systems will be available. The "Composition" (6.5 inch) radio system is also used in the model range. The new systems' most important distinguishing feature is the online connectivity unit including integrated eSIM. This means the Passat can, if desired, be permanently online as soon as the driver has registered it in the Volkswagen system. This is shown in the display by a small globe, which changes colour as soon as the system is live. The OCU has several advantages. It means mobile online services including "We Connect", "We Connect Plus" and "We Connect Fleet" are available in the Passat (see Section entitled "Volkswagen We" from page 36 for more details). For instance, it is now generally possible to access mobile online services as well as streaming services for music in the vehicle without a paired smartphone or an additionally installed SIM card. Volkswagen bears the costs for data transfers (exception: data costs for streaming services).

**New Home screen.** The intuitively controllable menu navigation in the MIB3 systems has been evolved and partially rebuilt. With the Discover Pro system, for example, the driver can control practically all features of the Infotainment system on two clear levels via a reconfigured Home screen. These include the following menu items: "Ambient lighting", "App-Connect", "Apps and services", "Auxiliary heater", "Images", "e-Manager" (Passat GTE), "Driver



assistance", "Vehicle", "Help" (support during operation), "Air conditioning", "Sound", "Media Control", "Media", "Navigation", "User/user management", "Radio", "Setup" and "Telephone". The driver simply configures the desired selection and arrangement of functions - just like the apps on the screen of a smartphone. That's it. This means operating the Passat is simpler than ever before. At this point, Volkswagen has transferred more new technologies from the Touareg to the Passat, as the design of the screen interface was taken from the latest top SUV model. You can also individually configure the arrangement of menu items in the main menu.

New navigation menu. The navigation menu has also been reconfigured. The primary goal was to design a menu which is as intuitive as possible. For this reason, there are now four small symbols on the left-hand side that the driver can access: Destination Import, Last Destinations, Trip Overview (interactive map) and Favourites (stored destinations). The Trip Overview is a completely new feature: when the navigation system is activated and the map view is fully opened, a stylised route (vertical bar) can be seen on the left-hand side as a trip overview. The traffic flow and the points of interest (POI) are shown via online traffic data along with any expected delays as a result. If the driver touches a POI - such as a restaurant - then relevant details are shown. It is possible from the POI display, for example, to directly call to reserve a table.

**Streaming services.** For the first time, drivers can listen to streaming music services such as Apple Music or TIDAL directly from the built-in infotainment display after linking their respective accounts. The in-car internet data required for streaming and Internet services can be purchased directly via the Infotainment system from Volkswagen's partner Cubic Telekom or alternatively provided via Wi-Fi tethering.

**Online radio and Wi-Fi hotspot.** Online radio stations will be available via the Internet Radio service in addition to FM, AM, and DAB stations. This



means you can listen to your favourite stations from all over the world. Passengers can also connect their smartphone, tablet, e-book reader, or similar devices to the Internet via a Wi-Fi hotspot. Natural voice control is additionally enhanced thanks to the online connection. Important for business users: if a smartphone is paired, text messages can be dictated and received messages are also read out by the Infotainment system.

App-Connect Wireless. For the first time, Volkswagen "App Connect" - which lets drivers access select smartphone apps directly from the built-in infotainment display - now also enables wireless Apple CarPlay. Using Apple CarPlay wirelessly with iPhone is as easy as using Bluetooth, connecting automatically when the driver enters the Passat. Compatible smartphones can also be charged inductively (i.e., wirelessly) via the new storage compartment with an interface for smartphones in the centre console.

Natural voice control. "Hello Volkswagen" – this short call is sufficient for the Passat to respond to natural spoken commands. With "Yes, please?" the Passat answers that it is ready. All major features for navigation, telephone and radio can be operated using speech. This kind of natural voice control is possible because the input voice signals are processed and recognised via a cloud; it goes without saying that voice control also works in a simpler mode when offline. Thanks to the online connection, both the driver and passen-gers can access up-to-date information and intelligent navigation data by voice command. Inputs are as intuitive as you would expect from current devices in the consumer sector and from smartphones.

#### Dynaudio sound system - specially adapted to the Passat

**Perfect sound.** The new Passat is optionally available with one of the best sound systems in its category: Dynaudio Confidence. It is available in combination with the Discover Media and Discover Pro Infotainment systems. Dynaudio has adapted the 700-watt sound system to the interior of the



Passat even more individually in a complex process. The objective in this process was to generate top-notch audiophile quality regardless of the music source.

Sound from Denmark. The loudspeakers of the sound system were specifically developed, intensively tested and adapted to the Passat at the Danish Dynaudio plant in Skanderborg. The Passat's loudspeakers are also produced in Skanderborg. They involve elements including a Dynaudio in-house development, magnesium silicate polymer (MSP), that is also used around the globe for the brand's high-end hi-fi studio loudspeakers. A total of twelve Dynaudio loudspeakers have been integrated into the Passat's vehicle interior. Ten loudspeakers with a low self-resonance have been installed in the doors: one bass speaker, mid-range speaker and treble loudspeaker each per front door and one bass speaker and treble loudspeaker in each rear door. The system is supplemented by a central loudspeaker in the mounting frame as well as a subwoofer in the luggage compartment. Dynaudio has also evolved its digital 16-channel amplifier. The system employs an internal, digital signal processor (Digital Signal Processing, DSP) to integrate each loudspeaker at its ideal output level. Thanks to DSP it is also possible to implement optimised sound, regardless of where occupants are sitting.

Volkswagen We is the new umbrella brand for mobility products

MIB3 and Volkswagen We as one unit. Mobility is rapidly changing. It is becoming more networked, service-oriented, personalised, and increasingly puts the focus on people. The new Passat sets standards in this regard: thanks to the third Modular Infotainment Matrix generation, it offers new hardware and software as an online interface to the interactive world of information and service offerings. The company's latest development – Volkswagen We – is a digital platform that offers and supplies bundled mobility products in a simple manner. It is an open system that is continuously



being enhanced. As an entire ecosystem, Volkswagen We combines different areas of use: in and on the vehicle, between the vehicle and smartphone, and in the interaction between vehicles and users and the world of information and offers in which they all move. Once they have logged in, customers are provided with their Volkswagen ID they can now use to access online services including We Connect and We Connect Plus.

**In-Car Shop.** Data plans for use of streaming services or the Wi-Fi hotspot can be booked and also renewed via the Infotainment system. These are provided by the Volkswagen mobile phone partner Cubic Telekom – an innovative technology start-up from Dublin. The same approach can be used in this In-Car Shop to download apps such as We Park and We Experience in order to use them as an extended feature of the Infotainment system in the future. App updates and additional vehicle functions will also be available to download at a later point. In addition, the extension of We Connect Plus can also be purchased via the In-Car Shop.

We Connect in the Passat. An ever-increasing range of online services is covered via We Connect. We Connect comes as standard in the Passat and is active indefinitely. Its functions in the Passat include mobile key, (depending on equipment/using a smartphone to open and start the Passat), Breakdown Call, Information Call, Emergency Call Service, Vehicle Status, Doors & Lights, Automatic Accident Notification, Vehicle Health Report, Driving Data, Parking Position, Service Scheduling, Personalisation, In-Car Apps in the In-Car Shop and a Wi-Fi hotspot. We Park and We Experience can be directly purchased and installed as in-car apps via the Infotainment system.

We Connect Plus in the Passat. We Connect Plus is offered as an optional vehicle-related premium package with even more features to choose from. In Europe "We Connect Plus" is also available as standard for a period limited to between one and three years (depending on the equipment; it can be extended). In addition to We Connect services, it also includes the following functions depending on the vehicle's equipment: Area Alert, Speed Alert, Horn & Turn Signals, Online Anti-Theft Alarm, Online Auxiliary Heater, Lock



& Unlock and, for the Passat GTE, Departure Times, Air Conditioning and Charging (controlled via e-manager). The We Connect Plus functions also include Online Traffic Information plus hazard information, Online Route Calculation, Filling Stations, Charging Stations, Online Map Update, Parking Spaces, Online Voice Control, Internet Radio, "Apple Music", TIDAL and the Wi-Fi hotspot.

We Connect Fleet in the Passat. For commercial customers with their own fleets, Volkswagen has developed "We Connect Fleet", a digital fleet management system, including features such as a Digital Logbook, Digital Refuelling Log, Driving Efficiency, GPS Tracking & Route Information, Consumption Analyser and Service Manager. This reduces maintenance, saving both time and money. The preparation for online services suitable for fleet management can be ordered ex works in Germany. Consequently, the vehicle has been prepared for "We Connect Fleet" and services are available after having activated them once.

Cloud-based personalisation. Together with We Connect, the smartphone becomes a remote control and a mobile information centre. Locking the car from a distance with the smartphone, accessing vehicle information such as the remaining range, or locating your car or the vehicles in a fleet – all can be done via smartphone. No matter whether We Connect or We Connect Plus: the user sets up access to all services and information within this networked architecture just once via their own Volkswagen ID. This gives the user access to all conceivable online services. With the Volkswagen ID, the user can even be identified in future in a different vehicle via cloud-based personalisation. The Passat will automatically activate many personal settings in this case.

**Mobile key.** The smartphone will become the vehicle key in the future. We Connect is the interface for this today in the new Passat. The smartphone is set up for this purpose via the We Connect app, then authorised via the Infotainment system and one-time passcode. The mobile key will be compatible with the majority of Samsung devices. No mobile network connection is



required to use the smartphone as a mobile key. It is sufficient to place the smartphone near the door handle in the same way as the keyless locking and starting system Keyless Access opens the Passat. To start the engine, the smartphone is placed in the new compartment with interface in front of the Passat's gear knob. Furthermore, it is also possible to send the mobile key to friends or family so that they can also use their smartphone as a key for the car.

We Park. We Connect in the new Passat changes the face of day-to-day mobility. The We Park online service means there's no need for drivers to fill a parking meter with coins after having found a parking space. We Park in the new Passat handles payment of parking fees for the first time directly via the Infotainment system. As a result, the Passat has the parking meter on board. This is also the case with the We Park app. Parking fees are calculated to the minute and cent on a monthly and cashless basis. Staff checking parking tickets can tell that the vehicle is participating in this online service via the registration number and the "We Park" sticker. If the parking time is running out, then the We Park app issues an early reminder. It also shows where the vehicle is parked. Getting a parking ticket for parking too long is certainly a thing of the past with We Park. We Park is currently also available in 134 German cities. As early as this year, the first cities in Spain and the Netherlands will also be added.

We Deliver and We Experience. With new services such as We Deliver, the Passat becomes the recipient of supplies and services. This means, for example, that ironed shirts from the dry cleaners (Jonny Fresh as service provider), flowers from the florist or purchases from a delivery service can all be delivered there. Access to the luggage compartment and GPS data for locating the Passat is obtained temporarily by We Deliver service providers for a delivery. In the same way, it is now possible for the Passat to be cleaned at its location by a service provider (MyCleaner) to save time going to the nearest car wash. The future We Experience service will demonstrate that the past analogue and future digital worlds can fuse to create a new present. We



Experience is implemented in the Infotainment system, and it provides tips such as customised options for restaurants, shops or filling stations along the route upon request. In this process, the available range of services stretches from fuel discounts to restaurant recommendations and service offers including car washes. These recommendations are provided on the basis of an intelligent and situation-based pool of vehicle data, GPS location and already preferred offers. For instance, ten current retail partners include Shell, Tank & Rast, Domino's and MyCleaner. We Experience and We Deliver will first be on board for the market launch of the Passat in Germany and Spain.

External partners welcome for We Deliver and We Experience. Volkswagen We is looking forward to working with large or smaller local partners who want to develop new offers. One thing is certain: this is just the start. With the large volume of the Passat and other best-sellers in this class, "Volkswagen We" has the potential to attract a constantly increasing number of retail partners and thus become even more relevant to "Volkswagen We" ecosystem customers.



#### **Technical data**

Consumption and emission values at a glance

Passat 2.0 TSI, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 8.3 / extra-urban 5.2 / combined 6.3; CO2-emissions combined in g/km: 144, efficiency class: C.

Passat 2.0 TSI 4MOTION, 200 kW/272 PS, fuel consumption in I/100 km (NEDC): urban 8.9 / extra-urban 5.9 / combined 7.0; CO2-emissions combined in g/km: 160, efficiency class: C.

Passat 1.6 TDI, 88 kW/120 PS, fuel consumption in I/100 km (NEDC): urban 4.6 / extra-urban 3.9-3.8 / combined 4.2-4.1; CO2-emissions combined in g/km: 109-107, efficiency class: A+.

Passat 2.0 TDI, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 5.2 / extra-urban 4.0 / combined 4.5; CO2-emissions combined in g/km: 117; efficiency class: A.

Passat 2.0 TDI 4MOTION, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 5.8 / extra-urban 4.4 / combined 4.9; CO2-emissions combined in g/km: 129; efficiency class: A.

Passat 2.0 TDI 4MOTION, 176 kW/240 PS, fuel consumption in I/100 km (NEDC): urban 6.8 / extra-urban 5.1 / combined 5.8; CO2-emissions combined in g/km: 151; efficiency class: B.

Passat Variant 2.0 TSI, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 8.4 / extra-urban 5.3 / combined 6.4; CO2-emissions combined in g/km: 146, efficiency class: C.

Passat Variant 2.0 TSI 4MOTION, 200 kW/272 PS, fuel consumption in I/100 km (NEDC): urban 9.0-8.9 / extra-urban 6.1 / combined 7.1; CO2-emissions combined in g/km: 163, efficiency class: C.

Passat Variant 1.6 TDI, 88 kW/120 PS, fuel consumption in I/100 km (NEDC): urban 4.8 / extra-urban 4.2 / combined 4.4; CO2-emissions combined in g/km: 116, efficiency class: A.

Passat Variant 2.0 TDI, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 5.3 / extra-urban 4.2 / combined 4.6; CO2-emissions combined in g/km: 120; efficiency class: A.

Passat Variant 2.0 TDI 4MOTION, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 5.8 / extra-urban 4.6 / combined 5.0; CO2-emissions combined in g/km: 132; efficiency class: A.

Passat Variant 2.0 TDI 4MOTION, 176 kW/240 PS, fuel consumption in I/100 km (NEDC): urban 6.9 / extra-urban 5.4 / combined 5.9; CO2-emissions combined in g/km: 156; efficiency class: B.

The new Passat / vehicle presentation / Volkswagen / June 2019



Passat Alltrack 2.0 TSI 4MOTION, 200 kW/272 PS, fuel consumption in I/100 km (NEDC): urban 9.0 / extra-urban 6.1 / combined 7.1; CO2-emissions combined in g/km: 163, efficiency class: C.

Passat Alltrack 2.0 TDI 4MOTION, 140 kW/190 PS, fuel consumption in I/100 km (NEDC): urban 5.8 / extra-urban 4.6 / combined 5.1; CO2-emissions combined in g/km: 133; efficiency class: A.

Passat Alltrack 2.0 TDI 4MOTION, 176 kW/240 PS, fuel consumption in I/100 km (NEDC): urban 6.9 / extra-urban 5.4 / combined 5.9; CO2-emissions combined in g/km: 157; efficiency class: B.

Passat GTE: This vehicle is a nearly production-ready concept car.

Passat GTE Variant: This vehicle is a nearly production-ready concept car.

Passat 1.5 TSI Evo: This vehicle is a nearly production-ready concept car.

Passat 2.0 TDI Evo: This vehicle is a nearly production-ready concept car.

All TSI vehicles are fitted with a petrol particulate filter.

All TDI vehicles are fitted with a diesel particulate filter and SCR catalytic converter.