Electric powertrain: three battery sizes and five power levels

- **First ŠKODA production model based on the modular electric car platform with a rear motor and rear-wheel drive or with two motors and all-wheel drive**
- **Fast charging and a range of more than 520 km* in the WLTP cycle thanks to outstanding aerodynamics**
- **Sustainable driving pleasure and optional sports chassis for particularly agile handling**

Mladá Boleslav, 29 March 2021 – Three battery sizes, five power levels and rear- or all-wheel drive with one or two electric motors: offering a wide range of powertrain variants, the new ŠKODA ENYAQ iV caters to many different requirements. The first ŠKODA MEB-based model fully exploits the diverse technical possibilities the Volkswagen Group platform has to offer. The ENYAQ iV is sustainable, fun to drive, impressively agile and – thanks to excellent aerodynamics – highly efficient. Requiring little time to recharge and offering ranges of more than 520 km* in the WLTP cycle, it is also ideal for covering long distances. The brand's first electric SUV is produced at ŠKODA's main plant in Mladá Boleslav, making it the only MEB-based model in Europe to be built outside of Germany.

The new ENYAQ iV is an agile and efficient family car with plenty of space. Offering great mileage and fast charging, it is also the perfect long-distance vehicle for people who spend a lot of time on the road. The ENYAQ iV is equally appealing as a sustainable sports car that is fun to drive with its impressive performance. With three battery sizes, five power levels and rear- or all-wheel drive, every customer will find the right model to meet their needs.

All-new vehicle concept

When creating the ENYAQ iV, ŠKODA used the Volkswagen Group's MEB modular electric car platform, applying an all-new vehicle concept. The entry-level variants with rear motor and rear-wheel drive have been technically inspired by well-known models from the brand's history. The electric motor is integrated into the rear axle and drives the rear wheels via a single-speed gearbox. Front-wheel-drive ŠKODA vehicles with a conventional transverse-mounted combustion engine either come with a manual gearbox with up to six speeds or a DSG with up to seven speeds. In contrast to an internal combustion engine, these gear ratios are not necessary for an electric motor as the maximum torque is available straight away and consistently across a wide speed range. A single speed is therefore sufficient for all types of driving situations; to reverse, the direction of rotation of the electric drive system is simply reversed using the power electronics. Compared to a conventional transmission, a single-speed gearbox is lighter and more compact, requiring less space. The more powerful variants of the ENYAQ iV are fitted with a second electric motor on the front axle and are therefore four-wheel drive. The air conditioning, heating and optional heat pump are also located directly on the front axle. Due to their design, an exhaust system with catalytic converters or particulate filters is obsolete for all-electric vehicles.

Battery modules in the floor

Whereas a ŠKODA model with an internal combustion engine requires fuel, which is stored in a tank under the rear seats, the ENYAQ iV is powered by high-voltage batteries located between the front and rear axles in the floor. Depending on the capacity, the battery consists of several modules, each containing 24 lithium-ion cells. They have a power output of up to 125 kW and are capable of

fast charging. The ENYAQ iV's largest battery can be recharged from 5 to 80% in 38 minutes. The ENYAQ iV can be conveniently charged overnight at home using an AC ŠKODA iV Charger wall box delivering up to 11 kW. The charging process for this takes six to eight hours, depending on the battery size. It will take roughly the same time when charging the car at a public AC station with the same maximum output. To this end, the ENYAQ iV comes equipped with a Mode-3 charging cable as a standard. The SUV can also be recharged with 2.3 kW using a standard 230-volt household socket. The optional Mode-2 charging cable of the ENYAQ iV fits all conventional charging sockets. The iV Universal Charger – a mobile solution with interchangeable connector plugs – is available as an optional extra. Using the CEE adapter, the vehicle can be recharged with up to 11 kW; a Schuko adapter for household sockets is another optional extra.

Catherine Lee Oppenheimer, Battery Development Engineer at ŠKODA AUTO, said: "The batteries for the ENYAQ iV are about half a metre long and, depending on their capacity, weigh between 350 and 500 kg. They are developed and produced at Volkswagen Group and consist of state-of-the-art battery technology. Of course, these batteries differ greatly from the ones we are familiar with – such as those in our laptops – in terms of their capacity, lifespan and level of safety. The design is based on what is known as pouch cells. These battery packs consist of several active layers that are stacked or folded and enclosed by a flexible outer film. Pouch cells feature a high degree of flexibility regarding their shape and can be ideally adapted to the respective requirements. Furthermore, they dissipate heat particularly well thanks to their smooth surface."

Five power levels, three battery sizes and rear- or all-wheel drive
The ŠKODA ENYAQ iV is available with three battery sizes and in five different power levels. The two most powerful models feature all-wheel drive thanks to a second electric motor on the front axle. The entry-level ENYAQ iV 50 is fitted with a 109-kW rear-mounted engine and rear-wheel drive; its maximum torque is 220 Nm. Its lithium-ion battery has a capacity of 55 kWh, of which 52 kWh can be used. The maximum range is more than 350 km*. The combined consumption is 15.2–20.9 kWh/100 km in the WLTP cycle. Equipped with a 62-kWh battery (58 kWh net), the ENYAQ iV 60 with an output of 132 kW can cover more than 400 km*. Its maximum torque is 310 Nm. The combined consumption is 14.6–17.6 kWh/100 km in the WLTP cycle. The ENYAQ iV 80 delivers 150 kW, has a maximum torque of 310 Nm and, at over 520 km* in the WLTP cycle, boasts the longest range in the series. The combined consumption is 15.2–21.6 kWh/100 km in the WLTP cycle. Its 82-kWh battery (77 kWh net) is also used by the two all-wheel-drive variants. Fitted with a second electric motor, the ENYAQ iV 80x produces 195 kW and the ENYAQ RS iV 220 kW. The system torque is 425 and 460 Nm respectively, the range more than 500 and 460 km*. As the sporty range-topping model, the ENYAQ RS iV has a top speed of 180 km/h, which is 20 km/h faster than the other variants in the series. It completes the sprint from 0 to 100 km/h in just 6.2 seconds*. The ENYAQ iV 80x and ENYAQ RS iV can also tow a trailer weighing up to 1,400 kg.

Excellent handling characteristics and optional sports chassis
With its low centre of gravity due to the battery installed in the floor, the ŠKODA ENYAQ iV is very safe to drive and has excellent handling characteristics. The electric SUV is even more dynamic on the road when fitted with the optional sports chassis. In addition to a firmer suspension, this option lowers the front axle by 15 mm and the rear by 10 mm. Adaptive Dynamic Chassis Control (DCC) is another option. This feature continuously assesses the driving situation and adjusts the damping and steering accordingly. The basic settings – Eco, Comfort, Normal and Sport – can be chosen in

Driving Mode Select, while in the Individual mode, these can be fine-tuned in 15 steps using a slider. The ENYAQ iV's agility is impressive, as it has no conventional transmission shafts on the front axle, unlike a vehicle with an internal combustion engine. With a turning circle of just 9.3 m in the rear-wheel-drive variant, it beats the ŠKODA KODIAQ by 2.3 m. This manoeuvrability is particularly useful in the city.

Highly effective and efficient brake energy recovery

Brake energy recovery in the ŠKODA ENYAQ iV ensures excellent deceleration and supports the vehicle's braking system. This increases efficiency and mileage, as the energy released during braking is not lost in the form of heat, but is converted into electric energy and fed into the battery. This means that the electric motor acts as a generator. For the driver, this process is most convenient in automatic recuperation mode. In combination with the intelligent Traffic Sign Recognition feature and data from the camera and radar sensors, the ENYAQ iV adjusts the degree of recuperative braking in each respective driving situation – automatically, continuously and particularly efficiently. This reduces the use and therefore the level of wear of the brakes, saves energy and increases driving safety. Using the paddles on the steering wheel, the driver can manually adjust the degree of recuperation and with it the level of braking assistance at any time. As soon as the driver steps on the accelerator, the automatic mode is reactivated. In regular driving mode D, the driver can manually set three recuperation levels using the paddles: D1 for a mild braking effect with a deceleration of 0.6 m/s², D2 with 1.0 m/s² and D3 with 1.5 m/s². Level D3, which is also activated directly by sliding the selector switch to mode B, provides the maximum delay. If no recuperation level is selected, the ENYAQ iV simply rolls on in idle when the driver takes their foot off the accelerator. When the driver steps on the brake pedal, the vehicle primarily uses recuperation to decelerate – provided the battery has sufficient storage capacity – only activating the conventional braking system if required. The front wheels feature ventilated disc brakes. As the rear brakes are used infrequently due to the brake energy recovery system, the rear wheels are fitted with robust drum brakes, which are particularly resistant to corrosion thanks to their closed design.

Many details ensure excellent aerodynamics

A drag coefficient (c_d) from 0.257, which is outstanding in this vehicle segment, is evidence of the ŠKODA ENYAQ iV's excellent aerodynamics and enables high efficiency and therefore long ranges. To achieve this, ŠKODA's new SUV makes use of clever details such as the active cooling roller blind in the lower air inlet of the front bumper. The aerodynamically optimised front apron and a front spoiler guide the air to specifically flow under the vehicle, where covers and a flat underbody reduce air turbulence. Air curtains as well as aerodynamically optimised wheels and wing mirrors direct the airflow to the rear around the vehicle in a controlled manner. The vehicle's height, which is low for an SUV, its elongated roofline and the roof spoiler with integrated side finlets all reduce air turbulence at the rear. The excellent aerodynamics also ensure low wind noise.

* All data is preliminary

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Follow us at https://twitter.com/skodaautonews for the latest news. Find out all about the brand-new ŠKODA ENYAQ iV with #ENYAQiV.

ŠKODA AUTO

- is focusing on three priorities with its 'NEXT LEVEL ŠKODA' program for the future: expanding the model portfolio towards entry-level segments, exploring new markets for further growth in the volume segment and making tangible progress in sustainability and diversity.
- currently offers its customers ten passenger-car series: the CITIGO^{e} iV, FABIA, RAPID, SCALA, OCTAVIA and SUPERB as well as the KAMIQ, KAROQ, KODIAQ and ENYAQ iV.
- delivered over one million vehicles to customers around the world in 2020.
- has belonged to the Volkswagen Group for 30 years. The Volkswagen Group is one of the most successful vehicle manufacturers in the world. In association with the Group, ŠKODA AUTO independently develops and manufactures vehicles, as well as components such as engines and transmissions.
- operates at three locations in the Czech Republic; manufactures in China, Russia, Slovakia and India mainly through Group partnerships, as well as in Ukraine with a local partner.
- employs approximately 42,000 people globally and is active in more than 100 markets.