

# **Porsche Mission X**

Press kit

#### Fuel consumption and emissions

911 GT3 RS: WLTP: Fuel consumption combined: 13.4 I/100 km; CO2 emissions combined: 305 g/km

Taycan Turbo S sports saloon WLTP: Power consumption combined: 23.4 – 21.9 kWh/100 km; CO<sub>2</sub> emissions combined: 0 g/km. Electric range WLTP: 440 – 468 km; electric range city WLTP: 524 – 573 km

All data refer to the EU model.

Consumption and emission data determined in accordance with the measurement procedure required by law. All new vehicles offered by Porsche are type-approved according to WLTP. Official NEDC values derived from WLTP values are no longer available for new vehicles as of 1 January 2023 and can therefore not be provided.

Further information on the official fuel consumption and official, specific CO<sub>2</sub> emissions of new passenger cars is available in the publication entitled 'Guidelines on fuel consumption, CO<sub>2</sub> emissions and power consumption of new passenger cars', which is available free of charge from all sales outlets and from DAT.

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#### **Highlights**

#### Spectacular reinterpretation of a hypercar

#### • Innovative glimpse into the future.

The Mission X represents the pinnacle of performance and modern luxury. At the same time, its sculpted form and muscular lines demonstrate that hypercars don't have to look aggressive. The concept study evokes legendary racing cars from different eras of the brand's history and propels them into the future. While Mission E showed the future of electromobility and Mission R the future of customer sport, Mission X is the vision for the next big step: experimental, exciting and extreme.

#### • Lightweight glass dome roof and Le Mans-style doors for this futuristic concept.

A lightweight glass dome with an exoskeleton made of carbon-fibre- reinforced plastic extends over both occupants. The Le Mans-style doors are attached to the A-pillar and the roof, and they open forwards and upwards. This type of door was previously used on the legendary Porsche 917 racing car. Design elements in a carbon-weave finish are found below the beltline. These components are varnished in a satin finish and as such are slightly coloured, but their material structure remains recognisable.

#### • Evolution of the Porsche light signature.

In the Mission X, the designers have reinterpreted the characteristic four-point graphic: the vertical base shape of the headlights has been significantly drawn down toward the road. A high-tech support structure frames the LED light modules and presents the exposed, narrow elements of the daytime driving lights and direction indicators. The sculpted rear light emerges, as if suspended in the air, from a modern support structure and extends across the entire width of the vehicle in four segments. While charging, the 'E' in the Porsche logo pulsates, adding a sense of mystery.

#### • Wheels designed with great detail.

The deep-dish wheels on the concept study are only slightly covered on the front axle, while the rear wheels are fitted with almost transparent aeroblades, which are designed like turbines for better brake cooling. The double spokes are relief milled, which combines lightweight construction and stability.

#### • Modernised Porsche crest.

One special detail is the newly modernised Porsche crest, which makes its debut on the Mission X. With its cleaner and more state-of-the-art execution, the refined crest communicates the character of Porsche. It can be found on the front panel and steering wheel of the Mission X, as well as in a monochrome design on the wheel centres.

# • Strong focus on the driver.

The operating and display concept is tailored to the driver, which is also reflected in the interior's colour concept. The curved instrument cluster sits at the highest point of the steering column: other motorsport parallels include the carbon-fibre-reinforced plastic (CFRP) seat shells integrated in the monocoque and the steering wheel, which is open at the top. There are multiple cameras on board. Using the Record button on the selector lever, the driver can start recording video.

# • Special stopwatch module for the passenger.

Porsche Design created a bespoke stopwatch module for the Mission X, with an analogue and digital display. On the passenger side, there is a bayonet system embedded in the instrument panel, to which the stopwatch module can be attached. The clocks are designed for both circuit and rally use and can display the lap times or vital data of the driver, among other information.

# • Live transmission from the interior.

Spectacular film footage can be recorded from the interior: one camera mounted in the roof and two cameras in the doors next to the digital exterior mirrors record what is happening in the cabin in real time. Recording starts as soon as the driver presses the Record button (REC) on the multi-purpose controller.

# • High-performance, efficient electric powertrain.

Our vision, should the Mission X go into series production:

- To create the fastest road-legal vehicle on the Nürburgring Nordschleife
- A power-to-weight ratio of roughly one PS per kilogram
- To deliver more downforce than the current 911 GT3 RS
- A charging speed roughly twice as fast as that of the Taycan Turbo S.

#### <u>Summary</u>

#### Porsche Mission X: yet another dream takes shape

At Porsche, innovative concept cars have always laid the groundwork for the future. The sports car manufacturer is continuing this tradition with the latest concept study: the Mission X is the spectacular reinterpretation of a hypercar, with Le Mans-style doors that open up and forward, and a high-performance, efficient electric powertrain. The excitingly designed two-seater will celebrate its premiere on 8 June 2023 – a special date: on the eve of the opening of the '75 Years of Porsche Sports Cars' special exhibition, it will be the star of the show at the Porsche Museum in Stuttgart-Zuffenhausen. It was on 8 June 1948, that the 356 'No. 1' Roadster became the first automobile bearing the name Porsche to receive its general operating permit. This was the birth of the sports car brand.

"The Porsche Mission X is a technology beacon for the sports car of the future. It picks up the torch of iconic sports cars of decades past: like the 959, the Carrera GT and the 918 Spyder before it, the Mission X provides critical impetus for the evolutionary development of future vehicle concepts," says Oliver Blume, **Chairman of the Executive Board of Porsche AG**. "Daring to dream and dream cars are two sides of the same coin for us: Porsche has only remained Porsche by constantly changing."

Michael Mauer, Head of Style Porsche, says: "The Mission X is a clear commitment to the core of the brand. The continuing, enhanced expression of our brand and product identity is an important compass for us to navigate the development of our series-production models. The concept study symbolises a symbiosis of unmistakable motorsport DNA with an overall sense of luxury."

Measuring approximately 4.5 metres in length and two metres wide, the Mission X concept study is a relatively compact hypercar. And with a wheelbase of 2.73 metres, its dimensions are similar to those of the Carrera GT and 918 Spyder. For aerodynamic reasons, the concept car has mixed-size tyres, with 20-inch wheels at the front and 21-inch wheels at the rear.

#### Design: classic brand elements reinterpreted

The Mission X represents the pinnacle of performance and modern sporting luxury. At the same time, its sculpted form and muscular lines demonstrate that hypercars don't have to look aggressive. The low-slung bodywork, which is less than 1.2 metres tall, is finished in Rocket Metallic – an elegant paint colour specially designed for the concept study. The carbon-weave design elements found below the beltline are varnished in satin-finish Rocket Metallic and as such are slightly coloured, but their material structure remains recognisable. The wheels of the concept study feature elaborate details: The rear axle is fitted with almost transparent aeroblades, which are designed like turbines for better brake cooling.

A lightweight glass dome with an exoskeleton made of carbon-fibre reinforced plastic extends over both occupants. The Le Mans-style doors are attached to the A-pillar and the roof, and they open forwards and upwards. This style of door was previously used in the legendary Porsche 917 racing car. Another eye-catcher is the light signature: In the Mission X, the designers have reinterpreted the characteristic Porsche four-point graphic. The vertical base form of the headlights was inspired by historic racing cars such as the Porsche 906 and 908 and drawn well down towards the road. A high-tech support structure frames the LED light modules and presents the exposed narrow elements of daytime running lights and indicators. When activated, the light opens up like an eye blinking open. Fully illuminated, the headlights make a confident statement.

A full-length light unit that looks as if it is floating characterises the rear of the Mission X. A transparent, illuminated Porsche logo is a standout feature. The sculpted rear light emerges, as if suspended in the air, from a modern support structure and extends across the entire width of the vehicle in four segments. While charging, the 'E' in the Porsche logo pulsates, adding a sense of mystery.

One special detail is the modernised Porsche crest, which makes its debut on the Mission X. Brushed precious metal, a three-dimensional honeycomb structure, a refreshed heraldic beast and a more subtle gold colour are, on close inspection, the differences between the modernised Porsche crest and its immediate forerunner. With its cleaner and more state-of-the-art execution, the refined crest communicates the character of Porsche. It can be found

on the front panel and steering wheel of the Mission X, as well as in a monochrome design on the wheel centres.

The driver focus can be seen in the asymmetry of the interior and its colour concept, as the two seats are coloured differently. Apart from the leather pads in Andalusia Brown, the driver's seat is Kalahari Grey and forms a single unit of colour with the centre console and the dashboard. The passenger seat is finished in the contrasting Andalusia Brown colour. Beyond the CFRP seat shells and their six-point seat belts integrated in the monocoque, further motorsport parallels include the open-top steering wheel, which features mode switches and shift paddles. There are multiple cameras on board. Recording starts as soon as the driver presses the record button (REC) on the multi-purpose controller.

Another highlight is found on the passenger side, where there is a bayonet system embedded in the instrument panel, to which a stopwatch module can be attached. Porsche Design created a special stopwatch module for the Mission X with an analogue and digital display. The clocks are designed for both racetrack and rally use and can display the lap times or health data of the driver, among other information.

# Technology: top marks in power-to-weight ratio, downforce and charging performance

Porsche exemplifies e-performance, yet is also a pioneer in sustainable mobility. The concept study fully meets both objectives. Our visions: if the Mission X is to go into series production, then it should

- Be the fastest road-legal vehicle around the Nürburgring Nordschleife.
- Have a power-to-weight ratio of roughly one PS per kilogram.
- Achieve downforce values considerably more than those of the current 911 GT3 RS.
- Offer a significantly improved charging performance with its 900-volt system architecture and charge roughly twice as quickly as Porsche's current frontrunner, the Taycan Turbo S.

The battery is installed centrally behind the seats in the car. This 'e-core layout' positions the mass centrally in the vehicle. This is similar to what you see in a conventionally powered mid-engined car, and results in excellent agility.

#### Forerunners: innovative super sports cars from Porsche

The fastest series-production vehicle of its time; the first series-production Porsche to be made of carbon fibre and the first road-legal vehicle to beat the seven-minute mark on the Nürburgring Nordschleife – the Porsche 959 (1985), Carrera GT (2003) and 918 Spyder (2013) models were milestones in the world of super sports cars. And that makes them the conceptual forerunners of the Mission X.

In 1985, the Porsche 959 made its debut as a technology platform. Its 450-PS six-cylinder twin-turbo boxer engine, combined with an aerodynamically optimised body, propelled the super sports car to a top speed of 317 km/h – then the world record for a series-production sports car.

With its V10 engine and 612 PS, dramatic design and, not least, its incomparable driving experience, the Porsche Carrera GT remains an icon among super sports cars to this day.

With the 918 Spyder, Porsche hybrid technology reached a spectacular zenith. In September 2013, the 652 kW (887 PS) two-seater became the first road-legal vehicle to break the seven-minute barrier on the Nürburgring's 20.6-kilometre Nordschleife, completing the lap in 6:57.

Porsche aims to stay true to this standard of the highest e-performance: our vision, should the Mission X go into series production, is for it to be the fastest road-legal vehicle around the Nürburgring Nordschleife.

#### The exterior design

#### Make no mistake: a Porsche at first glance

Although the Mission X features many innovative design concepts, its Porsche DNA is unmistakable. Even without the Porsche crest, this hypercar concept would be instantly recognisable as a model from the sports car manufacturer. The Mission X combines characteristic design features while at the same time offering a glimpse into the future of Porsche's unmistakable brand and product identity. The concept study evokes legendary racing cars from different eras of the brand's history and propels them into the future.

Despite its ultimate e-performance and corresponding aerodynamic demands, the body is not a patchwork of jaunty, unappealing angles, but rather a sculpted form shaped by the dynamic surfaces for which the brand is famous. The aerodynamics concept is borrowed from motor racing. The unusual appearance was made possible by directing the airflow through the body. Together with its classical proportions, lightweight glass dome over the cabin and upwardly pivoting Le Mans-style doors, the result is a sports car of superlative design.

"The Mission X is a clear commitment to the core of our brand," says Michael Mauer, Vice President Style Porsche. "The continuing, enhanced expression of our brand and product identity is an important compass for us to navigate the development of our series-production models. The concept study symbolises a symbiosis of unmistakable motorsport DNA with an overall sense of luxury. "Another very exciting aspect of Mission X is its unifying of apparent contradictions: a highly developed performance capability that coexists with highly efficient, sustainable technology. The design of the concept study once again underscores the brand's clearly defined design criteria and offers a tantalising glimpse into the future."

#### Lightweight glass dome and Le Mans-style doors: a futuristic concept

Instead of the usual glasshouse with a metal roof and conventional side windows, here the occupants ride in style beneath a lightweight glass dome. With its transparent surface, the spectacular roof structure is reminiscent of an aircraft cockpit or of earlier racing cars such as the Porsche 917 (1969). Smaller windows that can be lowered have been integrated into the larger side windows. The lines are all but seamless.

Like in the Mission R (2021), Porsche has used an 'exoskeleton' as the support structure. This carbon-fibre-reinforced plastic structure combines low weight with a striking appearance. Above the front window there is a small additional glass area. This 'Daytona window' was utilised in historic racing cars to enable improved visibility in banked turns and offers an even more open sense of space in the Mission X.

Equally sensational: the Le Mans-style doors are attached to the A-pillars and the roof, and they open forwards and upwards. This type of door was previously used in the legendary Porsche 917 racing car. There is a projector integrated in the driver's door. This underscores the performance-oriented approach yet again: the current conditions on the racetrack are projected onto the ground: outside temperature, relative humidity and wind speed are displayed digitally to the driver before they climb into the car.

# Silhouette: long and sweeping in the style of iconic racing cars

As with the legendary Porsche 917, the silhouette of the Mission X traces a rising line from the low, flat front bodywork up over the wings. The front end is offset from the rear, with the two sections having the appearance of two bodies pushed into each other. This both underscores the stark, three-dimensional sculpture and is at the same time part of the aerodynamics concept in which the airflow is directed through the front end with maximum efficiency.

The body is finished in Rocket Metallic – an elegant paint colour specially designed for the concept study. The special feature of this is its 'flip effect': depending on the viewing angle, the brown appears darker. Design elements in a carbon-weave finish feature below the beltline. This includes the side skirts, the front splitter and the large rear diffuser. These components are varnished in a satin finish and are therefore slightly coloured, but their material structure remains recognisable.

The area immediately behind the front wheels is exposed in classic racing car fashion, which allows better ventilation of the wheel arches. While the exterior has the classic Porsche combination of highly dynamic yet visually calm surfaces without decorative styling elements, the wheels of the concept study are elaborately detailed in line with their technical requirements: at the front, they are only lightly clad to allow the airflow necessary to cool the brakes. The wheels at the rear, meanwhile, are fitted with almost transparent aeroblades, which are designed like turbines for better cooling of the brakes. They are reminiscent of the legendary 'turbine blade' wheels of the Group A rally cars from the end of the 1980s. The alloy wheels (20 inches at the front, and 21 inches in diameter at the rear) feature a deepdished design. The bronze-gold double spokes are relief milled, and as such combine lightweight construction and stability.

The designers dispensed with traditional exterior mirrors, opting instead for cameras positioned on the B-pillars and above the rear diffuser, among other places. The diffuser dominates the view from behind. Porsche Active Aerodynamics (PAA) enhance the aerodynamic properties with an active front wing and an extendable rear wing. This ensures optimal performance in every driving situation, whether the focus is on extending range or chasing lap times.

One special detail is the updated Porsche crest, which makes its debut on the Mission X. Brushed precious metal, a three-dimensional honeycomb structure, a refreshed heraldic beast and a more subtle gold colour – these are just a few of the careful modifications that distinguish the refined Porsche trademark from its immediate forerunner. With its much cleaner and more modern look, the reworked crest communicates the character of Porsche. It can be found on the front panel and steering wheel of the Mission X, as well as in a monochrome design on the wheel centres.

# The Porsche light signature reinterpreted

The light signature is an elementary component of the Porsche brand identity. In the Mission X, the designers have reinterpreted the characteristic four-point graphic: The vertical base form of the headlights was inspired by historic racing cars such as the Porsche 906 and 908 and is drawn well down towards the road. A high-tech support structure frames the LED light modules and presents the exposed, narrow elements of the daytime driving lights and direction indicators. When activated, the light opens up like an eye blinking open. The headlights make a confident statement when fully illuminated.

A full-length light unit that seems to float in the air characterises the rear of the Mission X. A transparent, illuminated Porsche logo is a standout feature. The sculpted rear light emerges, as if suspended in mid-air, from a modern support structure and extends across the entire width of the vehicle in four segments. While charging, the 'E' in the Porsche logo pulsates,

adding a sense of mystery. In a similar fashion, there is also a blinking light in the support structure of the rear light and headlight. Even in such details, the Mission X provides impetus for the further development of future vehicles.

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#### Interior design and the Driver Experience (DX)

# Focus on the driver: the sporty yet elegant cabin

Porsche sports cars have always been tailored to the needs of the driver. In the Mission X, this focus reaches a new level. All essential display and control elements are on the 'river's axis. As is common in racing cars, the steering wheel and pedal are longitudinally adjustable, while the CFRP seat shells integrated into the monocoque are fixed. Another motorsport parallel: inspired by the highly customised seats of professional drivers, the seats can be customised with 3D-print bodyform full bucket seats.

To enable quick adjustment of the distance between the accelerator and brake pedals, a scale is milled into the 'river's footwell. Both occupants are secured with six-point seat belts. Andalusia Brown leather pads on the seat cushions and backrests as well as matching fabric sections in the integrated headrests play with materials and colour. The latter are easily removed with clips if, for example, the driver and passenger are wearing helmets and neck restraints on a race track.

The driver focus can also be seen in the asymmetry of the interior and its colour concept: the two seats are coloured differently. Apart from the customisable parts of the 3D-print bodyform full bucket seats, the driver's seat is Kalahari Grey and matches the colour of the centre console and instrument panel. The passenger seat, meanwhile, is finished in contrasting Andalusia Brown. An LED light strip is integrated in the centre of both seats. This greets the occupants with a 'welcome' gesture.

The steering wheel is open at the top, with the two leather-upholstered grips in Kalahari Grey fitting smoothly into the hand. As in the current 911 GT3 RS, there are four individual mode switches on the steering wheel. Rockers and paddles are available as additional control elements for controlling features such as the brake energy recuperation function.

The curved instrument cluster sits at the highest point of the steering column: it has a concave shape for better readability and is oriented towards the driver. The concept offers the choice between a display featuring classic Porsche dials or a full-screen navigation map. In Track mode, the displays shift to a functional representation with dedicated track-focused content.

On top of the steering column, a small display window offers a view of the airbag module. As in a racing car, the material used in the steering column has been optimised for weight. The 7.8-inch central display faces the driver. Prominent aluminium controls are positioned to its right. Here again, designers have performance-oriented driving in mind: the climate controls can even be operated with racing gloves on. In classic Porsche fashion, the 'Le Mans' starter button is located to the left of the steering wheel and features an elegant, authentic metal design. Here, the designers were inspired by the elegant metallic detailing of historic cameras.

A pair of six-inch displays are integrated in the mirror attachment piece between the door panel and A-pillars. They function as digital side mirrors, with the external cameras transmitting the visual information to them via a control unit. Spectacular video footage can be recorded inside the car as well: one camera mounted in the roof and two cameras in the doors next to the digital exterior mirrors record what is happening in the cabin in real time. Recording starts as soon as the driver presses the record button (REC) on the multi-purpose controller. This also functions as a control lever.

There is another interior highlight on the passenger side, where a bayonet system embedded in the instrument panel enables a stopwatch module to be quickly attached. The historical reference is unmistakable: in classic racing and rally cars, co-drivers often fitted a plate with stopwatches or a compact device with an odometer into the dashboard in this position. Porsche Design created a special timing module for the Mission X, with an analogue and digital display. The stopwatches are designed for both racetrack and rally use and can display the lap times or health data of the driver, among other information.

A small, closed compartment in the trim behind the seats provides practical storage. Smartphones can be charged wirelessly in the shelf in front of the multi-purpose controller. The air vents of the air conditioning system are located in the doors. Because even in a hypercar, Porsche never loses sight of everyday usability.

#### The technology

# Top marks in power-to-weight ratio, downforce and charging

Porsche exemplifies e-performance yet is also a pioneer in sustainable mobility. The concept study fully meets both objectives. Our visions: if the Mission X is to go into series production, then it should

- Be the fastest road-approved vehicle on the Nürburgring Nordschleife.
- Have a power-to-weight ratio of roughly one PS per kilogram.
- Achieve downforce values well above the level of the current 911 GT3 RS.
- Offer a significantly improved charging performance with its 900-volt system architecture, and charge roughly twice as quickly as Porsche's current frontrunner, the Taycan Turbo S.

Extreme lightweight construction and an all-electric drive concept with powerful electric motors are the basis for the outstanding power-to-weight ratio. By way of comparison, the Porsche 918 Spyder has a power-to-weight ratio of 0.5 PS per kg.

# Lightweight design throughout

Lightweight design is part of the Porsche DNA. A light car is not only more efficient but is in particular more agile in corners – decisive characteristics for a hypercar aiming for exceptional performance and lap times. As a supporting element, the high voltage battery is integrated into the rear of the car to perform this function.

This innovative design principle for high voltage batteries in electric vehicles is part of the lightweight construction concept of the Mission X concept study. Individual systems are combined to form functionally integrated structures that perform both thermal and mechanical tasks. Cooling systems, for example, are integrated directly into the support structures of the body, which both saves weight and further optimises cooling.

Lightweight construction is also immediately apparent in the form of large-scale carbonweave sections and the support structures of the frames for the lights. With the 900-volt system architecture, the compact, weight-optimised powertrain, the exoskeleton made of carbon-fibre reinforced plastic (CFRP) and many other measures, the Mission X concept study underscores its claim as a simultaneously high-performance and lightweight Porsche hypercar.

# High continuous power output and substantially improved charging performance

The electric motors are the next generation of powerful, permanently excited synchronous motors (PSM) – much like in the Mission R concept study. The direct cooling of the stator feeds the oil directly along the copper windings. This allows the heat from the motors to be dissipated directly at source and their effectiveness to be increased.

This is how the very high peak performance, its consistency and the exceptionally high efficiency associated with motorsport are achieved. Thanks to the enormous performance potential of the electric motors, during acceleration power is transferred to the wheels without any losses via a compact, weight-optimised single-speed transmission. The drive-energy is delivered by a high-performance battery with state-of-the-art technology coupled with a 900-volt system architecture. The very high voltage enables performance advantages without necessitating weight compromises and additional heat losses.

Likewise, the directly oil-cooled battery with high-end cells offers an optimum combination of efficiency, weight and power. The cell chemistry is designed for maximum performance. The position of the battery, installed centrally behind the seats in the vehicle in an e-core layout, enables a low, driver-optimised seating position. In comparison to a conventional underfloor battery, the e-core layout helps centre the weight in the car. As with a conventionally powered mid-engined car, this results in excellent agility.

# Comprehensive aerodynamic concept with Porsche Active Aerodynamics (PAA)

The e-core layout of the Mission X concept study enables a very low-slung, dynamic flyline. The exoskeleton made of carbon-fibre-reinforced plastic (CFRP) with a lightweight glass dome has a very slim design. Conventional rear-view mirrors have been dispensed with and the wheels are aerodynamically optimised.

And, because the airflow around the car is routed through the body, the Cd value of the concept study has been reduced to the maximum for optimised energy efficiency on the track. This in turn has enabled the battery to be optimised, weight reduced, and performance increased.

However, aerodynamics are more than simply efficiency due to low wind resistance. To achieve outstanding driving dynamics on the track, high downforce is also required. The Mission X concept study achieves the necessary downforce by means of Porsche Active Aerodynamics (PAA), which includes a Drag Reduction System (DRS) and aerodynamic elements in the lower area of the car and in the underbody.

The adaptive aerodynamic elements are intelligently controlled based on numerous parameters such as driving mode, lateral acceleration (cornering forces) and speed. This affects both drag and downforce. As a result, the Mission X concept study can be set up for maximum efficiency as well as the best possible performance on the track.

# Damper technology from the world of motorsport

For aerodynamic purposes, the concept car has mixed-size tyres, with 20-inch wheels at the front and 21-inch wheels at the rear. At the same time, the tyres on the driven rear axle (315/20 R 21) are six centimetres wider than on the front axle (255/35 R 20).

The damper technology and the suspension are derived from the motorsport arena. As with the current 911 GT3 RS, the driver is supported by many chassis systems, which they can directly access and operate via four individual mode switches on the steering wheel. This allows for quick access. The rebound and compression stages of the dampers can be adjusted individually for the driver and the conditions via the PASM mode switch.

PTV Plus enables the optimisation of steering behaviour and precision during highly dynamic driving. The driving modes and the Electronic Stability Control (ESC) and Traction Control (TC) systems are adjusted via two further mode switches. The chassis of the Mission X is at once designed both for extraordinary lap times and precise adaptation to the wishes of the driver.

#### **Conceptual forerunners**

#### Legendary super sports cars with motorsport genes

The fastest series-production vehicle of its time; the first series-production Porsche to be made of carbon fibre, or the first vehicle with international road-legal status to beat the seven-minute mark on the Nürburgring Nordschleife – the Porsche 959 (1985), Carrera GT (2003) and 918 Spyder (2013) were milestone models in the world of super sports cars. And that makes them the conceptual forerunners of the Mission X.

# Porsche 959: technology platform with a speed record

For many car enthusiasts, the 959 is one of the most exciting sports cars of the last century. In 1983, Porsche presented the 'Group B' study, designed to meet the regulations for this spectacular rally class, at the IAA. In the 1986 Paris Dakar Rally, all three 959s finished the race, taking first, second and sixth places.

The production model made its debut at the IAA in 1985. Its innovations included speedsensitive and adjustable dampers, self-levelling suspension, electronically controlled variable all-wheel drive with driving programme selection and ABS, a tyre pressure monitoring system and an aerodynamically optimised body (Cd 0.31). The outer skin was made of Kevlar and glass-fibre-reinforced epoxy resin in a hybrid construction, while the front spoiler was made from polyurethane integral foam. The doors and front compartment cover were made from a special aluminium alloy.

The 959 was the first production car to feature a twin-turbo boxer engine with sequential turbocharging. the two turbos operating in sequence helping to reduce turbo lag. Titanium conrods reduced the oscillating masses on the crankshaft. Its powerful engine, combined with an aerodynamically optimised body, propelled the super sports car to an impressive top speed of 317 km/h – then the world record for a series-production sports car. Only 292 examples of the Porsche 959 were built in series production from 1987 to 1988.

# Porsche Carrera GT: dramatic design coupled with many innovations

After the spectacular showing of the near-production-ready concept at the Paris Motor Show three years previously, the Porsche Carrera GT celebrated its world premiere in Geneva on 3 March 2003. The high-performance sports car was built in limited numbers at the Porsche

Leipzig plant. Its V10 naturally aspirated engine produced 450 kW (612 PS) and was blessed with thoroughbred racing genes. It was assembled at the Zuffenhausen engine plant. From autumn 2003 to early May 2006, 1,270 examples of the Carrera GT – internally known as the Type 980 – were hand-built in Leipzig.

With its engine, dramatic design and, not least, its incomparable driving experience, the Porsche Carrera GT remains an icon among super sports cars to this day. For the first time in a series-production Porsche, the monocoque chassis and unit carrier were made entirely of carbon-fibre-reinforced plastic (CFRP). The two halves of its Targa roof can be stowed up front in the luggage compartment. Another of the exceptional developments in the Carrera GT was the Porsche Ceramic Composite Brake (PCCB). Not only were the two brake discs made of ceramic material, but the model also featured the world's first ceramic double-plate dry clutch. Other innovative details included superlight seat shells made of Kevlar and double-wishbone pushrod suspension with inboard springs and dampers.

# Porsche 918 Spyder: unique all-wheel drive concept with hybrid powertrain

The 918 Spyder made its debut as a production car at the IAA 2013. A few days before the show, in September 2013, a prototype broke a world record: the two-seater became the first internationally road-legal vehicle to break the seven-minute barrier on the Nürburgring's 20.6-kilometre Nordschleife, with a time of 6:57.

Maximum performance and minimum fuel consumption resulted from a unique plug-in hybrid concept. The driver could choose between five driving modes, which optimally controlled single-source or mixed drive scenarios with the 4.6-litre V8 engine with 447 kW (608 PS) and the two electric motors with a total of 210 kW (286 PS).

The 918's driving dynamics became a tangible reality through the unique all-wheel drive concept, which featured a combined powertrain of both combustion engine and electric motor on the rear axle, plus a second electric motor on the front axle. The concept was based on insights gained by Porsche while racing with the successful 911 GT3 R Hybrid. This model and the Cayenne S Hybrid, the first series-production hybrid in the company's history, were presented by Porsche in Geneva in 2010. The motto at the time was 'Intelligent Performance' – an idea as timeless as the icons of model history.

#### The anniversary

#### 75 Years of Porsche Sports Cars: a success story

'Driven by Dreams' defines the essence of the Porsche brand. The slogan reflects the approach with which the people behind Porsche work every day to fulfil the dreams of their customers around the globe. The Porsche success story also began with a dream come true. In 1948, Ferry Porsche realised his vision of a sports car and, together with his team, designed the Porsche 356 'No. 1' Roadster. The model became licensed for the road on 8 June 1948. This was the birth of the legendary brand.

"75 years of Porsche stand for pioneering spirit, heart and dreams. We are celebrating that legacy together with people who are driven by dreams," says Oliver Blume, Chairman of the Executive Board of Porsche AG. "We're proud of our heritage. It is the foundation for a successful future. We associate our heritage with innovation and progress – and continually add extraordinary new moments to the unique Porsche story."

Ever since Ferdinand Porsche surprised the world with all-electric and hybrid vehicles at the end of the 19th century, technological innovations have been part of the Porsche DNA. Design is another fundamental component of the Porsche legend. Visionary studies and concept cars form the foundation for an unmistakable and innovative design language.

In 2023, the sports car manufacturer will be celebrating its anniversary with festivities around the world – and with the Mission X. The concept study is the spectacular re-interpretation of a hypercar, with upward, forward-tilting Le Mans-style doors and a high-performance, efficient electric powertrain. The Mission X represents the pinnacle of performance and modern sporty luxury. At the same time, its sculpted form and muscular lines demonstrate that hypercars don't have to look aggressive.

Further information on the history of Porsche is available online in the '75 years of Porsche Sports Cars' media kit: https://media.porsche.com/75-years-sportscars