

# Press Kit

## 2017 Frankfurt Motor Show

September 12, 2017



## Frankfurt Motor Show: Renault presents its vision of the future

- The 2017 Frankfurt Motor Show hosts the world premiere of the **SYMBIOZ** – Renault’s vision of the car and its role in society looking ahead to 2030. Electric, autonomous, connected and designed to be fully integrated in the human ecosystem. Renault’s new concept car actively explores the future of mobility and offers a completely new travelling experience with features, technology and design that interact with its ecosystem.

*“The way we use our cars is changing. Already a car is more than just a way to get from one place to another. Full of technology, it’s becoming an interactive and personalized space that connects passengers to other cars, people and objects around them. Looking to 2030 we imagine new scenarios with more efficient energy use, connectivity and autonomous driving scenarios that will improve how we live and travel.”*

**Thierry Bolloré** – Chief Competitive Officer, Groupe Renault

- The 2017 Frankfurt Motor Show also hosts the world premiere of **New Mégane R.S.** which features a 4CONTROL chassis, a first in its segment. The vehicle delivers a unique experience for a performance car and the ultimate in driving enjoyment. In addition to being exceptionally nimble through tight turns, the New Mégane R.S. offers impressive cornering stability at high speeds.

*“New Renault MÉGANE R.S. carries high the values of Renault Sport: agility, efficiency and driving pleasure. With this new model, we wanted to push the limits of the R.S. experience. With our know-how from the motorsport competition, we bring an exclusive proposal in terms of road handling in the market of high-performance hatchbacks.”*

**Patrice Ratti** – General Manager, Renault Sport Cars

- From mobility of the future to pure driving enjoyment, Renault’s vision of the car is people-centred for an easier life experience...

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# 01

## Renault SYMBIOZ – A new living space for a new kind of freedom



*“After an initial series of concept cars based on Renault’s ‘Cycle of Life’ design strategy which sought to prefigure the styling of our upcoming models, our new concept cars set out to explore what mobility might resemble in the future. No longer can we think of car design in isolation from the ecosystem surrounding us. Renault SYMBIOZ truly is a unique project that allowed us to work with planners, designers, engineers and architects. Our goal was to explore new boundaries in customer experience, technology, energy use and design harmony to form a completely new global experience.”*

**Laurens van den Acker** – Senior Vice President, Corporate Design

The SYMBIOZ concept showcases Renault’s vision of the car of the future and its role in our lives inside and outside the car. It comprises a car, a demo car and a home. Renault is the first carmaker to present a complete home at a motor show that evokes future possibilities of how the car will deliver new features inside the home and will be an extension of the home on the road. SYMBIOZ comes under the ‘Wisdom’ petal of Renault’s lifecycle-based design strategy, suggesting maturity.

The SYMBIOZ concept on display at the Frankfurt Motor Show looks ahead to a horizon of up to 2030, and Renault has also developed a demo car, which foreshadows a vehicle in a closer timeframe, around 2023. SYMBIOZ road tests will be held at the end of this year.

Both cars are electric, autonomous and fully connected to their environment. Passengers enjoy a cabin that feels like home and has been designed for autonomous motoring. On the road, the car becomes an extension of the home. When parked inside the home, it doubles as an extra mobile, modular and multi-purpose room.

Visitors to the Renault stand at the Frankfurt Motor Show will be able to walk around this connected home and experience the way cars like SYMBIOZ may be interacting with their environment in the future.

# Renault SYMBIOZ Chapter 1 – A car that delivers new features inside the home

Inside the home, Renault SYMBIOZ symbolically shows how cars can play an even more important role in our everyday lives by 2030.

## An extra mobile room

Renault SYMBIOZ provides extra space and features for the home, taking on different functions according to the needs and desires of occupants. Inside the home, SYMBIOZ becomes a snug, mobile, comfortable and modular extra room.

- A lifting platform can raise the car from the ground floor to the bedroom or the rooftop terrace on the first floor. Parked on the roof, SYMBIOZ can be turned into a cubby room for relaxation or rest, while enjoying a view of the outside.
- It can be an open space like a living room where people can spend time together and talk. The cabin interior was inspired by the design of living rooms.
- Or it can be a closed space for relaxation or work where people can seclude themselves from the rest of the house.

Renault SYMBIOZ features similar materials and interior furnishings to those used in the house and remains in complete harmony with the home, regardless of its position or use.



*“Renault SYMBIOZ shows how we may combine the car with the home. The car becomes a new mobile, multi-purpose living space for the whole family and can be used - open or closed - more fully, even when parked. But this spectacular work also operates in another important way. The car allows passengers to feel at home when traveling, thanks to the interior design. It is underpinned by the idea of maximizing the available space for the passengers without taking anything away from comfort and modularity. Each one has a space to live a personal experience, but this space and this experience can also be shared by all.”*

**Stéphane Janin** – Director, Concept Cars Design

## Smart energy sharing and saving

Renault, the European leader in electric vehicles, developed SYMBIOZ to ensure the home and car share energy. Kilowatt-hours are distributed through a smart grid shared by the car and the home in an artificial intelligence environment capable of anticipating occupants' needs:

- If there are no plans for a long trip in the next 48 hours, a minimum charge level will be left in the car battery (i.e. enough energy for a short trip) in order to optimise power distribution at home.
- However, if a weekend away is planned, the system will fully charge the car battery on Friday night, gradually turning down the home heating overnight.
- It is also possible to programme the system to use the power stored in Renault SYMBIOZ's batteries temporarily for the lights, screens and home appliances during peak times. If there is a blackout, this happens automatically.

Power sharing can be monitored and adjusted using the screen located on a table in the home's living room or via the car's dashboard.

## Always connected

The smart connection between the car and the home is permanent, making SYMBIOZ's ecosystem more seamless and efficient. Occupants can access their digital lives anytime for an easier and more enjoyable life experience, in line with the 'Easy Life' philosophy of Renault.

- The cabin is like the home where everything is within arm's reach – music, social media, personal cloud storage and digital subscriptions. Reading, listening to music and even teleworking are options from this

extra room. If someone rings your doorbell, their face pops up on the dashboard display and you can let them in.

Connected to open automation platforms using Internet of Things (IoT) technology, occupants can programme smart interactions between the car and home devices and appliances. The car and the home coordinate the energy, lighting, multimedia and comfort features seamlessly and continuously.

- If the car is on the rooftop terrace, it is automatically moved down safely to the ground floor a few minutes before a trip is scheduled in the daily planner. Messages are displayed on the screens around the home to inform occupants.
- If you enter a long trip into the planner like a holiday, the shutters will close fully and the home heating system will be turned down automatically after you leave.



# Renault SYMBIOZ: A home at one with the car



The house that showcases the Renault SYMBIOZ concept at Frankfurt Motor Show is 21 metres long, seven metres high and eight metres wide, for a total floor space of around 120 square metres.

- It was designed for Renault by Marchi Architectes, the 2008 winners of the Nouveaux Albums des Jeunes Architectes Paysagistes (NAJAP) Award from the French Ministry of Culture and Communication.
- One of the up-and-coming architecture firms in France, Marchi Architectes share the warm, people-focused approach which is central to Renault's design DNA.



*"As designers for Groupe Renault, our job is to imagine what role cars will play in the future and integrate them into its ecosystem. We therefore set out to build part of this ecosystem – a family home – and let our customers experience this home at an international motor show. That's a first.*

*The car and the home are at one with each other in complete symbiosis as they share some of the major architectural design choices, common materials and styling. The Renault SYMBIOZ concept has its place inside this innovative, connected home and can be seen by everyone through the wide glazed surfaces and on the rooftop terrace."*

**Tina Kentner** – Senior Designer, Environmental Design, Renault

The car is complementary to the home and also an extension of it. They bear a resemblance to each other and share the same architecture: a steel frame, extensive glazed surfaces and wooden decor elements. H33 is a throwback to the first modular prefabricated homes which were directly inspired by car design in the 1920s and 1930s. That was exactly 100 years before SYMBIOZ, which embodies Renault's vision for 2030.

The resemblance goes even further. The same interior and exterior materials have been used on both the home and the car, such as copper, marble, fabric and porcelain. Some of the furniture and homewares have been designed by promising French designers who share Renault's drive for innovation and authenticity. These include Ionna Vautrin (lights, worktops), Constance Guisset (mirrors, poufs), Iratzoki Lizaso (table, chairs), Guillaume Delvigne (marble objects, crystal glasses), Samuel Accoceberry (mirror, rug), Cléo Joffre and Cardew Bonniot (dinnerware).

The home blends in with a range of settings – city or country. It has two floors:

- 80% of the rectangular-shaped ground floor's glazed surfaces use clear glass to let in as much light as possible. The house has no interior pillars or walls to make it easier to move around inside and provide a special area for SYMBIOZ in the living room. The car is still visible from the outside of the house when it is inside because practically all the walls are transparent.
- The first floor of the house is cylinder-like and features the same warm colour as the car body. This 'night-time area' includes the bedroom and the corridor to the rooftop terrace, where the car can be positioned as an extra room to increase available space on the first floor. Unlike the ground floor, the walls on the first floor are opaque for greater privacy. Three light wells at the top of the cylinder let light flood in to the ground floor.

- This cylinder boasts a Philips Lighting-designed exterior lighting feature. Each lighting sequence matches a stage of communication between the car and the home: when the car is being charged, when it gets close to home, when it is in standby mode, and so on. The lights can be switched on and off remotely from the car's onboard system. In partnership with Renault, Philips Lighting's design team provided its experience in programming, smart lighting and Internet of Things (IoT) to transform lighting.



Renault has achieved a technical feat in designing a custom-engineered lifting, rotating platform to raise the car from the ground floor to the first floor. The car is lifted by just four cables to ensure the space remains as flexible and unencumbered as possible. When it is raised, the lift reveals an extra lounge/games room on the ground floor. The minimalist cable system has been directly inspired by that used in stage rigging.

# Renault SYMBIOZ Chapter 2 – An autonomous car: An extension of the home on the road

## Innovative design for a new travelling experience

### Architectural styling

The Renault SYMBIOZ concept car is 4.70 metres long, 1.98 metre wide and 1.35 metre high. This futuristic one-box car boasts D-segment dimensions. The vehicle's spacious modular cabin design is worthy of that of an E-segment model.

The car's exterior styling is also innovative. The upper section of the car body – floating and architecturally-inspired – is clearly different from the lower section, which is more sensuous, muscular and racy.

The upper section resembles an architect-designed house while still blending in with the lines of the car and lets ample light into the cabin. The aim is to travel in a bright, fengshui space that is much like a large living room in a house, with wide glazed contours.

- From the side windows to the roof, all the 'glazed' surfaces – made from glass or polycarbonate – use clear glass to maximise transparency and let light flood into the cabin.
- The original design of the roof, which seems suspended over the cabin, reduces the number of structural elements required and also makes the cabin brighter.
- The roof is attached to the vehicle frame using high-tech enamelling for extra sturdiness and rigidity, without obstructing the glazed surfaces.



The design of the lower section perfectly matches Renault 'French Design' styling: it is sensual and warm with fluid lines and a dynamic stance.

- SYMBIOZ's carbon fibre bodywork features two shades of copper. The matte copper hue at the front symbolises authenticity and calm, while a glossier, more satin-finish colour at the rear conveys elegance and refinement.
- The car boasts Renault's C-shaped lighting signature both front and rear. While SYMBIOZ's lighting signature is larger and more tapered and stylised, a link is established between the concept car and current model range.
- The tail lights produce a variety of dynamic visual effects thanks to small lit fins that deploy as a function of how hard the driver is braking.
- The third stop light is built into the aerodynamic wind deflector located at the back of the roof. Its linear graphic effects continue all the way to the fog light positioned under the bumper.
- SYMBIOZ's wheels are reminiscent of the spokes of a bicycle wheel, alluding to aerodynamic performance and lightweight design. The car uses Michelin tyres with a special narrow construction developed by the French firm to maximise SYMBIOZ's energy efficiency.
- As with the TREZOR concept car, the Renault logos at the front, the rear and the sides of the car light up in autonomous drive mode.

- The sensors and cameras used in the autonomous drive system are built into the rear wind deflectors, like two control towers.

### **Just like at home**

The Renault SYMBIOZ concept car was conceived as an extension of the home on the road, taking direct inspiration from both house and furniture design. The aim was to make sure the cabin was liveable like any modern home.

- The split door opening system – rear-hinged rear doors for the lower part and butterfly doors for the glazed upper part – functions like a flower opening its petals. Combined with the absence of a B pillar, the system invites occupants to climb on board in the same way as they would walk through the doors of their home. There is no need to bend down or hold on to the side; just sink right into the automatically pivoting seat.
- The car and the home share many of the same materials (felt, wood, fine marble, porcelain, etc.) to give the impression of entering a familiar, warm and reassuring space which is part of the home. The custom-made car seat fabric by Dutch designer Aleksandra Gaca is exactly the same as the fabric used for the upholstery of the large sofa in the home.
- Timeless materials like wood and marble are used, with high-tech production and finishing processes to ensure that they are of the ideal weight and form.

### **Maximum interior modularity for 2030**



The interior of SYMBIOZ has been carefully styled to guarantee maximum wellbeing for passengers so they can take full advantage of the autonomous drive system when it is operational. Travelling quickly becomes an easier and more enjoyable experience.

- The Ultra High Definition OLED (Organic Light-Emitting Diode) display located in front of the driver, thin, curved and covered by Corning® Gorilla® Glass for Automotive Interiors, consolidate in its 80 cm length all dashboard and multimedia system information. The Gorilla Glass has been manufactured into a 2D part then cold formed into a 3D shape.
- When the autonomous drive system is switched on, the steering column and steering wheel fold away into the dashboard and the pedals and dashboard retract automatically by about 15 centimetres. The seats contract to convert into genuine armchairs.
- The driver benefits from additional comfort, as well as more space, to check something on the display, rest a book on his or her knees or just take a deep breath and gain some extra space to put whatever they want in front of them – just like at home. The dashboard was developed in association with KEIM-cycles, a French firm specialised in luxury custom-made wooden bicycle frames. The thin sections of white ash are glued to a honeycomb-structure frame for a perfect trade-off between weight and strength.
- A small screen with the main indicators remains visible on the lower edge of the steering wheel which is still in the driver's line of sight once the steering wheel retracts.

- The cabin arrangement can be radically transformed when the driver is not travelling alone. The driver and the front passenger can turn to face the other occupants as their seats pivot 180 degrees and the armrests fold away to make the whole process easier.
- Meanwhile, a mini steel frame table with a marble top opens out between the seats. This feature is a nod to the first-generation Espace from the 1980s and encourages occupants to interact with each other and engage in shared activities as they would in a living room.
- Small wristwatch-like touch screens are integrated in the seat belts. Occupants have the controls for the air conditioning, music, etc. close at hand even when the seats are turned around. The driver also has access to all the driving controls for switching off the autonomous drive mode.

### **Renault SYMBIOZ Demo car - Advanced interior modularity and a MULTI-SENSE experience for 2023**

Renault SYMBIOZ Demo car looks ahead to 2023, and positions Renault at the cutting edge of innovation for cabin modularity and a sensory in-car experience.

This demo car is not showcased at the Frankfurt Motor Show but Renault will organise road tests for this vehicle at the end of the year. SYMBIOZ Demo car's interior layout will change according to the driving mode selected.

- The *Classic* mode is the standard mode. The travellers are at one with the car and feel at home. The driving position is conventional and the car's settings are focused on comfort.
- The *Dynamic* mode boosts driving sensations. Driving is more active and the driver's seat features additional lateral support for a bucket seat feel. The engine response, steering and chassis settings are all geared towards dynamic driving.
- The *AD* mode optimises the space available in front of the driver so they can do different things. When *AD* mode is switched on, the steering wheel and dashboard – which comes with a unique L-shaped display developed by LG automatically – move back 12 centimetres.

The driving mode is selected by pushing the Renault logo in the middle of the steering wheel which is lit up like a hologram.



In *AD* mode, the driver can choose from three journey experiences depending on how they want to spend their free time. The cabin layout also changes accordingly.

- The *Alone@Home* layout frees up space by retracting the steering wheel and dashboard and taking advantage of the extra foot room provided by the vehicle platform which has been optimised for autonomous driving and to house the electric motor. There is no centre console or transmission tunnel. The driver can use the additional space to enjoy other tasks.
- The *Relax* layout enables the driver to sit back and relax in their seat in 'zero gravity' position. They can use a special headset developed by Ubisoft to enjoy a virtual reality experience simulating abstract and surreal environments.
- The *Sharing* layout enables the driver to move closer to the person in the front passenger seat. The front armrests automatically drop down and the seats turn 15 degrees towards each other.

Courtesy of the Renault MULTI-SENSE 3.0 system, an upgrade to the current MULTI-SENSE system, the occupants will enjoy a new sensory experience based on the driving mode selected. The senses will be awakened, notably smell (different fragrances), hearing (a choice of acoustic ambiances) and sight (a range of lighting environments – white in *Classic* mode, amber in *Dynamic* mode and gold in *AD* mode).

### **'Mind-off' automation**

SYMBIOZ and SYMBIOZ Demo car are both cars capable of reaching Level 4 driving automation out of the five levels identified in SAE International's standard. Also known as 'mind-off' automation, Level 4 frees up the driver from all dynamic driving tasks when the car's automated driving system is switched on. The car is capable of moving into a safe position on the side of the road if it cannot deal with an unexpected incident ahead.

Since it is no longer necessary to pay attention to the road ahead, the driver becomes an occupant, just like any fellow passenger. He or she can consequently indulge in non-driving-related activities, such as reading a book, watching a film or working.

On authorized highways, a Level 4 autonomous car can adjust the vehicle's speed in accordance with the car in front, stay in its lane even when cornering, change lanes (i.e. to overtake another car) and operate alone in traffic jams.

Autonomous drive features will be progressively deployed in Renault's range under the name Renault 'EASY DRIVE'.

## **Zero Emissions\* electric platform**

The Renault SYMBIOZ concept car and demo car are powered by all-electric motors as Renault continues to pursue its Zero Emissions\* strategy. Renault is pioneering mass-market electric vehicles in Europe and is Europe's number one seller of electric vehicles.

- The two permanent-magnet electric motors powering SYMBIOZ and the demo car deliver high power-to-weight and torque-to-weight ratios. They are located on the rear axle, with each motor driving one wheel. This layout varies the torque transferred to each wheel to improve the car's agility and stability when cornering.
- This rear-wheel drive system also ensures that power is fed to the road more efficiently to enhance driving pleasure.
- On the performance front, the SYMBIOZ demo car delivers maximum power of 500kW and 660Nm peak torque. It provides acceleration from standstill to 100kph in less than six seconds, and the range of the batteries is more than 500 kilometres in real-world driving conditions on motorways. The 72kWh batteries can be charged 80 percent of their capacity in just 20 minutes.
- Performance, range and charging times will be improved by 2030 when a car like SYMBIOZ will take to the roads.
- The car batteries are charged automatically via an inductive charging system.

The Renault SYMBIOZ concept and the demo car were designed on a special EV platform. The position of the motors and batteries was optimised in order to deliver:

- E-segment cabin space with no transmission tunnel. The rear-wheel drive system also enabled the front seats to be brought forward.
- A dynamic drive thanks to a lower centre of gravity and the battery position.

*\* Zero CO<sub>2</sub> emissions and zero emissions of regulated pollutants during road use, in compliance with NEDC, excluding wear parts.*

## Connectivity for additional free time and safety



The advanced on-board connectivity system on SYMBIOZ and the demo car allows the driver and passengers to access their digital lives anytime and enjoy a wide range of services.

- When they climb into the car, occupants are identified automatically regardless of where they are sitting. Among other functions, their seat settings and music and video preferences are immediately taken into account.
- Occupants can access their digital environment, media and services just like at home or in the office.
- The various HMI applications like the seat belt control screens and the dashboard display provide data from the outside world via a Wi-Fi connection in order to interact remotely with domestic appliances like the TV, fridge, etc.
- The SYMBIOZ Demonstrator, which will be on the road by the end of the year, showcases some of the features of the Renault 'EASY DRIVE' new generation mobility and connected services solutions before they will be deployed in the Renault range over the next few years. For example, it allows passengers to check what happens in the house thanks to a 360 ° camera view on the screen of the dashboard, but also to modify the heating settings, connect or disconnect the alarm, etc.

This advanced on-board connectivity system is also a safety feature because the car can interact with other vehicles and road infrastructure.

- For instance, the car can be warned automatically of any accidents, dangers ahead or slow traffic several kilometres before these are encountered.
- On motorways, the car can go through toll gates in autonomous drive mode, as Renault demonstrated in July on a prototype which preceded the demo car. The car is notified of any upcoming infrastructure about one kilometre before the toll gate so it can move into a special lane for autonomous cars. Traffic sign recognition technology enables the vehicle to move into the right lane at a speed below 30kph and reduce its speed. Sensors keep the car in the middle of the lane.

## Renault SYMBIOZ: A demo car developed under an open innovation project



Renault will organise road tests for its SYMBIOZ demo car by the end of 2017. This demo car foreshadows the electric, autonomous and connected car of 2023.

This engineering feat was achieved by setting up a new organisation within the BVC Garage (for Brand Vision Concept) at Renault's Technocentre located in Guyancourt, outside Paris. SYMBIOZ demo car was developed by cross-functional teams from engineering and design. The project was carried out in partnership with technology and creative industry leaders, in an 'open innovation' approach. Groupe Renault highly values this way of collaborative working.

The partners provided input in their specific areas of expertise:

- LG is involved in the development of the human-machine interfaces
- Ubisoft is providing on board virtual reality experience for autonomous driving mode
- Devialet is developing a new user experience through advanced sound system
- Sanef is working on the way the car communicates with road network infrastructure
- TomTom is contributing its geo-positioning expertise
- IAV is providing autonomous driving engineering expertise

Before working on the actual SYMBIOZ demo car, teams from the BVC Garage developed three test mules to evaluate the main engineering components: the autonomous drive platform with Ghost Rider (based on Espace 5), the chassis and electric drive train with Road Runner and the autonomous drive system for this vehicle SYMBIOZ with Madmax (based on Talisman).

© photos Fernando Guerra, Jean-Christophe Mounoury, Nicolas Pivetal, Renault Design, Pagécran, LG

# 02

## New Renault MÉGANE R.S. – Boosted performance



Renault Sport is proud to be taking the wraps off **New Renault MÉGANE R.S.** at the 2017 Frankfurt International Motor Show. Since the launch of the original Mégane R.S. back in 2004, the model has carved out a strong reputation in the high-performance C-segment and become widely regarded as a benchmark in its class. New Renault MÉGANE R.S. takes Renault Sport's unmistakable hallmarks of **agility, efficiency** and **driving enjoyment** a step further thanks to.

- More finely-tuned chassis performance permitted by **4CONTROL** technology complete with four-wheel steering, **a first in the segment.**
- An all-new 280hp/390Nm engine that has benefited from synergies within the Alliance. Also, for the first time, New Renault MÉGANE R.S. is available with a choice of two transmission options.
- Technologies derived from the world of motorsport.

Order books for New Renault MÉGANE R.S. will open on December 1, 2017.

"I was involved in New Renault MÉGANE R.S.'s development and I am proud to be its ambassador. Thanks to the new technologies it packs, including 4CONTROL technology, New MÉGANE R.S. is even more efficient and nimbler than its predecessor. It's a delight to drive."

**Nico Hülkenberg** – Renault Sport Racing Formula 1 driver, Renault Sport Cars ambassador.

# Performance-driven design

## Wider tracks for outstanding driving dynamics

New Renault MÉGANE R.S.'s **expressive, sporty lines** point to the model's **performance pedigree** and pay tribute to Renault's longstanding involvement in topflight motorsport.

New Renault MÉGANE R.S. stands out through its specific proportions. In addition to the bespoke lines of its flanks, including wider wings which have been extended by **60mm** and **45mm** at the front and rear respectively compared with Mégane GT. Meanwhile, its overall width has been increased and new **18 and 19-inch** wheels have been designed to provide a better stance and further enhance cornering performance.



## Forceful styling features incorporating cues from the world of motorsport

The new front bumper incorporates:

- A **Formula 1-style blade** which, in addition to being a Renault Sport styling hallmark and symbolic of Renault's commitment to Formula 1, is picked out in a distinctive **Gun Metal Grey satin finish** that contrasts sharply with the bodywork's high-gloss sheen.
- A **wide air intake** to provide air for the intercoolers and engine cooling.
- A **specific front grille** complete with a honeycomb grid pattern revisited by Renault Sport.

The design of the sides features:

- A **silhouette** inspired by New Renault MÉGANE, with **sculpted, sensuous lines** accentuated by the R.S. version's wider tracks and wings.
- **Extractor vents** located behind the front wheels.
- A specific sill design incorporating a black blade that runs along the bottom edge to visually connect the front and rear of the car and suggest a **'flat floor' effect**, a common feature in motorsport.

Rear:

- The new lip **spoiler** with body-colour vertical mountings designed to generate greater downforce underlines the width of New Renault MÉGANE.
- The new rear bumper incorporates:
- **Mégane R.S. hallmark centrally-positioned twin exhaust pipes** with a prismatic finish.
- A **working diffuser** inspired by the world of Formula 1 for more balanced downforce at higher speeds.



### A specific new body colour

A new body colour has joined the Mégane R.S. family, namely **Tonic Orange**. Like Renault Sport's iconic **Sirius Yellow**, the new finish benefits from special work to combine a unique sheen with a special effect as light reflects off the body. It also injects added dynamism and is perfectly coordinated with the car's cabin where the following features contribute to New Renault MÉGANE R.S.'s distinctive interior ambience:

- Sports front seats with integrated head rests.
- A predominantly **charcoal grey** cockpit<sup>1</sup> with **red top-stitching**,
- A choice of two upholsteries ('carbon fibre weave' or **Alcantara**<sup>®2</sup>),
- Bespoke aluminium pedal covers and gear lever.

#### **Renault Sport's visual branding common to both its road cars and the world of racing**

Renault Sport took advantage of the presentation of Renault's latest Formula 1 car – the R.S.17 – in London, in February, to reveal its new logo which is shared by Renault Sport Racing and Renault Sport Cars. Now, for the very first time, this badging – emblematic of Renault's sporting heritage – appears on the tailgate of one of the brand's road-going models – New Renault MÉGANE R.S.

<sup>1</sup> Except versions with sun roof

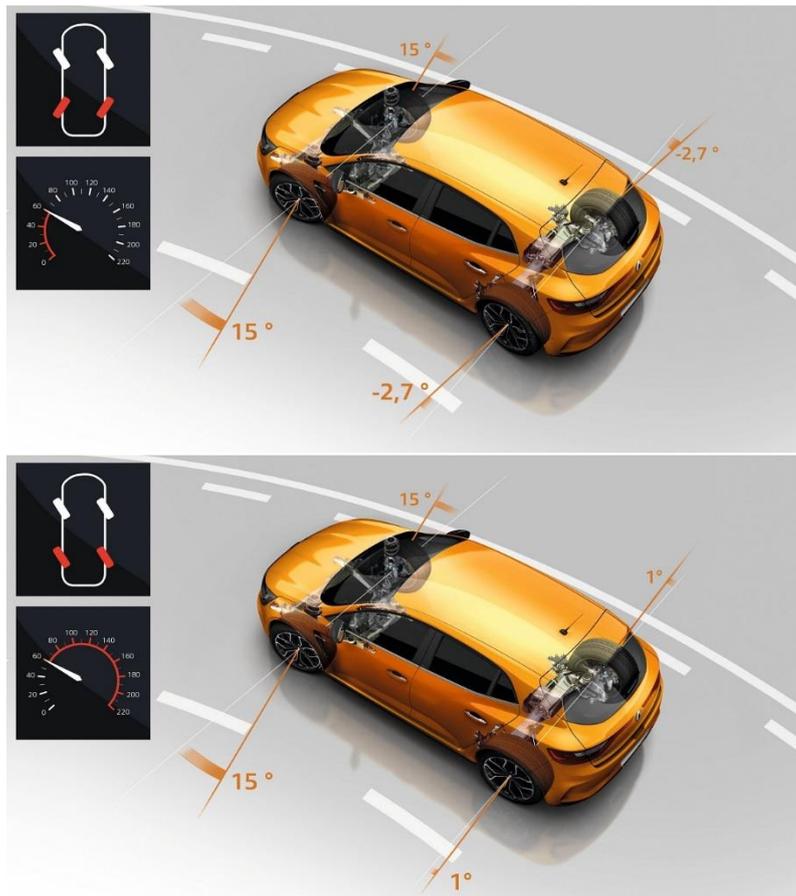
<sup>2</sup> Depending on market

# Unrivalled driving pleasure courtesy of Renault Sport's expertise

## 4CONTROL chassis: an exclusive in New Renault MÉGANE's class

Renault Sport's acclaimed engineering expertise has taken the performance of New Renault MÉGANE R.S. to a new level thanks to two new features that are **unique in the car's segment**.

- Courtesy of Renault's **4CONTROL system** with four-wheel steering (a standard feature of both the model's **Cup and Sport chassis versions**), New Renault MÉGANE R.S. is even more **nimble** through tight turns and more **stable when cornering at higher speeds**. The steering is more incisive while the turning circle is even tighter when manoeuvring. Carefully configured by Renault Sport, 4CONTROL generates a whole new level of driving enjoyment in the segment.



- **Four hydraulic compression stops**, a technology derived from the world of motorsport, provide additional damping and eliminate the effects of rebound by performing the following functions:
- They ensure a high level of chassis efficiency on the **Cup chassis** version irrespective of the type of road.
- Combined with the **Sport chassis**, they deliver unprecedented comfort in the segment.



New Renault MÉGANE R.S. carries over the key features that helped to forge the success of previous-generation versions.

- The **independent steering axis front suspension** has been completely redesigned to cater for New Renault MÉGANE R.S.'s new geometry and is stiffer than before.
- The new **Torsen® limited slip differential** that comes with the Cup chassis features different lock-up values under acceleration and deceleration for enhanced traction and higher cornering speeds.
- The suspension settings of both versions are specific (springs, dampers, bump stops and anti-roll bar stiffness).

## An all-new engine that benefits from synergies within the Alliance

New Renault MÉGANE R.S. is equipped with an all-new turbocharged engine equipped with direct fuel injection.

- It takes advantage of **synergies within the Renault-Nissan Alliance**.
- This 1.8-litre (1,798cc) four-cylinder unit generates **280hp (205kW)** at 6,000rpm and **390Nm of torque**, positioning it firmly amongst the class's front-runners in terms of peak torque.
- **Maximum torque** is available **from 2,400rpm up to 5,000rpm**.

To enable this engine to produce this level of power and torque under the bonnet of New Renault MÉGANE R.S., Renault Sport focused its development work primarily on **the cylinder head, air intake and exhaust**.

- The **cylinder head** has been completely redesigned with combined input from **the experts at Renault Sport Cars and Renault Sport Racing** Formula 1 engineers.
- The revised, higher-capacity dual-intake **air filter** features improved permeability.
- The **Twin Scroll** turbo significantly enhances flexibility and response at low revs.

This engine emits 155g of CO<sub>2</sub> per kilometre (a considerable 11% reduction compared with the previous generation Mégane R.S.), while NEDC combined-cycle fuel consumption stands at 6.9 litres per 100km<sup>3</sup>.

<sup>3</sup> New Renault MÉGANE R.S. with EDC transmission and 18-inch wheels.

## A choice of two types of transmission

La performance d'une voiture s'évalue aussi grâce à son freinage. Pour une expérience toujours plus riche, Renault Sport propose deux nouveautés :

- De nouveaux **disques avant de 355 mm** de diamètre associés à des étriers Brembo®.
- D'une option de disques **bi-matière en fonte et aluminium**.

For the first time, New Renault MÉGANE R.S. **offers a choice of transmission** for its new 280hp TCe engine.

- A six-speed **manual** gearbox.
- Six-speed automatic **EDC** dual clutch transmission.

The ratios and gearshift calibration were developed by Renault Sport to combine performance with efficient fuel consumption, while the EDC transmission's gear shift times have been optimised for greater performance and driving enjoyment.

The EDC transmission stands out through a number of specific features:

- Paddle-shifters – of a type similar to those used in motor racing – allow the driver to change gear without having to take their hands off the steering wheel when cornering.
- **Multi-Change Down** technology ensures fast sequential down-changing and allows drivers to downshift several gears in quick succession under braking. This ensures the vehicle is in the most appropriate gear to tackle the following corner.
- **Launch Control** for optimised getaways, directly inspired by motorsport technology. This is available in either Race mode or Sport mode, where it works in conjunction with the specially-adapted traction control to produce a textbook start even in low-grip situations.

### **A 300 horsepower / 400Nm Trophy version**

Before the end of 2018, Renault Sport will introduce a Trophy version of New Renault MÉGANE R.S., the engine of which will produce 300hp and 400Nm of torque. It will incorporate a number of technologies geared to performance, including the Cup chassis and 19-inch wheels as standard equipment.

The performance of a car is also gauged by its braking ability. Renault Sport has introduced two new features to upgrade New Renault MÉGANE R.S.'s stopping power:

- New **355mm front discs** with Brembo callipers.
- Optional **dual-material cast iron and aluminium** brake discs.

## Upgraded R.S. Monitor

Thanks to its on-board telemetry system, R.S. Monitor, Renault Sport extends the R.S. experience beyond the act of simply driving. The latest version features new graphics and is even more user-friendly, with a choice of two configurations.

- **R.S. Monitor** displays the driver's performance in real time on the R-LINK 2 screen.
- **R.S. Monitor Expert** provides drivers with the opportunity to connect a camera (either an independent camera or their smartphone camera) to film their drive. They can then play back and analyse their run thanks to the incorporation of performance data in the image. They can even share the film on social media.

There is a bespoke website for Renault Sport customers.

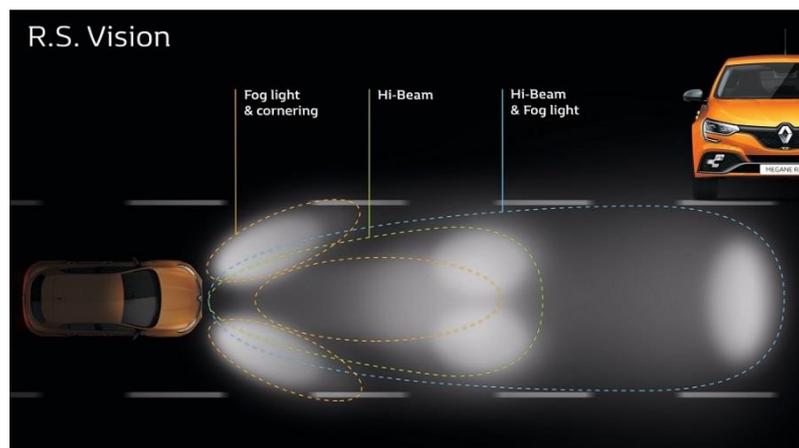
- **R.S. Replay** allows owners to engage with other members of the Renault Sport community by uploading their recordings, playing them back and comparing runs.

## Performance in all situations

### R.S. Vision, Renault Sport's lighting system

Already a feature of New Clio R.S., Renault's **multi-reflector R.S. Vision LED** lighting system **was a natural choice** for New Renault MÉGANE R.S. Taking the form of a **chequered flag** – another nod to the world of motor racing – it is incorporated in the front bumper and frames the F1-style blade. This patented technology, which is exclusive to Renault Sport, delivers high-performance lighting and covers the **fog lights, cornering lights and dipped and main beam head lights**. R.S. Vision stands out as an unprecedented lighting package in New Renault MÉGANE R.S.'s segment to ensure a level of visibility worthy of the car's high-performance pedigree.

Meanwhile, for the first time on Mégane R.S., Renault's trademark **C-Shaped** lighting signature incorporates the vehicle's direction indicators.



### A personalised experience courtesy of MULTI-SENSE

Renault's **MULTI-SENSE** system and its choice of five driving modes personalise the driving experience by adapting engine response (via the pedal mapping), the firmness of the steering and gear shift speeds<sup>4</sup>.

- **Comfort mode:** helps to minimise fuel consumption during everyday use.
- **Normal mode:** the ideal compromise between comfort, acoustics and performance.
- **Sport mode:** sportier performance, enhanced engine response, a more satisfying engine sound and firmer steering, while the ESC threshold has been raised.
- **Race Mode:** designed for track use and unfettered performance thanks to sportier 4CONTROL settings for enhanced agility, with the ESC turned off.
- **Perso mode:** New Renault MÉGANE R.S.'s technologies can be activated or switched off at will to enjoy a truly personalised drive.

The **R.S. Drive** button provides shortcut access to the Sport and Race modes thanks to a short or long press respectively.

<sup>4</sup> With EDC transmission only.

## Driver aids designed for everyday use

Now a five-door hatchback, New Renault MÉGANE R.S. is even more suited to everyday use, while losing nothing of its dynamic, sporty character.

A suite of Advanced Driver Assistance Systems (**ADAS**) allows it to be driven in all types of situation.

Its palette of driving aids – all accessed and activated or deactivated via the R-LINK 2 tablet – fulfil provide the following functions:

- **They reassure:** Adaptive Cruise Control (ACC) and Active Emergency Braking System (AEBS),
- **alert:** Lane Departure Warning (LDW); Safe Distance Warning (SDW); Traffic Sign Recognition with Over Speed Prevention (TSR with OSP) and Blind Spot Warning (BSW),
- **or assist when manoeuvring:** Reversing camera; front, rear and side parking sensors; and Easy Park Assist (hands-free parking).

**New Renault MÉGANE R.S.** comes with Renault's high-end **R-LINK 2** multimedia system complete with a large **8.7-inch (22cm)** TFT display.