

BMW at the Paris 2006 Mondial de l'Automobile. Contents.



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1. BMW at the Paris 2006 Mondial de l'Automobile. (Short Version)



Introducing three new models and attractive innovations on the drivetrain, BMW stands out clearly once again at the 2006 Paris Motor Show, the Mondial de l'Automobile: Not only the new BMW 3 Series Coupé, the new BMW X3, and the BMW M6 Convertible, but also BMW's new range of straight-six petrol and diesel engines for the 3 Series are making their debut at the most important motor show of the year in Europe.

The Mondial de l'Automobile is taking place at the fairgrounds of the capital of France from 30 September – 15 October 2006, and the organisers expect some 1.5 million visitors from all over the world.

At the Mondial de l'Automobile 2006 the new BMW 3 Series Coupé will be presented to a large audience for the first time. And indeed – this sporting and elegant two-door is an exclusive new entry into the BMW 3 Series, joining its Saloon and Touring counterparts. Apart from its stylish look, the Coupé stands out in particular through its excellent driving dynamics now also available with BMW's intelligent xDrive all-wheel-drive system.

Visitors from the world of motoring and aficionados of the motor car from all over the world also have the opportunity in Paris to check out the new BMW X3 for the first time. This highly successful Sports Activity Vehicle (SAV) now comes with carefully updated and refined design, a particularly sophisticated interior, as well as new, powerful engines for even greater appeal.

Introducing the new version of the BMW X3 as well as a number of xDrive variants of the 3 Series Coupé, the Munich car company has everything it takes to further expand its top position as the world-leading manufacturer of all-wheel-drive vehicles in the premium segment.

The unique M6 Convertible is of course a further attraction at the Mondial de l'Automobile. This open four-seater combines the dynamic performance of a super sports car with the exclusivity of a luxury convertible, the 5.0-litre ten-cylinder power unit developing 373 kW/507 hp for outstanding performance at all times.

Recently awarded the title "Engine of the Year" once again, the high-speed power unit accelerates the BMW M6 Convertible from 0–100 km/h in just 4.8 seconds.

Not only the V10 power unit, but also BMW's straight-six engines have already gained supreme international merits through their fascinating performance, exemplary refinement and outstanding economy. And now BMW is presenting the new six-cylinder petrol and diesel engines for the 3 Series at the Paris Motor Show, particularly the 3.0-litre six-cylinder with Twin Turbo Technology, High-Precision Injection with direct injection of gasoline fuel, and an all-aluminium crankcase ensuring top performance in the 3.0-litre six-cylinder. Making its world debut in the BMW 335i Coupé, this 225 kW/306 hp power unit will also be available in future in the BMW 3 Series Saloon and the BMW 3 Series Touring.

Yet another highlight at the Mondial de l'Automobile is BMW's new generation of straight-six diesel engines also featured in the 3 Series. An all-aluminium crankcase, turbocharging, and the latest generation of common-rail direct fuel injection make the new diesel an outstanding example of Efficient Dynamics.

The power unit right at the top, obviously, is the new 3.0-litre featuring Variable Twin Turbo (VTT) technology for maximum output of 210 kW/286 hp and peak torque of 580 Newton-metres or 427 lb-ft. This most powerful straight-six diesel in the world comes in the BMW 3 Series Coupé, the BMW 3 Series Saloon, and the BMW 3 Series Touring.

BMW's second new straight-six diesel is featured in the BMW 325d. Developing maximum output of 145 kW/197 hp and peak torque of 400 Nm or 295 lb-ft, this power unit also using a turbocharger with variable turbine geometry offers impressive muscle combined with exemplary efficiency: The new BMW 325d Saloon makes do with just 6.4 litres of diesel fuel per 100 kilometres (equal to 44.1 mpg Imp) in the EU test cycle, the new BMW 325d Touring consumes hardly any more fuel at 6.6 litres or 42.8 mpg Imp.

Searching for efficient dynamics, BMW does not focus on the development of the power unit alone. On the contrary – innovations involving the engine's ancillary units allow further progress reducing fuel consumption and enhancing motoring pleasure at the same time. An impressive example in this context is Intelligent Alternator Control announced by BMW at the 2006 Mondial de l'Automobile, which comprises a system for the regeneration of brake energy. The objective in this case is to generate the electric power required for the car's on-board network exclusively in the overrun mode and under application of the brakes, so that the engine is not required to develop any energy for driving the alternator when pulling the car. In practice, this means that a greater share of the energy contained within the fuel is available for extra driving dynamics and power when accelerating.

Regeneration of brake energy is therefore an additional method for ensuring enhanced fuel efficiency, energy so far wasted through dissipation of heat on the brake discs being converted into electric power and fed to the car's on-board network.

2. Highlights at a Glance.



- **World debut: the new BMW 3 Series Coupé.**

With its unique body design and supreme driving dynamics, the new BMW 3 Series Coupé is the No 1 choice for the true individualist. At very first sight, the flowing silhouette of this sporting but elegant two-door bears out genuine passion for dynamic motoring. In the top-of-the-range BMW 335i Coupé, the new 3.0-litre featuring Twin Turbo Technology, High-Precision Injection and an all-aluminium crankcase offers supreme output of 225 kW/306 hp. And for the first time the new BMW 3 Series Coupé is available with BMW's intelligent xDrive all-wheel drive system.

- **First appearance worldwide: the new BMW X3.**

Unique agility, modern body design, superior flexibility and a premium ambience inside the car – these are the features which give the new BMW X3 its truly outstanding position in the segment of Sports Activity Vehicles (SAVs). Excellent performance on the road and unrestricted muscle and power off the beaten track are ensured by powerful engines operating in conjunction with BMW's permanent electronically controlled xDrive all-wheel-drive technology. And for the first time a diesel engine comes right at the top of the range in the new BMW X3, the 3.0-litre straight-six with Variable Twin Turbo technology in the BMW X3 3.0sd developing a superior 210 kW/286 hp.

- **Simply fascinating: the BMW M6 Convertible.**

The BMW M6 Convertible is one of the most fascinating and exclusive cars ever built – a high-performance convertible combining the performance of a sports car, luxurious features all round, and inimitable flair. The BMW M6 Convertible is powered by a 373 kW/507 hp V10, a multiple prize-winner churning out supreme power and performance all the way to the highest engine speeds and accelerating the BMW M6 Convertible to 100 km/h in just 4.8 seconds.

- **Extra muscle: six-cylinder petrol engine with Twin Turbo technology.**

The BMW 3 Series proudly boasts a new top-of-the-range power unit, with the world's first 3.0-litre straight-six featuring Twin Turbo technology, High-Precision Injection for direct injection of gasoline fuel, and an all-aluminium crankcase making their debut in the BMW 335i Coupé. Given these qualities, this 225 kW/306 hp power unit is obviously also available in the BMW 3 Series Saloon and the BMW 3 Series Touring.

- **Another world-first: the new six-cylinder diesel engines.**

The most sporting and dynamic straight-six diesel in the world is now also available in the BMW 3 Series Saloon and the BMW 3 Series Touring: Benefiting from Variable Twin Turbo (VTT) technology, this newly developed 3.0-litre power unit offers peak output of 210 kW/286 hp and maximum torque of 580 Nm or 427 lb-ft. Another new power unit is the 3.0-litre straight-six diesel with Variable Turbine Geometry (VTG), maximum output of 145 kW/197 hp, and peak torque of 400 Nm or 295 lb-ft. Two features shared by both of these new engines are an all-aluminium crankcase and the latest generation of common-rail direct fuel injection.

- **Innovation: Intelligent Alternator Control and regeneration of brake energy.**

BMW is proudly presenting yet another significant innovation at the 2006 Mondial de l'Automobile in Paris, focusing this time on enhanced economy and driving dynamics by further improvement of the engine's ancillary systems: New Intelligent Alternator Control concentrates the generation of electricity for the car's on-board network on the overrun and brake application phases. This means there is more energy available for enhanced driving dynamics whenever the engine is actually "pulling" the car, for example when accelerating.

Intelligent Alternator Control also comprises a system for regenerating brake energy. In future, therefore, heat generated on the brake discs upon application of the brakes will no longer be squandered, but rather converted into electric power also fed to the car's on-board network.



3. BMW at the Paris 2006 Mondial de l'Automobile. (Long Version)

3.1 Elegance and Performance United: The new BMW 3 Series Coupé.

The new BMW 3 Series Coupé proudly making its public debut at the 2006 Mondial de l'Automobile in Paris is more stylish and dynamic than ever before. Indeed, this new two-door continues a long tradition at BMW and at the same time sets brand-new standards in a highly interesting segment.

This is the third time that the BMW 3 Series is being upgraded by a Coupé supplementing the Saloon and Touring. And a point to be emphasised is that the new BMW 3 Series Coupé is more unique and individual than ever before.

This individual character of the new BMW 3 Series Coupé is recognisable at very first sight, with virtually every beholder admiring the sporting and stretched lines extending along the body brand-new in every respect. And beneath the engine compartment lid the car is likewise brand-new, with BMW's 3.0-litre straight-six featuring Twin Turbo technology, High-Precision Injection and the all-aluminium crankcase making its powerful premiere. Indeed, this 225 kW/306 hp high-performance power unit gives the BMW 335i Coupé truly outstanding performance combined with impressive fuel economy.

The wide range of engines includes two further petrol units and two diesel engines. Rear-wheel drive, optimised weight, harmonious axle load distribution and the most demanding suspension in this segment are further guarantees ensuring a truly fascinating driving experience. And as yet another highlight the BMW 3 Series Coupé comes for the first time with BMW's intelligent xDrive all-wheel-drive technology.

Powerful design to the last detail.

Despite its close relationship in technical terms to the Saloon and Touring, the new BMW 3 Series Coupé is more unique in its looks than ever before: It is a genuine BMW from every angle, but nevertheless a true individualist in its two-door body. The design of the car is free of any exaggerated, flashy effects, but full of lasting, positive impressions. So in its overall appearance, the new BMW 3 Series Coupé is perfectly balanced, smooth and harmonious, and mature to the last detail.

The new BMW 3 Series Coupé embodies powerful elegance in its most advanced, avant-garde form, the flowing silhouette immediately revealing a powerful passion for dynamic motoring. The long wheelbase, the passenger

cell moved far to the rear, as well as the low roofline tapering out gently to the tail of the car all characterise the stretched silhouette of the new Coupé, while the voluminous, extra-large wheel arches emanate a feeling of power and solidity.

Bi-xenon headlights with corona rings featured as standard.

The front air dam, the headlight units and contours on the engine compartment lid are likewise new and quite unique on the BMW 3 Series Coupé. Seen from the front, the car is low and wide. The low-slung dual round headlights fit snugly beneath the engine compartment lid and therefore appear optically to be cut off at the top, creating the impression of a very concentrated, self-confident look.

The new BMW 3 Series Coupé comes as standard with bi-xenon headlights featuring corona rings serving as daytime driving lights. Indeed, these striking light rings have a dual effect, making the Coupé easy to recognise at all times and ensuring that it stands out clearly as a genuine BMW at very first sight.

The LED light rods in the rear light clusters also give the new BMW 3 Series Coupé a truly unique look. Integrated flush in the rear and side panels, the light units are split up into two sections and extend all the way down to the rear lid. The entire rear end, in turn, is characterised by a subtle flow of horizontal lines emphasising the wide track and the sporting appeal of the car also from this angle.

Individual style and class also inside.

The clear focus on individual style, dynamism and exclusivity continues consistently within the car, the light effects, colour schemes and the choice of materials providing a unique atmosphere in the new BMW 3 Series Coupé. A particular highlight is added by the light bar on the inner door and side linings available as an option. Covered at the top, this light bar extends above the armrests from the front door hinges all the way to the rear of the passenger compartment, emanating warm and direct light within the interior. Switches and control elements used particularly often such as the door openers and gearshift lever are finished in particularly high metallic quality not only looking good, but also offering a very special and pleasant surface touch.

Straight-six power units for Efficient Dynamics.

The new BMW 3 Series Coupé is available with a choice of no less than three petrol and two diesel engines. Fitted lengthwise at the front, the straight-six power units conveying their power to the rear wheels of the car continue a proven drive concept with a long and glorious tradition at BMW. And now the new BMW 3 Series Coupé is available for the first time with a 3.0-litre straight-six power unit featuring Twin Turbo, High-Precision Injection, and an

all-aluminium crankcase. Developing maximum output of 225 kW/306 hp, this unique engine combines the qualities typical of a six-cylinder with the extra power and performance of two turbochargers as well as second-generation direct gasoline injection for the first time providing a significant improvement in fuel economy also in practice.

The result of this combination is Efficient Dynamics of a very special kind: The power unit of the BMW 335i Coupé develops its maximum torque of 400 Newton-metres or 295 lb-ft at just 1,300 rpm, providing its power and performance much more spontaneously than conventional turbocharged engines and ultimately revving up smoothly and powerfully all the way to 7,000 rpm.

The driving experience is as impressive as these figures indicate from the start, with the BMW 335i Coupé accelerating from 0–100 km/h in just 5.5 seconds. Top speed, in turn, is limited electronically to 250 km/h or 155 mph. And despite this impressive performance, BMW's new top-end power unit in the straight-six range offers equal impressive economy, consuming just 9.5 litres of premium fuel/100 kilometres (equal to 29.7 mpg Imp) in the BMW 335i Coupé tested in the composite EU driving cycle.

Optimised weight, extra power.

The two six-cylinder normal-aspiration engines also available in the new BMW 3 Series Coupé likewise offer an even better balance of power, weight and fuel economy: The power unit in the BMW 330i Coupé develops maximum output of 200 kW/272 hp and peak torque of 315 Newton-metres or 232 lb-ft. This ensures acceleration to 100 km/h in 6.1 seconds and a top speed limited electronically to 250 km/h or 155 mph.

Impressive performance and superior refinement of this kind go together in the 3.0-litre normal-aspiration power unit with a new level of all-round efficiency: Consuming just 8.8 litres on average in the EU test cycle (equal to 32.1 mpg Imp), the new BMW 330i Coupé is approximately 12 per cent more fuel-efficient than its predecessor.

The use of magnesium on the crankcase, in the bedplate and cylinder head cover, together with the lightweight camshafts, serves to significantly reduce the weight of the engine. Greater efficiency is also ensured, inter alia, by BMW's fully variable VALVETRONIC valve management.

Both of these features also comes in the 2.5-litre straight-six developing 160 kW/218 hp and maximum torque of 250 Newton-metres or 184 lb-ft to give the BMW 325i Coupé equally outstanding performance on the road: Acceleration to 100 km/h comes in 6.9 seconds, and the car's top speed is

247 km/h or 153 mph. Ultimate proof of supreme efficiency also in this class, finally, is ensured by average fuel consumption in the composite EU test cycle of 8.4 litres/100 kilometres, equal to 33.6 mpg Imp.

Diesel engines in the Coupé – more appealing than ever before.

With the diesel engine certainly being a very tempting alternative in the new BMW 3 Series Coupé, the BMW 335d Coupé and the BMW 330d Coupé offer two particularly attractive engines with this outstanding technology. Their primary merits are superior power, unique fuel economy, low weight thanks to the all-aluminium crankcase, and use of a particulates filter fitted as standard.

Particularly the BMW 335d Coupé offers new benchmarks in many respects, the most sporting and dynamic six-cylinder diesel in the world giving the car a standard of power and performance quite unique in its segment. Maximum output of the 3.0-litre straight-six diesel engine with Variable Twin Turbo technology is 210 kW/286 hp, peak torque is 580 Newton-metres or 427 lb-ft at just 1,750 rpm. And with the engine developing its maximum output at 4,400 rpm, engine speed goes all the way to 5,000 rpm quite exceptional on a diesel.

An ongoing, continuous surge of power ensures truly dynamic acceleration throughout the entire speed range: From a standstill, the BMW 335d Coupé reaches 100 km/h or 62 mph in just 6.1 seconds, and its top speed is limited electronically to 250 km/h or 155 mph.

When it comes to fuel economy, on the other hand, the BMW 335d Coupé is by all means a modest performer, consuming just 7.5 litres of diesel/100 kilometres (equal to 31.0 mpg Imp) in the EU test cycle and clearly proving how attractive the principle of Efficient Dynamics can be on the road.

This superiority is attributable, first, to BMW's two-stage turbocharger technology with a small turbocharger cutting in at low engine speeds and a large turbocharger activated additionally at higher speeds. Another essential factor is third-generation common-rail fuel injection using piezo injectors for a fast and finely metered supply of fuel.

Maximum output of the second variant of BMW's 3.0-litre straight-six diesel is 170 kW or 231 hp. Combined with peak torque of 500 Newton-metres or 369 lb-ft, this kind of power again promises dynamic performance on the road, acceleration to 100 km/h in 6.6 seconds as well as top speed limited electronically to 250 km/h or 155 mph impressively underlining the sporting character of this very special diesel engine.

With its new turbocharger and the latest generation of common-rail fuel injection, the power unit in the BMW 330d Coupé also offers new dimensions in terms of efficiency and fuel economy, with average fuel consumption in the EU test cycle of just 6.5 litres diesel fuel/100 kilometres (equal to 43.5 mpg Imp).

Freedom of choice for the sporting driver: manual or automatic.

As an alternative to the six-speed manual gearbox featured as standard, the new BMW 3 Series Coupé is also available with a particularly fast, dynamic and efficient automatic transmission: Featuring particularly effective hydraulic control, a new torque converter complete with an integrated torsion damper, and extremely efficient management software, the newly developed six-speed automatic transmission fitted as standard in the BMW 335d Coupé ensures an exceptionally quick and precise response to the driver's commands especially when accelerating.

The new automatic transmission is able to shift gears with a reaction time of just 100 milliseconds, regardless of whether the driver is switching back one or several gears at a time. With its precise selection of gears, the new automatic transmission also helps to optimise fuel economy when driving at a steady, consistent speed. And last but certainly not least, the driver also has the option to select gears manually via paddles on the steering wheel making the manual gearshift a truly sporting experience.

Modern chassis and suspension technology for maximum precision.

Transmission of engine power to the road is equally fascinating in the new BMW 3 Series Coupé, again providing the same kind of superiority as the power unit with its superior performance. The first point is that standard drive with the engine at the front and the drive wheels at the rear ensures maximum agility, directional stability and safe handling at all speeds. Then there is the double-joint tiebar front axle made largely of aluminium and featuring sophisticated spring struts as well as the five-arm rear axle, these two features together giving the new BMW 3 Series Coupé the currently most advanced and modern suspension in its class. And finally the low centre of gravity, very good axle load distribution, and the special set-up of the dampers also help to give BMW's new two-door truly unique dynamic driving qualities.

Rack-and-pinion steering with hydraulic power assistance offers supreme precision and provides an exact feedback on road conditions. Active Steering tailored specifically to the new BMW 3 Series Coupé comes as an option, varying steering forces as a function of the steering angle and road speed.

The new BMW 3 Series Coupé is fitted as standard with a high-performance brake system combining powerful deceleration, fading-free reliability, and wear reduced to a minimum. And at the same time BMW is the first manufacturer in the world to fit its models with a continuous, ongoing wear indicator permanently providing information on the brake linings and their condition.

DSC with enhanced functions for extra safety and dynamic performance.

The efficiency and performance of the brake system is further enhanced by various innovative functions of BMW's DSC Dynamic Stability Control: This latest generation of DSC not only controls the brakes in the ABS mode and helps to stabilise the car on slippery surfaces, but also compensates even the slightest fading effect at extremely high brake temperatures.

A further feature is regular Dry Braking ensuring optimum deceleration also in the wet. Pre-loading of the brake linings, in turn, enhances brake standby whenever required, and DBC Dynamic Brake Control maximises brake pressure whenever the driver requires a particularly high level of stopping power.

CBC Cornering Brake Control counteracts any unwanted oversteer of the car when applying the brakes slightly in a bend. And in conjunction with Active Steering, DSC is also able to provide additional stability on surfaces with a varying frictional coefficient by intervening in the steering quickly and with utmost precision.

On loose ground ASC Automatic Stability Control integrated in the system ensures optimum traction at all times. DTC Dynamic Traction Control, in turn, serves to move up the DSC response thresholds, enabling the car to smoothly build up speed on, say, loose snow, with the drive wheels intentionally being allowed to spin slightly. DTC even helps to provide a more sporting and active style of motoring, allowing a slight slip effect on the drive wheels for taking bends in a controlled drift or power slide.

Intelligent xDrive all-wheel-drive system on the Coupé.

The new BMW 3 Series Coupé is available for the first time with BMW's intelligent xDrive all-wheel-drive system. As an alternative to standard drive (engine at the front, drive wheels at the rear), all-wheel drive offers an even higher standard of traction and driving stability also on slippery or loose surfaces. Electronically controlled, variable distribution of drive power between the front and rear axle optimises not only the transmission of power on roads with a low frictional coefficient, but also the standard of driving dynamics by counteracting any tendency to over- or understeer.

The new BMW 3 Series Coupé comes as standard on 17-inch light-alloy rims together with 225/45R17 failsafe tyres. Another standard feature to be mentioned in this context is the Tyre Defect Indicator permanently monitoring air pressure and warning the driver as soon as the pressure of air in the tyres drops more than 30 per cent below the ideal level.

Ultra-modern body construction: less weight, more safety.

The intelligent combination of innovative and proven materials, together with modern production technology, gives the new BMW 3 Series Coupé a particularly light but extremely stiff bodyshell approximately 10 kilos or 22 lb lighter than the body of the Saloon.

Introduction of the innovative plastic side panel on the Coupé serves to optimise weight at the front end of the car, where this improvement is particularly important in the interest of enhanced driving dynamics. Compared with a conventional steel panel, the plastic side panel at the front is no less 50 per cent lighter.

The B-pillars on the Coupé are reinforced for the first time by tubes made of ultra-strong steel extending all round from one side to the other and produced in a hot-moulding process. In conjunction with the doors, the seats and the instrument panel between the A-pillars, these reinforcement tubes ensure maximum stability and body stiffness, a further advantage being that forces generated in a side impact are diverted to the other side of the car via the floor assembly.

The support element carrying the bulkhead is made of innovative and particularly strong multi-phase steel, dynamic deformation zones at the front end of the car serving, together with other features, to ensure maximum occupant protection in a collision from the front. And last but not least in this context, longitudinal carrier profiles, special reinforcements as well as the extra-stable luggage compartment floor, rear and side panels serve to minimise the consequences of an impact from behind.

All-round occupant safety.

The carefully conceived arrangement and dimensions of the new Coupé's load-bearing structures, crash boxes and deformation zones serves to keep impact energy reliably away from the passenger cell. Within the interior itself, carefully interacting, centrally controlled restraint and cushioning systems ensure individual passenger safety, with the frontal, hip thorax, and curtain head airbags, belt latch tensioners and belt force limiters being activated by the car's sensor-controlled safety electronics as a function of the type and severity of a collision.

For safe motoring also in the dark, the new BMW 3 Series Coupé comes as standard with bi-xenon headlights. As an option, these very strong and highly effective headlights may be further enhanced by the Adaptive Headlight and Bending Light functions.

Particularly through the striking look of their light rods, the rear light clusters also ensure extra safety in the dark, while the two-stage brake lights help to minimise the risk of a collision from behind: Whenever the driver applies the brakes particularly hard, the brake lights are illuminated over a larger area, urging other motorists following from behind to apply their brakes equally hard and with full power.

Four seats, lots of space: the interior.

The new BMW 3 Series Coupé is conceived as a genuine four-seater offering ideal conditions for relaxed motoring on all four seats. The centre console extending all the way to the rear subdivides the rear seat bench into two separate, independent seats offering the passengers generous headroom through their low seating position.

Access to the two seats at the rear is facilitated by the comfort entry function on the front seats, with the seat release lever being positioned exactly where it should be at the top on the outer side of the seat backrest.

Offering capacity of no less than 440 litres or 15.4 cubic feet (430 litres/ 15.1 cu ft on the BMW 335i Coupé), the luggage compartment sets yet another benchmark in this segment. Substantial capacity is also provided by the folding storage boxes inside the doors, an equipment feature offered for the first time in the BMW 3 Series Coupé and providing the significant advantage of utmost privacy, with all items stored in these boxes being kept safely away from prying eyes.

Innovation for extra comfort: automatic belt feeder.

The front seats in the BMW 3 Series Coupé offer excellent comfort also on long distances and equally outstanding side support for dynamic motoring on winding roads. Buckling up in the car, in turn, is facilitated by the newly developed belt feeder “handing” the belt pivoting in typical coupé-style in the B-pillar moved far to the rear to both the driver and front passenger as soon as they close the doors and the driver has inserted the straight-profile wireless key into the starter shaft to the right of the steering wheel.

The door openers, grab bars, gearshift lever bracket, ventilation grille adjuster and the decal trim brackets in the leather sports steering wheel featured as standard all come with a Pearl Grey chrome surface developed exclusively for the new BMW 3 Series Coupé.

The trim around the starter button is also finished in this unique look, with the driver being merely required to briefly press the button in order to start the engine on both the petrol and diesel models. And last but not least, all of the design features in the cockpit likewise emphasise the sporting and driver-oriented character of BMW's new Coupé.

Individual and exclusive features.

Supplementing the wide range of standard equipment, the new BMW 3 Series Coupé is available with an equally wide range of high-tech audio, navigation and telematics solutions originally developed for the luxury performance class and now featured also in this segment. Clearly, highlights of this calibre again underline the exclusive character of the BMW 3 Series Coupé.

Summing up, the new BMW 3 Series Coupé is truly fascinating at first sight and convincing forever after. The power unit and drivetrain combine supreme output and performance with truly exemplary efficiency. The chassis and suspension, in turn, translate superior engine power into dynamic performance on the road with a perfect blend of sportiness and safety all in one. So ultimately, the new BMW 3 Series Coupé offers ideal conditions for sheer driving pleasure of the highest calibre at all times and at all places.

3.2 Fresh Power Moving to the Top: The new BMW X3.

Offering a unique combination and versatility, the new BMW X3 is powerfully continuing the success story of its predecessor.

Dynamic and powerful engines, fresh design, and a sophisticated interior make BMW's Sports Activity Vehicle (SAV) so well-known and appreciated for its outstanding agility even more attractive to the genuine connoisseur and enthusiast. Six-cylinder petrol engines with a magnesium/aluminium crankcase as well as all-aluminium six-cylinder diesel engines including BMW's new 3.0-litre diesel featuring Variable Twin Turbo technology and maximum output of 210 kW/286 hp, give the new BMW X3 truly impressive performance in every respect.

With their significantly upgraded gearshift, the new automatic transmissions also enhance the sporting potential of this outstanding SAV. Appropriate modifications at the front, rear and sides, in turn, give the new BMW X3 even more dynamic character, with the interior combining particularly sophisticated materials, flowing lines and a stylish scheme of colours.

Additional driving dynamics on country roads, in town or off the beaten track is ensured by BMW's permanent xDrive all-wheel-drive technology with variable power distribution to convert the muscle of the new engines into supreme performance both onroad and offroad. In this context the optimised computer control of BMW's Integrated Chassis Management (ICM) ensures even more effective and faster interaction of xDrive with DSC Dynamic Stability Control and engine management now enhanced by additional functions.

The bottom line is that the new BMW X3 offers all the features and technologies required for further enhancing its leading position as the most outstanding premium model in its segment.

The top-of-the-range power unit is the second generation of the world's most dynamic diesel now also featured in the new BMW X3: The newly developed 3.0-litre straight-six featured in the BMW X3 3.0sd, complete with Variable Twin Turbo (VTT) technology, now develops maximum output of 210 kW/286 hp (10 kW/14 hp more than the first-generation VTT diesel) and reaches peak torque of 580 Newton-metres or 427 lb-ft (+ 20 Nm).

The new generation of straight-six petrol engines displacing 3.0 and, respectively, 2.5 litres also serves to raise the new BMW X3 to an unprecedented level in every respect. Featuring a composite magnesium/aluminium crankcase, VALVETRONIC and bi-VANOS, these two power units develop maximum output, respectively, of 200 kW/272 hp (+ 30 kW/41 hp over the previous engine) and 160 kW/218 hp (+ 19 kW/26 hp).

Design full of character – the perfect match for dynamic performance.

The innovations at the front and rear of the BMW X3 are subtle but nevertheless striking: Both at the front and at the back, the bumper units are visibly separated into two levels finished largely in body colour again emphasising the sophisticated, sporting and elegant look of the new BMW X3. Only the particularly exposed protection elements are made of robust, black plastic.

Seen from the side, the discreet wedge shape is further enhanced by the lower character line with its contours flowing in the low side section into the front and rear air dams to further enhance the visual impact of the dynamically stretched side-line with its extra-sleek look.

A common feature shared by all BMW X-models is the so-called “six-eye face” highlighted in the new BMW X3 by new dual round headlights with their light sources and reflectors housed safely behind a clear glass cover. This look is further enhanced by the foglamps on a line extending diagonally to the outside from the main headlights all the way to the wheels. Again, this particular look enhances the impression of the vehicle literally hugging the road, just as the painted front air dam beneath the outer bumper adds yet a further touch of dynamism.

Having grown in size and featuring grid rods in different colours, depending on the model variant, the BMW kidney grille is a particularly striking eye-catcher.

New rear light units with clear glass covers over LED-fed horizontal light rods give the new BMW X3 striking night design also from the rear, and likewise serve as an outstanding sign of distinction during the day.

Sophisticated materials and refined design within the interior.

The smooth, gentle flow of shapes and transitions between the individual areas inside the vehicle takes up and continues the harmonious lines of the new BMW X3 also within the passenger compartment. This is where solid function blends with refined design, each and every detail visibly and tangibly revealing the high standard of quality applied in choosing and finishing all materials. Indeed, such solidity of a particularly high calibre reflects the style of a modern generation of motorists using their vehicle for all kinds of purposes but wishing to enjoy a refined ambience at all times.

A choice of no less than four equipment versions, ten exterior colours, six interior colours and five trim surfaces offers the discerning customer a wide range of freedom in personalising his or her new BMW X3. And as an alternative to the basic seats, the new BMW X3 is available as an option also with sports or comfort seats.

Yet another debut: a diesel right at the top.

For the first time a diesel engine comes right at the top of the range in a BMW, following the principle of highest engine power: The all-new 3.0-litre straight-six diesel featuring Variable Twin Turbo (VTT) technology is making its debut in the BMW X3 3.0sd as the most sporting six-cylinder diesel ever featured in a production car.

The second generation of BMW's top-end diesel now developing maximum output of 210 kW/286 hp comes complete with Variable Twin Turbo (VTT) technology introduced by BMW for the first time worldwide in 2004 in the BMW 535d. Referred to as two-stage turbocharging, this technology incorporates two turbochargers, a small turbocharger cutting in first at low engine speeds, a larger turbocharger then developing its additional power at higher speeds and with greater pressure on the gas pedal. Maximum torque now increased to 580 Nm or 427 lb-ft is maintained consistently between 1,750 and 2,250 rpm.

This outstanding power and muscle is borne out clearly in the performance of the new BMW X3 3.0sd, taking only 6.6 seconds to accelerate to 100 km/h and reaching a top speed of 240 km/h or 149 mph. Average fuel consumption in the EU test cycle is nevertheless a modest 8.7 litres of diesel fuel per 100 kilometres, equal to 32.5 mpg Imp. And highly effective emission management, finally, is ensured by a particulates filter and an oxidation catalyst.

New 3.0-litre diesel: powerful and light.

The exemplary efficiency of the top-end diesel in the range is borne out, inter alia, by a reduction in weight of 25 kilos or 55 lb and the latest generation of common-rail direct fuel injection complete with piezo injectors.

These two features are also to be admired in the 3.0-litre straight-six powering the BMW X3 3.0d, again featuring an all-aluminium crankcase as well as piezo injectors in the fuel injection system. Injection pressure increased to no less than 1,600 bar, in turn, serves to fill the combustion chambers particularly quickly and efficiently, and in combination with a turbocharger featuring Variable Turbine Geometry (VTG) maximum output is 160 kW/218 hp, peak torque 500 Nm/369 lb-ft.

The new BMW X3 3.0d accelerates to 100 km/h or 62 mph in 7.4 seconds and has a top speed of 210 km/h or 130 mph. Running on V-class tyres available as an option from the factory, the vehicle's top speed is an even more impressive 220 km/h or 136 mph.

Returning average fuel consumption in the EU cycle of 7.9 litres of diesel fuel/100 kilometres, equal to 35.8 mpg Imp, the new BMW X3 3.0d is very efficient. And as a further contribution to the environment, it comes as standard with a particulates filter fitted close to the engine for optimum emission management.

The new BMW X3 2.0d is even more economical, its four-cylinder common-rail fuel injection power unit developing maximum output of 110 kW/150 hp and peak torque of 330 Nm/243 lb-ft maintained consistently between 2,000 and 2,500 rpm.

Acceleration to 100 km/h comes in this case in 10.2 seconds and the top speed of the BMW X3 2.0d is 198 km/h or 123 mph. Average fuel consumption, in turn, is just 7.2 litres/100 kilometres or 39.2 mpg Imp, and a particulates filter naturally comes as standard also on BMW's four-cylinder diesel.

Petrol engines: more power, less weight.

BMW's particularly light, free-revving straight-six petrol engine comes in two different sizes and output levels in the new BMW X3. Features shared by both of these engine variants are the composite magnesium/aluminium crankcase, variable VALVETRONIC valve management, and a coolant pump activated only when required. And weighing just 165 kilos or 364 lb, both of these two petrol engines contribute to the well-balanced axle load distribution and, accordingly, to the outstanding agility and driving dynamics of the BMW X3.

The new BMW X3 3.0si comes with a 3.0-litre six-cylinder developing maximum output of 200 kW/272 hp and peak torque of 315 Nm/232 lb-ft. This means acceleration to 100 km/h in just 7.2 seconds and a top speed on 210 km/h (130 mph) or, respectively, of 232 km/h (143 mph) with the optional V-class high-speed tyres also available from the factory. Offering average fuel consumption in the EU cycle of 10.1 litres/100 kilometres (equal to 28.0 mpg Imp), finally, the new BMW X3 3.0si boasts all-round economy quite outstanding for a vehicle of this class and calibre.

The 2.5-litre six-cylinder develops maximum output of 160 kW/218 hp and peak torque of 250 Nm or 184 lb-ft, accelerating the new BMW X3 2.5si to 100 km/h in 8.5 seconds and again allowing a top speed of 210 km/h or 130 mph (221 km/h or 136 mph running on V-class tyres). Average fuel consumption in the EU cycle, in turn, is just 9.9 litres/100 kilometres or 28.5 mpg Imp.

The entry-level model is the new BMW X3 2.0i featuring a 110 kW/150 hp 2.0-litre power unit with maximum torque of 200 Nm or 147 lb-ft.

The engine in the BMW X3 2.0i is indeed the only four-cylinder in the world to boast variable VALVETRONIC valve management.

Further equally outstanding features are variable bi-VANOS camshaft management and BMW's DISA switchable intake manifold.

Benefiting from these cutting-edge technologies, the BMW X3 2.0i offers an extremely high level of performance for a four-cylinder, accelerating to 100 km/h in 11.5 seconds and reaching a top speed of 198 km/h or 123 mph. Average fuel consumption in the EU cycle, finally, is 9.3 litres/100 kilometres or 30.4 mpg Imp.

New automatic transmission for enhanced performance, efficiency, and comfort.

With the exception of the BMW X3 3.0sd, all versions of BMW's new SAV come as standard with a six-speed manual gearbox. The automatic transmission complete with Steptronic available as an option also has six speeds for even greater flexibility, and is featured as standard on the new top model in BMW's SAV series, the BMW X3 3.0sd, where the automatic transmission specially developed to team up with the high-power engine chooses the right gear at all times. Indeed, the new six-speed automatic transmission handles this task at incomparable speed, with unique precision and outstanding efficiency.

New converter technology with an integrated torsion damper and particularly efficient, high-performance software serves to reduce reaction and gearshift times compared with a conventional automatic transmission by up to 50 per cent. And thanks to direct gear allocation, the process of skipping one or even several gears when shifting down does not take up any extra time.

With its truly outstanding gearshift dynamics and unusually direct connection to the engine, the new six-speed automatic transmission enhances the sporting and active qualities of the BMW X3 3.0sd in a truly impressive manner, at the same time providing even better conditions for comfortable, relaxed and fuel-efficient cruising at low engine speeds.

Permanent all-wheel drive the intelligent way: BMW xDrive.

To a large extent, the new BMW X3 owes its supreme all-round potential to permanent, intelligent BMW xDrive all-wheel-drive technology with its extremely fast and precise response ensuring fully variable distribution of power between the front and rear axles. Via a power divider with an electronically controlled multiple-plate coupling, BMW xDrive feeds the power of the engine precisely to where it can be used most effectively.

The result is not only optimum traction on rough and poor ground, but also enhanced driving dynamics with BMW xDrive counteracting any over- or understeer in bends right from the start. A lateral lock function, in turn, is applied by the brakes intervening on any of the wheels about to spin.

40 : 60 power distribution under normal driving conditions.

In normal driving situations engine power is distributed to the front and rear wheels in a 40 : 60 split. As soon as surface conditions or the driving situation change even in the slightest, xDrive responds instantaneously by modifying the distribution of power accordingly. With the frictional coefficient between the front and rear wheels showing an extreme difference, for example, xDrive is able to convey nearly all the power of the engine very quickly to just one axle, just as it is able to counteract possible oversteer in a fast bend. In that case the multiple-plate clutch is closed harder in order to feed more power to the front wheels and optimise driving stability in the process.

Enhanced to an even higher standard: Integrated Chassis Management.

To ensure an appropriate response tailored to current driving conditions, the xDrive all-wheel-drive system, DSC Dynamic Stability Control, and engine management are all connected to one another by Integrated Chassis Management. The chassis management sensors also provide xDrive with the data required for determining current driving conditions, enabling xDrive to respond proactively, as it were, in stabilising the vehicle.

With its new control philosophy, Integrated Chassis Management ensures even faster and more precise interaction of xDrive and DSC. While so far engine and brake management controlled the steering behaviour of the vehicle almost independently of longitudinal management, the three control cycles now operate in parallel: Longitudinal management masterminds the distribution of drive power between the front and rear axle, brake management is able to intervene individually on the wheel brakes in the interest of enhanced traction and driving dynamics. And if necessary, engine management is able to reduce or increase drive power from the engine itself.

DSC Dynamic Stability Control with additional functions.

The new BMW X3 comes with an even more sophisticated system of Dynamic Stability Control upgraded by a number of functions:

The new DSC not only ensures enhanced driving stability and traction, but also optimises the effect of the brake system, setting off even the slightest tendency to fade at extremely hot brake temperatures by reducing brake pressure appropriately. A further function is to moderately build up brake pressure at an early point in time in order to enhance the availability of the brake system in situations likely to require spontaneous application of the brakes (Brake Standby).

Regular Dry Braking, in turn, automatically activated as soon as the driver switches on the windscreen wipers, optimises the brake effect in the wet, while DBC Dynamic Brake Control maximises brake pressure automatically whenever there is a need for particular stopping power. And last but not least, Hill Assist facilitates the process of setting off on an uphill gradient.

DSC Dynamic Stability Control also comprises the ABS anti-lock brake system, ASC Automatic Stability Control, HDC Hill Descent Control, Trailer Stability Control, and CBC Cornering Brake Control, the latter serving to prevent the vehicle from oversteering when the driver applies the brakes slightly in a bend.

DTC function featured for the first time in a BMW X-model.

DTC Dynamic Traction Control also featured within the new DSC system likewise enhances the high standard of driving dynamics offered by the new BMW X3. DTC raises the engine and brake response thresholds to a higher level than usual, enabling the BMW X3 to set off smoothly on, say, loose snow, with the drive wheels being intentionally allowed to spin slightly when necessary.

DTC also upgrades the sporting and active driving experience by allowing higher lateral acceleration all the way to a light and controlled power slide in bends. And reflecting BMW's usual philosophy, DSC may be activated completely whenever required, only the lateral lock function being maintained by intervention of the brakes on the wheels as soon as they start to spin.

The new BMW X3 comes as standard on 17-inch light-alloy rims, the BMW X3 3.0sd features 18-inch wheels as standard equipment. A wide range of other light-alloy wheels measuring 18 and 19 inches is also available as an option, while the Tyre Defect Indicator likewise featured as standard informs the driver in good time of a possible loss in pressure in the tyres.

Generous and safe: the bodyshell of the new BMW X3.

Through its solid body structure and complete range of restraint and cushioning systems masterminded in their function by a central electronic “brain”, the new BMW X3 offers passive safety of the highest calibre. Extra-strong longitudinal supports and crossbars, as well as deformation elements bolted on to the body, serve to divert and absorb impact energy in a head-on collision, while the consequences of an impact from the side are minimised inter alia by diagonal door reinforcements made of high-strength steel profiles. Joining up with the side frame in a deformation via hooks in the doors, these special profiles again serve to divert impact energy away from the vehicle, keeping the passenger cell largely unharmed even in a severe collision.

Apart from frontal and side airbags, curtain head airbags at the side are also standard within the interior. Inflating out of the covers on the A-pillar and roof lining, the curtain head airbags protect the occupants both front and rear from injury should the worst ever come to the worst.

The new BMW X3 is 4,569 millimetres or 179.9” long, 1,853 millimetres or 73.0” wide, and 1,674 millimetres or 65.9” high – ideal dimensions in many respects for a five-door vehicle of this kind. As the more compact member of BMW's SAV model range, the new BMW X3 combines supreme agility and handling with a generous and flexible interior as the ideal basis for practical use.

Luggage capacity up to the luggage compartment cover is an ample 480 litres or 16.8 cubic feet, the large tailgate swinging far up to the top and the low loading sill significantly facilitating the process of loading and unloading bulky objects. Folding down the asymmetrically split rear seat bench, finally, the driver obtains an even larger luggage compartment with maximum capacity of no less than 1,560 litres or 54.6 cubic feet.

Equipment and features: from comprehensive to exclusive.

Apart from the wide range of colours, upholstery options and trim surfaces, numerous attractive optional extras offer almost unrestricted freedom in customising the new BMW X3. High-quality, sophisticated navigation and audio systems also serve to enhance grand touring comfort in the new BMW X3 to an even higher standard, and last but not least, BMW's new SAV is also available as an option with the BMW Assist telematics service.

Bi-xenon headlights featuring parking light rings in the headlight units ensure optimum visibility at night and may be combined with the Adaptive Headlight function, with the swivelling headlights anticipating the course of the road ahead and therefore optimising illumination of the road in bends and

serpentine. And last but not least, the Bending Light function provided by the foglamps facilitates bending manoeuvres in the dark and manoeuvring processes in general at low speeds.

PDC Park Distance Control measures the distance of the vehicle from an obstacle. When parking, therefore, the driver benefits from an acoustic signal "telling" him the distance between his vehicle and an obstacle nearby.

Aficionados of open-air motoring are also able to enhance their driving pleasure in the BMW X3 in a particularly attractive manner, the two-piece Panorama Roof no less than 0.65 square metres in size offering an unusually generous view of the sky above.

Continuing a unique story of success.

The new BMW X3 is the consistent, ongoing development of a vehicle concept already highly successful in all international car markets the world over. As a particularly agile Sports Activity Vehicle, the new BMW X3 combines dynamic driving characteristics on the road with the traction benefits offered by BMW's intelligent xDrive all-wheel-drive system also on rough tracks.

The BMW X3 has already proven to be an outstanding performer in the international car market and is among the most popular all-wheel-drive vehicles in numerous countries the world over, with worldwide sales amounting to more than 260,000 units in just 2½ years.

Now the new BMW X3 has everything it takes to continue this story of success. Its new power units offer a standard of performance by far exceeding the existing benchmark in this segment. And with its unique dynamism, fresh design, and tastefully modified interior, it appeals above all to the discerning motorist with a lifestyle based on activity and spontaneity – the motorist in search of a special driving experience in a robust, agile and by all means versatile vehicle, while at the same time appreciating all the quality and flair of a genuine premium automobile.

3.3 Incomparably Dynamic, Open and Attractive: The BMW M6 Convertible.

The BMW M6 Convertible is a dream car for the genuine enthusiast – the real connoisseur seeking to combine impressive driving dynamics with a particularly stylish rendition of open-air motoring. Ten cylinders and five litres engine capacity, 373 kW/507 hp and maximum torque of 520 Newton-metres or 383 lb-ft – these are the fundamental facts and figures of an engine revving up to 8,000 rpm in unique style and with unique supremacy.

Interacting with the truly excellent chassis and suspension conceived for supreme dynamics, as well as BMW's Sequential M Gearbox (SMG) complete with Drivelogic, this unique power unit turns the big Convertible from BMW M GmbH into an exhilarating open sports car accelerating to 100 km/h in just 4.8 seconds. And at the same time the BMW M6 Convertible combines its outstanding driving dynamics with supreme exclusivity and aesthetic styling characterised in particular by dynamic elegance. Offering all the space and comfort of a genuine 2+2-seater as well as the luxurious features of a top-end performance car, finally, the BMW M6 Convertible makes open-air motoring a truly unforgettable experience.

Combining various qualities in an unprecedented manner, the BMW M6 Convertible is truly unmistakable. It is the open-air version of the high-performance of the BMW M6 sports car. And at the same time it is the most sporting and dynamic rendition of the BMW 6 Series Convertible.

In particular, however, the BMW M6 Convertible is one of the most fascinating and exclusive cars ever built. Taking up the usual policy of BMW M Cars, the dynamic driving qualities of the BMW M6 Convertible have been optimised on the race track. But through its high standard of motoring comfort, wide range of equipment, and unique flair, the BMW M6 Convertible is at home on all roads the world over.

The top-quality soft roof guarantees supreme driving pleasure throughout the year, in all seasons and in all kinds of weather. And last but not least, the BMW M6 Convertible also excels through its understatement in looks so typical of a genuine BMW M Car.

Unique at very first sight.

Considering the sum total of its features and qualities, the BMW M6 Convertible virtually ranks alone in the market, without any direct competitor. And combining the racing DNA of BMW M with the comfort-oriented elegance of the BMW 650i Convertible, the BMW M6 Convertible is most definitely a class of its own: a fascinating high-performance convertible in every respect.

Measuring 4,871 millimetres or 191.8" in length, the BMW M6 Convertible is well over 5 centimetres or 2 inches longer than the BMW 6 Series Convertible, above all due to the aerodynamically optimised rear air dam giving the car an even sleeker silhouette. Widely flared side sills, in turn, add a further touch of dynamism, with the M6 Convertible almost crouching on the road as if it were ready to pounce.

The absolute eye-catcher at the rear is the exhaust system with four tailpipes typical of a BMW M Car sticking out of the powerfully designed rear air dam. In all, therefore, the BMW M6 Convertible comes in an aesthetic look based on dynamism and exclusivity equally thrilling with the roof up or down.

Fin look also with the roof open or closed.

The soft roof of the BMW M6 Convertible is made of three layers, a sound- and temperature-proofing layer of polyurethane foam (PUR) coming between the rubberised outer cover and the interior lining. And through its unique fin look, the soft top retains the dynamic roofline also characteristic of the Coupé.

The wide C-pillar of the BMW M6 Convertible even boasts the famous Hofmeister "kick" so typical and visible on all BMWs. And although the roof stretches over a very large and generous passenger compartment, it folds up into compact dimensions when opened, the vertical rear window moving up and down electrically independently of the roof and thus taking up only minimum space.

Such separate operation of the rear window allows a draught-free supply of fresh air to the interior, while the roof itself opens and closes electrically either by remote control or by pressing a button in the instrument panel, taking less than 25 seconds to move from one position to the other.

The interior: a sports car openly presenting its class.

The BMW M6 Convertible offers a wide range of optical highlights also within the passenger compartment openly revealing all the class and style rightly expected by the connoisseur of such an exclusive convertible. Indeed, these features range from generous seats and space all the way to the most attractive comfort features. Yet a further highlight is the tasteful combination of the most exclusive materials, with the design of the interior combining sportiness and elegance all in one.

In the driver-oriented cockpit the essential functions required in driving the car are arranged in perfect ergonomics on or around the steering wheel. The controls for all functions also relevant to the front passenger, in turn, are housed in the centre console also accommodating the iDrive Controller serving to activate and mastermind comfort functions through the Control Display.

In its purist design, the iDrive Controller looks and feels quite different from the "regular" unit in the BMW 650i Convertible, while the Control Display itself comes with enhanced menu guidance also comprising MDrive management. The speedometer and rev counter are housed within chrome surrounds, the instrument faces as such are black, the numbers on the instruments come in white and the indicator needles are in traditional BMW M red.

The optional Head-Up Display (HUD) presents information important to the driver directly in his line of vision. And the driver can choose himself at the touch of a button whether to receive the usual standard information or special M data instead.

Perfect seats for sports motoring.

The front seats have been specially optimised for the BMW M6 Convertible, offering excellent support above all with a dynamic style of motoring. And considering the usual conditions in a convertible, the two passengers at the rear also enjoy a high standard of all-round comfort.

As on all M Cars, the battery and tyre repair system are accommodated in the luggage compartment. Offering capacity of 300 litres/10.5 cubic feet with the roof open and 350 litres/12.3 cubic feet with the rood closed, the luggage compartment is nevertheless unusually large, conveniently accommodating one large and one small hard-shell suitcase or a medium-sized hard-shell case plus two 46-inch golf bags.

Convertible with a V10 power unit: an open confession to supreme performance.

Boasting a 373 kW/507 hp V10 power unit, the BMW M6 Convertible makes a very open pledge to supreme performance. But even so, engine power alone is not everything. Rather, the fascinating potential of this drive unit is the result of supreme acceleration and outstanding muscle at all engine and road speeds.

On the BMW M6 Convertible, this ideal combination of engine torque and the overall transmission ratio ensures incredible thrust on the drive wheels in all situations, the performance character of the fast-revving V10 in the BMW M6 Convertible forming a perfect team with the transmission and final drive ratios for perfectly dosed transmission of engine power to the rear wheels.

The concept for generating this supreme power comes directly from motorsport: To develop its maximum power, the V10 power unit revs all the way to 8,250 rpm, a level of engine speed otherwise only found in a racing car. And specific output is also quite outstanding for a normal-aspiration engine, at more than 100 horsepower per litre.

Variable bi-VANOS camshaft adjustment ensures an optimum gas cycle at all times, while all-electronic control of the individual throttle butterflies on each cylinder is yet another feature typical of motorsport.

High-speed engine technology and seven-speed SMG.

One thing the driver will never miss on the high speed power unit is superior output and muscle. But since fast overtaking also requires a fast and precise gearshift, the BMW M6 Convertible comes complete with BMW's Sequential M Gearbox (SMG) and Drivelogic, seven-speed SMG transmitting the power of the engine ideally via the drivetrain to the rear wheels and also offering the option to shift gears manually with extremely short shift times.

The automatic drive function, in turn, makes fast cruising an outstanding experience of both comfort and performance, SMG enabling the driver to shift gears either on the selector lever or via paddles on the steering wheel. And the interruption of power when shifting gears is reduced to an absolute minimum in both the manual and automatic mode.

Drivelogic in BMW's SMG transmission offers the driver no less than 11 driving programs for an individual SMG gearshift tailored to his style of motoring. Six of these 11 programs may be pre-selected within the manual gearshift function (S mode), with the driver choosing gears by hand.

The only exception is Launch Control for maximum acceleration from a standstill. The shift manoeuvres required in each case are completed independently by the transmission at the ideal gearshift point and with optimum slip control.

Adding to this freedom in choosing gears manually, the D-mode offers another five driving programs with automatic transmission.

“M” for maximum muscle.

Interaction of the V10 power unit and seven-speed SMG offers the driver maximum driving pleasure at all times: Acceleration to 100 km/h comes in 4.8 seconds and the BMW M6 Convertible completes the standing-start kilometre in 22.9 seconds. This ongoing surge of indescribable power and muscle is finally limited electronically to a top speed of 250 km/h or 155 mph.

Lap times on the Nordschleife, the Northern Circuit, of Nürburgring, almost as fast as in the BMW M6 Coupé, clearly prove the sporting performance of the Convertible. Working consistently on the suspension, however, the engineers at BMW M have succeeded in making the Convertible a touch smoother and even more refined on the road. And indeed, this superior driving comfort comes to bear above all on “normal” roads away from the race track, where the BMW M6 Convertible handles even rough bumps with stoic supremacy. In practice this means that the occupants feel only appropriate feedback from the road of significance with a sporting style of motoring

Variable M Differential Lock and DSC with M Dynamic Mode.

The variable, speed-sensing M Differential Lock gives the Convertible superior driving stability and optimum traction particularly when accelerating out of a bend. So even in very demanding situations, the car benefits from decisive advantages in traction, for example with the drive wheels running on different surfaces with very different frictional coefficients. In such a case the M Differential Lock immediately builds up a growing lock effect parallel to the difference in speed on the drive wheels, safely retaining superior thrust and drive power at all times.

The BMW M6 Convertible comes with BMW's latest generation of DSC Dynamic Stability Control. While the first stage of DSC is conceived for maximum driving safety, the M Dynamic Mode is appreciated above all by the sporting driver, and the driver also has the option to switch off DSC completely.

EDC Electronic Damper Control likewise offers freedom of choice, three programs varying the suspension and chassis all the way from sporting and firm to relatively comfortable.

Clearly, the driver does not need all the muscle of the V10 power unit in every situation. In city traffic or when cruising at a brisk speed, for example, the P400 performance program is the ideal choice. Precisely this is why P400 is automatically activated when starting the engine, initially restricting engine output to 400 horsepower. But then all the driver has to do is press the Power button in order to unleash all the performance of the ten-cylinder, the extra power delivered in this way immediately ensuring significantly greater spontaneity and engine response.

High-performance brakes like in motorsport.

Reflecting the enormous power of the engine, the BMW M6 Convertible comes with a high-performance brake system featuring cross-drilled, weight-optimised compound brake discs. As a result, the Convertible comes to a halt from 100 km/h within just 36 metres or 118 feet, while its stopping distance from 200 km/h is less than 140 metres or 46 feet.

Two-stage brake lights at the rear help to prevent bumper-to-bumper collisions: Whenever the driver presses down the brake pedal hard, the area lit up in the lights is larger than usual, urging motorists following from behind to brake harder, too. And another safety feature is the use of very bright, fast-responding light-emitting diodes free of wear and not requiring any maintenance.

Top quality all the way: perfect blend of the finest materials.

An excellent balance of weight contributes to the superior driving behaviour of the BMW M6. Indeed, this virtually perfect balance is based on an intelligent mix of materials on the bodyshell using modern plastics wherever appropriate. At the same time these advanced materials are stiffer and stronger than comparable components made of conventional materials, not only helping to enhance the car's driving dynamics, but also to ensure supreme vibration control with a very high standard of crash safety.

Electronically controlled safety systems.

The seat belts on all four seats come with belt force limiters, the integrated restraint systems on the front seats additionally featuring belt latch tensioners. Two-stage frontal and side airbags, in turn, also help to reduce the risk of injury.

All of these components are controlled and masterminded by the ASE Advanced Safety Electronics safety and information system precisely monitoring the intensity of an impact and activating exactly the right restraint systems quickly and with the desired effect.

High-tech customisation options.

The BMW M6 Convertible is a truly unique car even in "regular" trim. And to personalise the M6 Convertible to an even higher level, the customer has the choice of all kinds of features in both the BMW 6 Series and the BMW M6. Highlights are the Adaptive Headlight function with the headlights always pointing in the direction on the road ahead and automatic cruise control. Further features are audio systems and a wide range of communication units tailored specifically to the Convertible. So like the car itself these very special options combine top performance with supreme technical refinement.

3.4 Supreme Efficiency for Supreme Performance: The new Straight-Six Gasoline Engine with Twin Turbo and High-Precision Injection in the BMW 3 Series Saloon and the BMW 3 Series Touring.

A new top-of-the-range power unit with Twin Turbo technology and direct gasoline injection now rounds off BMW's range of straight-six engines.

Making its debut in the new BMW 3 Series Coupé, this new top-end engine is proudly presented at the 2006 Mondial de l'Automobile in Paris also in the BMW 3 Series Saloon and the BMW 3 Series Touring. With maximum output of 225 kW/306 hp and peak torque of 400 Nm/295 lb-ft, this new engine will satisfy even the most demanding driver through its spontaneous and supreme development of power.

The first straight-six with a twin turbocharger, High-Precision Injection, and an all-aluminium crankcase, the new engine offers a standard of responsiveness and dynamism never seen before in a turbocharged power unit, as well as superior muscle and torque all the way to high engine speeds. And at the same time the new turbocharged power unit naturally comes with the smoothness and refinement so typical of a BMW straight-six.

The reason for this combination of supreme power and ultimate efficiency is BMW's High-Precision Injection, with the latest generation of direct gasoline injection making a significant contribution to the all-round economy of this turbocharged power unit. Indeed, through this combination BMW's engineers are writing a new and particularly interesting chapter in the history of turbocharged power units 100 years after the invention of the turbocharged engine.

A proven foundation: BMW's straight-six power unit.

Introducing turbocharger technology on the gasoline engine, BMW is providing additional power and performance through a concept both fascinating and efficient in one. Particularly the concept chosen by BMW makes turbocharging the ideal technology to preserve proven drivetrain qualities and evoke new appeal at the same time.

The new power unit is based on BMW's current generation of straight-six engines having achieved an outstanding potential with engine capacity of 3.0 litres and maximum output of 200 kW/272 hp. Now, to generate significantly more power and, in particular, torque, BMW is using Twin Turbo Technology, with output up by more than 10, maximum torque by an even more significant 30 per cent over the proven 3.0-litre normal aspiration engine.

The result of this supreme technology is expressed clearly by maximum output of 225 kW/306 hp and peak torque of 400 Nm/295 lb-ft, figures which in practice guarantee impressive performance from low engine speeds. The new BMW 335i Coupé featuring this Twin Turbo power unit, for example, accelerates to 100 km/h in just 5.5 seconds and sprints from 80–120 km/h (50–75 mph) in second-highest gear in a mere 6.2 seconds.

Retaining the normal-aspiration concept, this kind of power and performance would otherwise only have been possible with a considerably larger engine also meaning higher weight and an adverse effect on the car's balance. Turbocharger technology combined with High-Precision Injection, on the other hand, is a particularly efficient way to meet even greater demands in terms of power and torque. For comparison, the new straight-six Twin Turbo weighs approximately 70 kilos or 154 lb less than a similarly powerful eight-cylinder normal-aspiration engine displacing 4.0 litres. And at the same time the power unit fitted with High-Precision Injection reduces fuel consumption versus an equally powerful turbocharged engine with intake manifold injection by approximately 10 per cent.

Apart from its low weight and fuel efficiency most outstanding in this performance class, the new Twin Turbo offers yet another feature typical of a BMW straight-six: Supreme smoothness and refinement and, as a result, precisely the virtue that has made BMW's straight-six power units the world benchmark for high-class drivetrain technology.

The configuration of cylinders alone gives the engine a superior balance of free mass forces, with virtually no vibrations even at high engine speeds. And at the same time the turbocharged version of BMW's six-cylinder comes with the particularly light camshafts already featured on the normal-aspiration engine, variable bi-VANOS camshaft adjustment and an electrically driven coolant pump only cutting in when actually required.

The turbo gap: a thing of the past.

Introducing this new power unit, BMW's engineers have succeeded in eliminating the inherent disadvantages of conventional turbocharged engines. As a result, BMW's turbocharged six-cylinder is free of the disadvantages so far so typical of such an engine: the delay in building up power (the "turbo gap") and the high fuel consumption of a conventional turbocharged power plant.

Particularly the Twin Turbo concept provides a far more spontaneous build-up of power, two smaller turbochargers taking the place of one large turbocharger in supplying compressed air to three cylinders at a time. The big advantage

of these smaller turbochargers is their low level of inertia, even the slightest movement of the gas pedal by the driver serving to immediately build up pressure and power.

This eliminates the old “turbo gap” – the brief moment elapsing until the turbocharger starts to develop extra power – so typical of a conventional turbocharged power unit, the new turbocharged engine therefore offering the same performance characteristics of a much larger normal-aspiration engine in practice: the 3.0-litre develops maximum output of 400 Nm or 295 lb-ft without any noticeable delay throughout a broad speed range from 1,300–5,000 rpm. And even that is not all, with the engine revving up powerfully all the way to 7,000 rpm.

On the road this gives the driver a particularly superior thrill of driving dynamics for fast and efficient acceleration in relaxed style.

Double progress: high output, high efficiency.

To ensure an ideal balance of fascinating performance and moderate fuel consumption, BMW is the first car maker in the world to offer a straight-six gasoline engine with twin turbocharger technology, direct fuel injection, and an all-aluminium crankcase.

The turbocharger concept makes an important contribution to the reduction of fuel consumption: With the turbines made of high temperature-resistant special steel able to handle temperatures of up to 1,050 °C, they do not require the cooling effect of a higher supply of fuel – and this means a noticeable reduction of fuel consumption particularly under full load: With average fuel consumption in the EU test cycle of just 9.5 litres/100 kilometres (29.7 mpg Imp), the BMW 335i Coupé offers a standard of efficiency quite unique in its performance class.

The key function ensuring moderate consumption of fuel is however High-Precision Injection. This new generation of direct gasoline injection fulfils even the strictest practical expectations in terms of economy, without requiring any concessions in the engine’s dynamic qualities and performance. Indeed, High-Precision Injection allows more exact dosage of the fuel/air mixture as well as a higher compression ratio as ideal prerequisites for enhanced efficiency and a significant reduction of fuel consumption.

This superiority is made possible by the piezo injector placed right in the middle between the valves, where this innovative injector opening to the outside is able to distribute fuel in a conical burst spreading out smoothly within the combustion chamber.

Developing this new straight-six with bi-turbocharger technology and direct fuel injection, BMW is opening up a new chapter in an engine principle actually quite old: Last year the turbocharged engine celebrated its 100th birthday. Registered for a patent in November 1905 by Swiss engineer Alfred Büchi, turbocharger technology was of great significance for decades above all in boosting the output of marine and aircraft engines. Cars with turbocharged power units entered production much later, with the turbocharger not making its appearance in series production in Europe until 1973 in the BMW 2002 Turbo.

BMW – the first turbocharged World Champion in the history of Formula 1.

In the course of these 100 years of turbocharger history, BMW has set milestones in development time and again: As early as in the late 1960s, BMW became the first manufacturer to use turbocharged engines in touring car motorsport. And in 1983 a BMW Brabham with Brazilian driver Nelson Piquet at the wheel became the first turbocharged racing car to win the Formula 1 World Championship.

Even back then BMW's engine specialists were able to develop far more than 1,000 horsepower from an engine capacity from just 1.5 litres. But precisely this seemingly limitless surge of power made possible by the turbocharger ultimately led to the decision in the highest realms of motorsport to opt against even more power for reasons of safety.

In series production, on the other hand, all existing turbocharger concepts have so far suffered from the disadvantage of higher fuel consumption – and for a long time this conflict of interests appeared to be inevitable. Only very recent developments in engine construction have indeed revealed a new approach BMW is now following consistently: Twin Turbo technology in conjunction with High-Precision Injection as the concept for a particularly fascinating rendition of Efficient Dynamics.

The new high-performance power unit right at the top of BMW's straight-six engine ranges convincingly proves the potential of this concept and its most important components. With its immediate response and superior pulling force, the new engine opens up unprecedented dimensions in driving dynamics. And introducing High-Precision Injection, BMW's engine development specialists have already prepared further options for the future, with this new injection technology serving for the first time to genuinely offer the customer all the advantages of lean burn combustion with its full thermodynamic potential.

This is made possible by the central position of the injectors and the spark plug acting together to form one combustion system. Hence, the cloud of fuel and air formed and ignited in the combustion chamber is surrounded completely by pure air, without any loss of fuel clinging to the walls of the combustion chamber.

High-Precision Injection technology thus provides the foundation for a lean burn direct injection concept and, accordingly, for a further significant reduction of fuel consumption.

Achieving this standard, BMW is once again proving its leading competence in engine construction, developing modern and up-to-date drivetrain technologies and enhancing sheer driving pleasure to an even higher standard in the process.

3.5 Powerful, Muscular and Economical: The new Straight-Six Diesel Engines in the BMW 3 Series.

Immediately after making its debut in the BMW 335d Coupé, the new 3.0-litre 210 kW/286 hp power unit featuring Variable Twin Turbo (VTT) technology is also entering the market in the BMW 3 Series Saloon and the BMW 3 Series Touring. With maximum torque of 580 Newton-metres or 427 lb-ft, the world's most powerful straight-six offers output and muscle never seen before in this segment.

The power unit in the BMW 325d also displacing 3.0 litres, developing maximum output of 145 kW/197 hp, and peak torque of 400 Nm or 295 lb-ft, is rounding off the range of six-cylinder diesels in the Saloon and Touring as yet another new engine being introduced at the same time.

The most attractive range of diesels throughout the entire segment.

Like the drive unit in the successful BMW 330d developing maximum output of 170 kW/231 hp, both of these engines, through their all-aluminium crankcase and the latest generation of direct fuel injection, provide a convincing combination of torque, power and efficiency. And the introduction of the two new engines means that the customer opting for a BMW 3 Series Saloon or for the BMW 3 Series Touring now has a choice of no less than three six-cylinder and two four-cylinder diesels, with the BMW 3 Series offering the most attractive range of diesel engines in its class.

The new generation of straight-six diesel engines in the BMW 3 Series is an outstanding example of Efficient Dynamics. Through their superior power and torque, the engines ensure sporting performance on the road, with the reduction in weight helping to enhance the agility of the car and with precise fuel injection serving to minimise the consumption of fuel.

Efficient Dynamics and exemplary emission control.

Introducing an all-aluminium crankcase, BMW's engineers have succeeded in reducing the weight of the six-cylinder diesel engines versus the former generation by a significant 20 kilos or 44 lb. New MV injectors and optimised fuel supply using the common-rail principle ensure even more precise fuel injection benefiting both engine efficiency and running smoothness. And a diesel particulates filter positioned close to the engine serves to effectively reduce exhaust emissions.

Spontaneous power thanks to Variable Twin Turbo technology.

The power unit of the BMW 335d owes its outstanding performance to Variable Twin Turbo technology. This technology first activates a small turbocharger at low engine speeds, which, due to its low inertia, develops its power-boosting effect spontaneously and without the slightest delay, responding to every movement of the gas pedal. Then, with engine speed increasing, the second, larger turbocharger also picks up momentum and starts to boost power, enabling the engine to reach its maximum torque of 580 Newton-metres or 427 lb-ft at just 1,750 rpm, impressively continuing all the way to approximately 5,000 rpm.

Interaction of the two turbochargers is masterminded by particularly efficient engine electronics.

In 2004 BMW became the first manufacturer in the world to introduce this technology also referred to as two-stage turbocharging in the BMW 535d. Now, moving up to the power unit in the new model, maximum output of BMW's new top diesel has been increased yet again by 10 kW or 14 hp thanks to modifications in the injection system and on the exhaust manifold.

The efficiency of VTT turbocharger technology is also enhanced by new rotors on the two turbochargers, with this extra power benefiting not only the new BMW 335d Coupé, but also the BMW 335d Saloon and the BMW 335d Touring.

VTT technology raises the BMW 335d to a new dimension of driving dynamics: Acceleration to 100 km/h in the BMW 335d Coupé comes in just 6.1 seconds, with the Saloon completing the same exercise in 6.2, the BMW 335d Touring in 6.3 seconds. Top speed on all three models is limited electronically to 250 km/h or 155 mph.

Returning average fuel consumption of 7.5 litres (BMW 335d Coupé and BMW 335d Saloon) and, respectively, 7.7 litres (BMW 335d Touring) for 100 kilometres in the EU test cycle (equal to 37.7 and, respectively, 36.7 mpg Imp), BMW's most powerful sports diesel also offers an impressive standard of efficiency and fuel economy.

Common-rail direct fuel injection of the latest generation.

Turbocharging and common-rail direct fuel injection of the latest generation also help to give the power unit of the BMW 325d a spontaneous and lasting surge of power. Variable Turbine Geometry (VTG), in turn, serves to mastermind the performance characteristics on this new engine to the driver's respective requirements.

The diesel engine in the BMW 325d develops its maximum torque of 400 Nm or 295 lb-ft at a low 1,300 rpm, enabling the Saloon to accelerate to 100 km/h in 7.4, the BMW 325d Touring in 7.6 seconds, Top speed, in turn, is 235 km/h or 146 mph in the Saloon and 233 km/h or 144 mph in the Touring. And fuel consumption in the EU cycle, finally, is 6.4 litres/100 kilometres or 44.1 mpg Imp in the BMW 325d Saloon and 6.6 litres/100 kilometres 42.8 mpg Imp in the BMW 325d Touring.

3.6 Efficient Use of Energy for Enhanced Driving Dynamics: Intelligent Alternator Control and Regeneration of Brake Energy.

The objective pursued by BMW's engine development specialists is to maximise the standard of driving dynamics developed from every litre or gallon of fuel. And indeed – the combustion engines featured in BMW's latest models offer a significantly higher level of efficiency than the power units in former model generations, consuming less fuel but providing more power and performance.

The fact nevertheless remains that even today only about 25–30 per cent of the energy contained in fuel is actually used for driving the vehicle. Most of the energy consumed is still converted into heat, although the fuel burnt also serves to generate electrical energy for the on-board network.

To make the development of electrical energy in the vehicle more efficient, BMW has developed Intelligent Alternator Control (IAC) serving to generate electric power exclusively in overrun and when the driver is applying the brakes. On the road, this means more energy for enhanced driving dynamics when driving under power with the engine “pulling” the car, for example when accelerating. And to enhance driving efficiency to an even higher level, IAC also incorporates a system for regenerating brake energy.

The demand for electrical energy is consistently increasing in the modern automobile. Air conditioning, telecommunications, entertainment, as well as new components for enhanced safety and driving dynamics such as suspension management, Active Steering, engine management, and ABS all require electric power. Hence, the generation of electricity for the car's on-board network consumes an increasing share of the power generated by the engine. Precisely for this reason BMW has developed IAC in order to generate electrical energy in the car even more efficiently and use that energy for a wider range of purposes and functions.

Already reality today: intelligent management of the flow of energy.

BMW is pursuing two objectives in this process: First, to limit the overall consumption of energy without any loss of function. Second, to control the conversion of energy from fuel into electric power with enhanced efficiency, minimising losses in the overall energy balance.

BMW's current models already incorporate important features and technologies to reach both of these objectives, intelligent management of the flow of energy already being ensured in series production. One example is the new electrical coolant pumps in BMW's straight-six power units already operating exactly – and only – when required, meaning that they develop their maximum output and performance only at high and very high speeds, while remaining passive immediately after the engine has been started, ensuring in this way that the engine is warmed up more quickly.

This alone helps to reduce fuel consumption in the EU homologation test by approximately 2 per cent.

BMW has also developed a further energy management system now monitoring the status of the battery in an increasing number of model series: The Intelligent Battery Sensor (IBS) ensures a sufficient level of electrical energy at all times for starting and re-starting the car, preventing any overload in the supply of energy and the risk of discharging the battery as a result.

Following clearly defined priorities, the flow of energy to functions serving exclusively to enhance motoring comfort (such as the seat heating or air conditioning) may therefore be reduced, providing sufficient energy at all times for safety-relevant functions and maintaining an adequate reserve for starting the engine.

Controlled generation of electric power preventing the loss of energy.

Apart from fuel consumption, Intelligent Alternator Control is also able to enhance the time of energy conversion in the interest of maximum efficiency. So far, electrical energy has been generated consistently under all driving conditions and in all phases of motoring, the alternator is driven permanently by a belt running on the crankshaft.

In future the alternator is to be driven primarily when the car itself has no need for engine power, that is in overrun or when applying the brakes, while remaining “passive” when the car is under power, with the engine “pulling” the vehicle. This will provide a greater share of the energy contained in the fuel for actually propelling the vehicle, for example when accelerating, with the on-board network being supplied with power exclusively by the battery under such conditions. The alternator, in turn, only becomes active again when the engine switches to overrun or if the battery charge is insufficient.

Brake Energy Regeneration: Turning the brakes into a source of energy.

The objective of this development is to generate electrical energy without using engine power and, accordingly, any of the energy contained in the fuel. Such “inexpensive” electrical energy is generated not only during overrun via the alternator, but also when applying the brakes through recuperation of energy released in the process, a power converter fitted directly within the brake system converting the energy generated upon application of the brakes into electric power and thus feeding energy previously wasted on the brake discs into the car’s on-board network. Direct conversion of fuel into electrical energy is restricted to just a few exceptional cases.

An important prerequisite for energy management geared to current driving conditions is to control the battery charge specifically as required. Depending on ambient conditions, therefore, the battery is charged to only about 80 per cent of its capacity whenever the engine is pulling the vehicle, always maintaining an adequate reserve for the consumption of energy at a standstill and for starting the vehicle. A higher charge level is generated only when the vehicle is in overrun or upon application of the brakes, that is in phases with a better energy balance.

With the number of charge cycles increasing thanks to these specific control functions, BMW combines Intelligent Alternator Control with modern AGM (absorbant glass mat) batteries able to handle a far higher load than conventional lead/acid batteries by embedding acid in microglass fibre mats between the layers of lead. Such batteries are able to store energy for a long time even when charged and discharged frequently.

Applying the brakes generates electric power, pressing down the gas pedal develops dynamic performance.

Intelligent Alternator Control combined with Brake Energy Regeneration offers two important benefits in practice. First, on-demand generation of electrical energy helps to reduce fuel consumption in the EU homologation test by approximately 4 per cent. Second, the driver benefits directly from the alternator being disconnected when the engine is running under power, enjoying more power for acceleration and dynamic motoring. As a result, Efficient Dynamics means not just enhanced economy, but also greater driving pleasure.

Intelligent management of electrical energy offers a significant potential for enhancing the all-round economy of the modern automobile. The strategy is to minimise any loss of energy, increase the regeneration of energy, and streamline the process of mechanical conversion, providing the highest possible share of energy conversion into dynamic, sporting performance.

Every step taken for this purpose is able to significantly reduce fuel consumption, an appropriate combination of the various strategies also helping to enhance driving pleasure. And a further point is that Intelligent Alternator Control combined with Brake Energy Regeneration can be used throughout BMW's entire range of models, offering advantages in terms of Efficient Dynamics to a large number of customers even today.