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1. The BMW model range from autumn 2011. (Short version)



From autumn 2011, newly developed engines, innovative BMW ConnectedDrive functions and numerous other attractive additions to standard and optional equipment will lend further variety to the BMW model range and imbue the brand's hallmark characteristics with renewed vigour. Newly developed petrol and diesel engines backed by BMW TwinPower Turbo technology will be made available for several model series, boosting driving pleasure once again while further reducing fuel consumption and emissions. At the same time, the range of BMW EfficientDynamics technology fitted as standard will be expanded across the model series.

New exterior paint finishes and interior trim variants, additional comfort-enhancing features and innovative systems linking up drivers with their cars and surroundings underline the premium character of the individual models. For example, the Real-Time Traffic Information and Apps functions from BMW ConnectedDrive will be available for several models from autumn 2011.

BMW 3 Series range: attractive Edition models add the personal touch.

From autumn 2011, the BMW 3 Series Coupé and BMW 3 Series Convertible will be available in Exclusive Edition and M Sport Edition guises. Precisely coordinated design features and equipment options offer customers the chance to add striking emphasis to either the sophisticated or the dynamic side of their car's character. A BMW Individual hardtop in contrasting paint finish is available for the first time for the BMW 3 Series Convertible. And the BMW 320d EfficientDynamics Edition Touring will also be available in Exclusive and Lifestyle special editions.

BMW 5 Series range: even more efficient thanks to BMW TwinPower Turbo.

The BMW 5 Series range builds on its leading position in the areas of design, sporting capability, comfort and efficiency with an extended range of engines. The BMW 520d EfficientDynamics Edition, for example, represents the

epitome of efficiency in a premium executive class car. The Sedan is powered by a 135 kW/184 hp four-cylinder diesel engine, yet its average fuel consumption in the EU test cycle is just 4.5 litres per 100 kilometres (62.8 mpg imp). New four-cylinder engines with BMW TwinPower Turbo technology add further talent to the line-up of petrol and diesel powerplants. The eight-cylinder engine under its bonnet makes the BMW 550i Touring the flagship five-door variant of the 5 Series family. A new highlight from BMW ConnectedDrive, meanwhile, is the hands-free tailgate/rear window opening function – an additional string to the Comfort Access option's bow.

In addition, the BMW 5 Series Gran Turismo can be ordered with an M Sport package from autumn 2011, and new options from the BMW Individual range are also available for this model.

BMW 6 Series range: premiere for six-cylinder diesel engine and xDrive.

Coinciding with the market launch of the new BMW 6 Series Coupé, additional engine variants will also be available for the new BMW 6 Series Convertible from autumn 2011. Making its debut in both models is the world's sportiest six-cylinder diesel engine, a 230 kW/313 hp 3.0-litre unit boasting BMW TwinPower Turbo technology. For the first time, BMW 6 Series models will be available with the BMW xDrive intelligent all-wheel-drive system – just one of the innovative equipment features customers will be able to order for their new BMW 6 Series Coupé or Convertible.

BMW 7 Series range: M Sport package for the BMW ActiveHybrid 7.

Attractive additions to its selection of optional equipment further increase the BMW 7 Series range's profile in the luxury sedan segment, while the introduction of the M Sport package for the BMW ActiveHybrid 7 lays on an even more alluring combination of luxury, efficiency and sports performance.

BMW Z4: now with even greater efficiency and Pure Balance design package.

The BMW Z4 will line up from autumn 2011 with the promise of further advances in driving pleasure and efficiency. Two newly developed four-cylinder petrol engines with BMW TwinPower Turbo technology will be available for the Roadster. The 2.0-litre units for the BMW Z4 sDrive20i and

BMW Z4 sDrive28i develop 135 kW/184 hp and 180 kW/245 hp respectively, and can team up – as an option – with an eight-speed automatic transmission. All variants of the BMW Z4 will now be fitted as standard with Servotronic speed-sensitive power steering, and the BMW Z4 sDrive35i will also feature 18-inch light-alloy wheels in multispoke design. Added to which, the appeal of the successful two-seater rises still further with the introduction of the new Design Pure Balance equipment package.



2. The BMW model range from autumn 2011. (Long version)

2.1 The BMW 3 Series range: More individuality, more innovation.

Dynamic driving properties, innovative equipment features and a design exuding sporting capability and elegance in equal measure have defined the BMW 3 Series range since it first arrived on the scene. And now a selection of special-edition versions of the undeniably handsome BMW 3 Series Coupé and BMW 3 Series Convertible three-door models and BMW 320d EfficientDynamics Edition Touring are poised to shine an even brighter spotlight on its undoubted qualities. These high-quality options are carefully coordinated and provide attractive flourishes for the body design and interior. Bespoke upholstery materials with matching interior trim team up with exclusive exterior paint finishes and light-alloy wheels to give the special-edition models an exclusive and individual allure. All variants come with chromed bars for the hallmark BMW kidney grille and chrome door sill strips with "Edition" lettering.

The new BMW Individual hardtop in contrasting paint finish available for the BMW 3 Series Convertible will appeal to customers seeking an even greater degree of individualisation. Two different roof shades and an array of body paint finishes open the door to myriad colour combinations. And customers can also look forward to a range of intriguing packages to complement the BMW infotainment portfolio. From autumn 2011 the innovative traffic information system RTTI (Real-Time Traffic Information) will be available in cars fitted with one of the Professional navigation systems (selected markets only at launch).

Stylish elegance or heart-pounding dynamics: Edition Exclusive and M Sport Edition packages for the BMW 3 Series Coupé and BMW 3 Series Convertible.

The BMW 3 Series Coupé and BMW 3 Series Convertible will put an even more stylish foot forward in Edition Exclusive trim. A particularly eye-catching feature of this package are the 18-inch V-spoke light-alloy wheels painted in Space Grey. Customers can also select the exclusive exterior paint shade Mineral Grey as an option, or any one of the other colour variants offered as

standard or as an option. Exterior mirror caps in Oxide Silver add further colour accents.

Dakota leather upholstery has a defining influence on the interior ambience. The seats can be ordered in the exclusive colour Pearl Grey with grey contrast stitching, or in Black with white contrast stitching. Floor mats with colour-coordinated piping make the perfect complement. And finally, Edition Exclusive specification also includes interior trim strips in Bamboo Grain Anthracite.

M Sport Edition adds another layer to the athletic capability of the BMW 3 Series Coupé and BMW 3 Series Convertible. M Sport suspension joins forces with other interior and exterior equipment features to inject even greater intensity into the dynamic driving experience. The exclusive Silverstone paint finish familiar from the BMW M3 and 18-inch Ferric Grey light-alloy wheels in double-spoke design lend the car's sporting credentials visual impact.

Also playing their part in refining the car's exclusive appearance are the BMW Individual High Gloss Shadow Line window recess finishers and the black-painted exterior mirrors. The rear apron with integrated sports diffuser painted in body colour, which further optimises the car's aerodynamic properties, provides an additional sporting touch. The BMW 3 Series Coupé can also be specified with an M rear spoiler as an option.

Inside the car, sports seats with M detailing, an M Sport steering wheel, stainless steel pedals and an M aluminium driver's footrest point to the exclusiveness of the Edition model. Dakota leather seat covers with blue contrast stitching and special "M" piping are also included. Model-specific interior strips in Aluminium Glacier Silver dark and floor mats with blue piping set the seal on the M Sport Edition package.

Attractive combinations: BMW Individual hardtop in contrasting paint finish for the BMW 3 Series Convertible.

The new hardtop in contrasting paint finish for the BMW 3 Series Convertible represents a particularly striking personalisation option. The folding steel roof is available in contrasting Black or Titanium Silver metallic and can be combined with a total of 15 different body paint finishes to generate an

attractive interplay of colours when the roof is closed. The contrasting hardtop can also be specified in conjunction with the M Sport package and for the BMW M3 Convertible.

Special edition packages also available for the BMW 320d EfficientDynamics Edition Touring.

The Exclusive and Lifestyle special edition packages for the BMW 3 Series Touring can now also be specified for the BMW 320d EfficientDynamics Edition. The sole difference between this CO₂ champion and its Touring siblings are its light-alloy wheels, which come in 16-inch format. BMW offers customers the wheels in two alternative designs to the standard-fit items.

Keeping up to speed: new infotainment packages and Real-Time Traffic Information (RTTI).

The new navigation and infotainment packages for the BMW 1 Series and BMW 3 Series are much clearer and logically put together. In addition to the familiar system components, the Professional and Business navigation systems also offer voice control and a USB audio interface. The mobile phone preparation with Bluetooth interface can be specified not only with the Professional and Business navigation packages, but also in conjunction with the Radio Professional.

BMW is set to offer the latest traffic information technology in cars fitted with one of the Professional systems. Available from autumn 2011, the new Real-Time Traffic Information (RTTI) function from BMW ConnectedDrive delivers a whole new level of reliability and precision when it comes to identifying, conveying and utilising the car's current traffic situation. The result is a faster and more effective calculation of routes and, if necessary, diversions. RTTI will be available to customers as an extension of their BMW ConnectedDrive contract (see chapter 2.7: BMW ConnectedDrive).

2.2 The BMW 5 Series range: New diversity extends leadership on efficiency and driving enjoyment.



Further highly efficient engines, more standard-fitted BMW EfficientDynamics measures and attractive additions to the optional equipment range reaffirm the BMW 5 Series' benchmark position on efficiency and driving enjoyment at the premium end of the upper mid-range segment. From autumn 2011, both the BMW 5 Series Sedan and the BMW 5 Series Touring ranges will for the first time feature two newly developed four-cylinder petrol engines with BMW TwinPower Turbo technology. More diesel engines will get this technology too. Also from autumn, the BMW 5 Series Touring line-up will be joined by a new top-of-the-line model, the BMW 550i Touring with V8 engine. All these measures will help the BMW 5 Series extend its segment leadership as the model range with the best balance of driving enjoyment and fuel economy. The most fuel-efficient model of all is the BMW 520d EfficientDynamics Edition, which achieves average fuel consumption in the EU test cycle of 4.5 litres per 100 km (62.7 mpg imp) and CO₂ emissions of 119 grams per kilometre.

From autumn 2011, a Driving Experience Control switch will be standard specification on the BMW 5 Series Sedan and the BMW 5 Series Touring. On all four- and six-cylinder models, this switch also allows the driver to select ECO PRO mode. At the same time, further model versions will be fitted with the Auto Start-Stop function as standard. New optional equipment features will include innovative functions from BMW ConnectedDrive, including the new-generation BMW Head-Up Display, Real-Time Traffic Information and hands-free opening of the tailgate or rear window. The BMW 5 Series is also confirming its position as a safety leader with the new Active Protection function.

Autumn 2011 will also see the launch of an M Sport package for the BMW 5 Series Gran Turismo, which was developed specifically for this model. New options from the BMW Individual range for this model, comprising additional exterior paint finishes, alloy wheels and interior trim, all highlight the exclusive character of the BMW 5 Series Gran Turismo.

New four-cylinder petrol engines with BMW TwinPower Turbo technology.

With the launch of a new generation of four-cylinder engines with BMW TwinPower Turbo technology, the BMW 5 Series engines for the upper mid-range market now lead the way on efficiency and sporty power delivery in the petrol segment too. This world-exclusive technology equips the two 2.0-litre engines with twin-scroll turbocharging, High Precision Injection direct injection, VALVETRONIC variable valve timing and Double-Vanos variable camshaft timing. This combination of features is inspired by the technology package used on the multi-award-winning 225 kW/306 hp six-cylinder in-line BMW TwinPower Turbo engine of the BMW 535i. Now BMW has adopted this highly efficient performance-boosting technology in the four-cylinder engines as well. The system, which delivers the exhaust gases from each pair of cylinders to the turbine via two separate channels, both in the exhaust manifold and in the turbocharger itself, provides more responsive performance. The fuel supply is precisely metered by the direct-injection system with solenoid injectors, while the latest version of the VALVETRONIC system provides even more precise air mass control and, in combination with Double-Vanos variable intake and exhaust camshaft timing, optimises both efficiency and response.

As fitted in the new BMW 520i, the four-cylinder engine develops maximum power of 135 kW/184 hp at 5,000 rpm and peak torque of 270 Newton metres (199 lb-ft), which is available between 1,250 and 4,500 rpm. Instantaneous power response helps the BMW 520i Sedan perform the 0 to 100 km/h (62 mph) sprint in 7.9 seconds (automatic: 8.0 seconds), while the BMW 520i Touring accomplishes the same task in 8.3 seconds (automatic: 8.4 seconds). Top speeds are 227 km/h (141 mph) (automatic: 226 km/h / 140.4 mph) for the Sedan and 220 km/h (36.7 mph) (manual and automatic) for the Touring model. Simultaneous efficiency improvements are reflected in average fuel consumption (as per EU test cycle, depending on tyre format) of 6.8 – 7.0 l/100 km (40.3 – 41.5 mpg imp) (automatic: 6.5 – 6.7 litres / 42.2 – 43.5 mpg imp) and CO₂ emissions of 157 – 163 grams (149 – 155 grams) per kilometre. For the BMW 520i Touring, the corresponding figures are 7.0 – 7.3 l/100 km (38.7 – 42.2 mpg imp) (automatic: 6.7 – 7.0 litres / 40.3 – 42.2 mpg imp) and 163 – 170 grams (automatic: 156 – 163 grams) per kilometre.

In the new BMW 528i, with modified turbocharging and injection technology, the four-cylinder engine develops maximum power of 180 kW/245 hp at 5,000 through 6,500 rpm, and peak torque of 350 Newton metres (258 lb-ft), which is available between 1,250 and 4,800 rpm. 0 to 100 km/h (62 mph) is accomplished in 6.2 seconds for the new BMW 528i Sedan (automatic: 6.3 seconds), and 6.4 seconds for the BMW 528i Touring (automatic: 6.6 seconds). Top speeds are 250 km/h (155 mph) for the Sedan and 244 km/h (151.6 mph) for the Touring model (in both cases the figures are the same for both manual and automatic versions). The new BMW 528i Sedan achieves average fuel consumption (as per EU test cycle, depending on tyre format) of 6.8 – 7.1 l/100 km (39.8 – 41.5 mpg imp) (automatic: 6.5 – 6.8 litres / 41.5 – 43.5 mpg imp), and CO₂ emissions of 159 – 165 grams (automatic: 152 – 158 grams) per kilometre. For the new BMW 528i Touring, the corresponding figures are 7.1 – 7.4 l/100 km (38.3 – 39.8 mpg imp) (automatic: 6.8 – 7.1 litres / 39.8 – 41.5 mpg imp) and 165 – 172 grams (automatic: 159 – 166 grams) per kilometre.

BMW 520d EfficientDynamics Edition: unique in the upper mid-range segment – a premium sedan with CO₂ emissions of 119 g/km.

From autumn 2011, in parallel with the regular BMW 520d, an ultra-fuel-efficient version of this sedan will be offered: the BMW 520d EfficientDynamics Edition. With unchanged maximum power (135 kW/184 hp) and torque (380 Newton metres / 280 lb-ft), this model records average fuel consumption in the EU test cycle of 4.5 l/100 km (62.8 mpg imp) and CO₂ emissions of 119 grams per kilometre. This is around ten per cent better consumption than the most fuel-efficient segment competitors, despite the fact that the BMW 520d EfficientDynamics Edition is more powerful than the competitor models.

With a 0-100 km/h (62 mph) acceleration time of 8.2 seconds and a top speed of 231 km/h (143.5 mph), even this most fuel-efficient model in the BMW 5 Series boasts typical sporty BMW performance. Its extra-efficient 2.0-litre diesel engine is, like that of the familiar BMW 520d, equipped with a centrifugal pendulum absorber which reduces irregular running at low engine speeds for greater refinement. It is also combined with a range of other efficiency-enhancing measures. These include Auto Start-Stop, an Optimum

Shift Indicator, Brake Energy Regeneration and active cooling flap control, plus a longer final drive ratio and special aero rims with “Streamline” styling.

New diesel engines for the BMW 5 Series: more power and efficiency, courtesy of BMW TwinPower Turbo technology.

For the other diesel engines in the BMW 5 Series, autumn 2011 will bring further improvements in power, and further reductions in fuel consumption, in line with the twofold goal of BMW EfficientDynamics. The BMW 525d will get a new four-cylinder diesel engine with BMW TwinPower Turbo technology. This 2.0-litre all-aluminium unit features Variable Twin Turbo two-stage turbocharging and common-rail diesel injection with piezoelectric injectors. The new unit features reduced weight and, thanks to the VNT technology of the small turbocharger, instantaneous response. The small turbocharger comes on stream at low engine speeds, while the contribution from the larger turbocharger varies in precise response to throttle requirements.

The new BMW 525d offers a 10 kW power increase over the previous model, developing 160 kW/218 hp at 4,400 rpm. Peak torque of 450 Newton metres (332 lb-ft) is now available between 1,500 and 2,500 rpm. The extra agility and sprinting power is reflected in a further improvement in 0-100 km/h (62 mph) acceleration times, which now stand at 7.0 seconds for the Sedan and 7.2 seconds for the Touring model. Top speeds are 243 km/h (150.9 mph) (automatic: 239 km/h / 148.5 mph) for the new BMW 525d Sedan and 236 km/h (146.6 mph) (automatic: 233 km/h / 144.8 mph) for the BMW 525d Touring. Average fuel consumption (as per EU test cycle, depending on tyre format) is 5.0 – 5.3 l/100 km (51.4 – 53.3 mpg imp) (automatic: 4.8 – 5.0 litres / 56.5 – 58.8 mpg imp) for the Sedan and 5.3 – 5.5 litres (51.4 – 53.3 mpg imp) (automatic: 5.1 – 5.4 litres / 52.3 – 55.4 mpg imp) for the Touring model – a 20 per cent reduction over the previous models. The corresponding CO₂ emissions are 132 – 138 grams (automatic: 126 – 132 grams) per kilometre for the Sedan and 138 – 145 grams (automatic: 135 – 142 grams) for the Touring model.

The new 5 Series in-line six-cylinder diesel engines with BMW TwinPower Turbo due for launch in autumn 2011 again offer more power and a further reduction in fuel consumption and emissions. Extensive

modifications to the 3.0-litre engine in the new BMW 530d results in a 10 kW power increase to 190 kW/258 hp at 4,000 rpm. Equipped with VNT turbocharging and common-rail injection with solenoid injectors, its peak torque of 540 Newton metres (398 lb-ft) (560 Nm / 413 lb-ft) with automatic transmission) is on stream between 1,500 and 3,000 rpm.

The BMW 530d Sedan and Touring models accelerate from 0 to 100 km/h (62 mph) in 6.1 and 6.2 seconds respectively (automatic: 6.0 and 6.1 seconds). The Sedan has a governed top speed of 250 km/h (155 mph), while the Touring model tops out at 247 km/h (153.5 mph) (automatic: 248 km/h / 154.1 mph). Average fuel consumption (as per EU test cycle, depending on tyre format) has been reduced by approximately 13 per cent compared with the previous models, to 5.7 – 5.9 l/100 km (47.9 – 49.6 mpg imp) (automatic: 5.3 – 5.5 litres / 51.4 – 53.3 mpg imp) for the Sedan and 5.9 – 6.2 litres (45.6 – 47.9 mpg imp) (automatic: 5.5 – 5.8 litres / 48.7 – 51.4 mpg imp) for the Touring model. CO₂ emissions are 149 – 155 grams (automatic: 139 – 145 grams) per kilometre for the BMW 530d Sedan and 155 – 162 grams (automatic: 145 – 152 grams) per km for the BMW 530d Touring.

Moving on to the BMW 535d, the world's sportiest six-cylinder diesel engine offers further gains in performance and efficiency. The new version of the BMW 535d's 3.0-litre engine features a modified two-stage Variable Twin Turbo system and common-rail injection with piezoelectric injectors. These modifications increase maximum power to 230 kW/313 hp at 4,400 rpm, and deliver peak torque of 630 Newton metres (465 lb-ft) at between 1,500 and 2,500 rpm. The awesome torque accelerates the BMW 535d – which is standard-equipped with an eight-speed automatic transmission – from 0 to 100 km/h (62 mph) in 5.5 seconds. These times are identical for both the Sedan and the Touring model. Both models have a governed top speed of 250 km/h (155 mph). Equally impressive are an average fuel consumption (as per EU test cycle, depending on tyre format) of 5.4 – 5.6 l/100 km (50.4 – 52.3 mpg imp) (Touring: 5.6 – 5.9 litres / 47.9 – 50.4 mpg imp) and CO₂ emissions of 142 – 148 grams (148 – 155 grams) per kilometre.

BMW 5 Series Sedan: international bestseller is now even more attractive.

The BMW 5 Series Sedan is a worldwide success. It has won a host of awards and comparison tests and earned top marks on quality, safety and value retention. Demand in car markets all over the world is steadily growing. With its seductive styling, its unrivalled balance between sporty performance and comfort, and an extensive range of innovative equipment features, this series quickly established itself as the world market leader in its segment. Now, new engine versions and specification upgrades will lend this model range even greater variety and appeal.

From autumn 2011, the BMW 5 Series Sedan range will consist of five petrol and four diesel models. The petrol versions comprise the two new four-cylinder models, the six-cylinder in-line BMW 530i with lean-burn High Precision Injection, whose output has been upgraded to 200 kW/272 hp, the BMW 535i, and the range-topping V8 BMW 550i. The diesel versions comprise two four- and two six-cylinder units. At the same time, further xDrive versions will be offered. This intelligent all-wheel-drive system, which provides optimised driving dynamics, traction and stability, will in future be fitted in the BMW 528i xDrive, BMW 535i xDrive, BMW 550i xDrive, BMW 525d xDrive, BMW 530d xDrive and BMW 535d xDrive.

BMW 5 Series Touring: the perfect combination of attractive styling, dynamism and adaptability.

The BMW 5 Series Touring range, too, now offers even more choice. From autumn 2011 this model range, which provides the world's most attractive combination of driving enjoyment, adaptability and upscale styling, will likewise be available in nine different engine versions. The new top-of-the-range model will be the BMW 550i Touring, whose V8 engine with BMW TwinPower Turbo technology develops maximum power of 300 kW/407 hp and peak torque of 600 Newton metres (442 lb-ft). A 0-100 km/h (62 mph) sprint time of 5.1 seconds puts this model on a par with top-class sports cars. Average fuel consumption (as per EU test cycle, depending on tyre format) is 10.7 litres/100 km (26.4 mpg imp), with CO₂ emissions of 249 – 250 grams per kilometre.

At the same time, with its high standards of long-distance ride comfort and its adaptable load space, the BMW 5 Series Touring is the epitome of an ideal touring vehicle. With the rear backrest partially or fully lowered, using the levers in the luggage compartment, load space can be increased from 560 to as much as 1,670 litres. For even bigger transport jobs, a trailer hitch with a towing capacity of two tonnes is available. To add another dimension to the driving enjoyment, and to provide even more confidence and control when towing a trailer, xDrive intelligent all-wheel-drive versions are also available. This system, which electronically controls the drive power distribution, will be available from autumn 2011 in the BMW 528i xDrive Touring, BMW 535i xDrive Touring, BMW 525d xDrive Touring, BMW 530d xDrive Touring and BMW 535d xDrive Touring.

Auto Start-Stop function and Driving Experience Control including ECO PRO mode set new standards of efficiency.

From autumn 2011, a Driving Experience Control switch will be fitted as standard on the BMW 5 Series Sedan and BMW 5 Series Touring models. This rocker switch on the centre console allows the driver to customise accelerator response characteristics, engine response, the power steering characteristics, the Dynamic Stability Control (DSC) thresholds and, on automatic models, the shift characteristics of the transmission. Drivers can choose between "COMFORT", "SPORT" or "SPORT+" modes. All the four- and six-cylinder models also feature ECO PRO mode, which supports a relaxed, extra-fuel-efficient, low-rpm driving style. At the same time, ECO PRO mode also programs electrically powered convenience functions like the heated seats and exterior mirrors and the air conditioning to operate at optimum efficiency. A special display in the instrument cluster lets the driver know by how much the driving range is being extended when using ECO PRO mode (see chapter 2.6: BMW EfficientDynamics).

Auto Start-Stop, which from autumn 2011 will be specified as standard on even more BMW 5 Series models, makes another big contribution to efficiency. This system, which automatically shuts the engine off when the vehicle is stopped in a traffic queue or at intersections, can be used on both manual and automatic models. In future it will form part of the BMW EfficientDynamics technology package on all diesel models as well as on the BMW 520i, BMW 528i and BMW 535i. On the BMW 535i, the Auto Start-Stop function in

combination with an optimised drive train cuts fuel consumption by up to 9 per cent despite a further improvement in performance, while the Sedan and Touring versions now both achieve a 0 to 100 km/h (62 mph) time of 5.8 seconds (automatic: 5.9 seconds). The average fuel consumption of the BMW 535i Sedan (as per EU test cycle, depending on tyre format) has been improved to 8.1 – 8.3 l/100 km (34 – 34.9 mpg imp) (automatic: 7.6 – 7.9 litres / 35.8 – 37.2 mpg imp), and CO₂ emissions to 188 – 194 grams per kilometre (automatic: 177 – 183 grams), while the BMW 535i Touring achieves an average of 8.2 – 8.5 l/100 km (33.2 – 34.4 mpg imp) (automatic: 7.7 – 8.0 litres / 35.3 – 30.5 mpg imp) and CO₂ emissions of 190 – 197 grams per kilometre (automatic: 179 – 186 grams).

Enhanced safety, comfort and infotainment with new BMW ConnectedDrive functions.

The BMW 5 Series leads its segment in another important area too: active and passive safety. Euro NCAP, US NCAP and the Australasian NCAP are among the crash tests in which the 5 Series Sedan achieved the maximum rating of five stars. From autumn 2011, the range of safety equipment will be extended to include the innovative Active Protection system. If an accident risk is detected, the central safety electronics will automatically close the side windows and the sunroof (if fitted). At the same time, the front seatbelts are pre-tensioned and, if the optional comfort seats are fitted, their backrests are adjusted to an upright position. In this way the Active Protection system helps to mitigate the risk of occupant injuries.

Elsewhere, the optional Comfort Access system has been upgraded with a new function – the hands-free tailgate opener, which provides increased convenience when loading the luggage compartment of both the Sedan and the Touring model. This innovative function allows drivers to open the boot or tailgate automatically simply by moving their foot under the rear apron (see chapter 2.7: BMW ConnectedDrive). On the BMW 5 Series Touring, this opens and raises either the independently opening tailgate window or, if the optional electric opening and closing function is fitted, the entire tailgate.

In future, 5 Series models with the optional Professional navigation system will also be available with Real-Time Traffic Information. This new BMW ConnectedDrive function provides drivers with more precise and more

up-to-date information about traffic conditions on motorways and main roads, and on selected urban roads (see chapter 2.7: BMW ConnectedDrive).

A further innovative system that improves driver concentration, and ultimately safety, is the optional BMW Head-Up-Display. This system projects relevant information onto the windscreen directly in the driver's line of sight. From autumn 2011, the BMW 5 Series Sedan, the BMW 5 Series Touring and the BMW 5 Series Gran Turismo will be available with the new-generation version of the BMW Head-Up-Display, which for the first time offers full-colour display of symbols and graphics, making road signs etc. look even more realistic. The functionality of the optional BMW Night Vision system with pedestrian recognition has now been extended to include an acute warning comprising visual and audible signals.

BMW 5 Series Gran Turismo: more sporty and exclusive than ever.

The BMW 5 Series Gran Turismo provides a unique blend of adaptability, touring comfort and effortless driving enjoyment. From autumn 2011, it will for the first time be available with an M Sport package which accentuates and intensifies the most dynamic facets of this model. The package comprises a range of aerodynamics, suspension and interior components which were developed specifically for this model and which heighten both the sporty driving qualities and the brawny appearance of the BMW 5 Series Gran Turismo. The specification includes an M aerodynamics package, dark chrome tailpipes, lowered M Sport suspension and 19-inch V-spoke M alloy wheels with mixed tyres. Alternatively, 20-inch twin-spoke M alloy wheels with mixed tyres are available as an option.

A typical M feel in the interior is provided by sports seats upholstered in fabric/alcantara (Dakota leather for the BMW 550i Gran Turismo), an M leather steering wheel, M driver's footrest, M door sill finishers, Palladium Grey interior trim strips and a BMW Individual roof lining in anthracite. In conjunction with the M Sport package, seven exterior paint finishes are available for the BMW 5 Series Gran Turismo, including M-exclusive Carbon Black metallic.

In addition to the regular optional equipment list for the BMW 5 Series Gran Turismo, various exclusive options from the BMW Individual range are also available. Four more BMW Individual paint

colours will be on offer in future. These will include the BMW Individual exterior paint finishes Citrin Black metallic, Champagne Quartz metallic, matt-finish Frozen Grey metallic and matt-finish Frozen Silver metallic. Also new in the BMW Individual range for this model will be 20-inch V-spoke alloy wheels with mixed tyres. In conjunction with the optional comfort seats, the extended BMW Individual Merino leather trim will be available in Platinum/Black and Amaro Brown/Black. The exclusive appearance of the seats, both at the front and at the rear, is finished off by contrasting piping. Matching leather BMW Individual interior trim strips in Platinum/Black and Amaro Brown/Black are also available. The stylish and exclusive ambience can be topped off with BMW Individual door sill finishers and a BMW Individual rear badge.



2.3 The BMW 6 Series range: Breaking new ground in the segment – the world's sportiest six-cylinder diesel engine and BMW xDrive intelligent all-wheel drive.

The market launch of the new BMW 6 Series Coupé in autumn 2011 will be accompanied by the arrival of additional engine variants for the new BMW 6 Series Convertible. Making its debut in the two models is the world's sportiest six-cylinder diesel engine, a 3.0-litre unit with BMW TwinPower Turbo technology and output of 230 kW/313 hp. For the first time, the BMW 6 Series will also be available with BMW xDrive. The electronically controlled intelligent all-wheel-drive system will give the BMW 650i xDrive Coupé and BMW 650i xDrive Convertible unbeatable authority, traction and directional stability in all road and weather conditions. The list of upgrades in the new BMW 6 Series Coupé and new BMW 6 Series Convertible will also include a number of innovative equipment features.

BMW 640d Coupé and BMW 640d Convertible: instantaneous pulling power, unsurpassed efficiency.

The launch of the BMW 640d Coupé and BMW 640d Convertible sees BMW setting another new benchmark in the premium environs of the exclusive luxury 2+2-seater segment when it comes to efficient driving pleasure. Their predecessors successfully established diesel technology in this class of car. And now the engine that achieved such acceptance has passed on the title of the world's sportiest six-cylinder diesel to its even more powerful and economical successor. The BMW TwinPower Turbo technology of the new six-cylinder in-line powerplant comprises sequential turbocharging (Variable Twin Turbo) and common-rail direct injection with solenoid valve injectors. Peak torque of 630 Newton metres (464 lb-ft) is on tap between just 1,500 and 2,500 rpm and maximum output of 230 kW/313 hp arrives at 4,400 rpm. The instantaneously delivered pulling power enables acceleration of 0 to 100 km/h (62 mph) in 5.5 seconds in the case of the BMW 640d Coupé and 5.6 seconds for the BMW 640d Convertible. The fuel consumption and CO₂ values of the two diesel models set new standards in their segment. The BMW 640d Coupé has average fuel economy of 5.4 – 5.5 l/100 km (51.4 – 52.3 mpg imp) and CO₂ emissions of 143 – 145 grams per kilometre. The average fuel economy of the BMW 640d Convertible stands at 5.6 – 5.7 l/100 km (49.6 – 50.4 mpg imp),

and CO₂ emissions come in at 147 – 149 g/km (as per EU test cycle, depending on tyre format).

Like the BMW 640i Coupé and BMW 640i Convertible, the two diesel models are equipped as standard with ECO PRO mode, which promotes an extremely calm – and therefore economical – driving style. ECO PRO mode is activated using the standard-fitted driving mode button on the centre console. Activating this mode adjusts the accelerator mapping and the shift characteristics of the automatic transmission, and prompts the heating and air conditioning system (as well as other electrically-controlled comfort functions) to work with maximum efficiency. The driver can admire this optimisation of fuel economy in the form of a “range bonus” flashed up in the instrument cluster. Symbols displayed here give the driver tips on how to use the car’s fuel-saving potential in ECO PRO mode to maximum effect.

Available for the first time in the BMW 6 Series range: the intelligent all-wheel-drive system BMW xDrive.

Variants of the new BMW 6 Series Coupé and new BMW 6 Series Convertible fitted with the range-topping V8 engine with BMW TwinPower Turbo and 300 kW/407 hp can now also be ordered with xDrive. This new weapon in the BMW 6 Series’ arsenal takes the sure-footed authority and acceleration of both models to new levels. The BMW 650i xDrive Coupé powers from rest to 100 km/h (62 mph) in 4.8 seconds, while the BMW 650i xDrive Convertible requires just 0.1 seconds longer to complete the same sprint.

The impressively innovative optional equipment also made available for the BMW 6 Series Convertible at the launch of the new BMW 6 Series Coupé includes Adaptive LED Headlights, which use LED units to generate low and main beam and also include a cornering function. The light they generate is extremely close to natural daylight and illuminates the road ahead with rich contrast. The Adaptive LED Headlights can be identified by the levelled off form – at the top and lower edges – of the twin round headlights.

**New functions from BMW ConnectedDrive,
M Sport package and exclusive options from BMW Individual.**

The line-up of BMW ConnectedDrive technology available for both models from autumn 2011 will include Active Cruise Control with Stop & Go function.

This system also comprises Collision Warning with braking function, which automatically brakes the car for some 1.2 seconds, if required, and uses visual and audible alerts to prompt the driver to brake and/or perform an evasive manoeuvre. The selection of mobility services will be expanded to include the innovative Real-Time Traffic Information congestion warning system. Providing unbeatable audio pleasure on the move is the Bang & Olufsen High End Surround Sound System – developed specifically for each of the two models – with exclusive Acoustic Lens Technology plus amplifier output of 1,200 watts and 16 speakers in the BMW 6 Series Coupé, or 1,000 watts and 12 speakers in the BMW 6 Series Convertible.

From autumn 2011, both the Coupé and the Convertible version of the new BMW 6 Series will be available with an M Sport package, which includes features such as an M aerodynamics package, LED foglamps, 19-inch M light-alloy wheels in double-spoke design, sports seats with Alcantara/leather upholstery and an M leather steering wheel. Also available for both models is the BMW Individual range, which comprises – among other features – exclusive paint finishes, light-alloy wheels and exceptionally sophisticated and stylish options when it comes to tailoring the interior of the car to the customer's tastes.

2.4 The BMW 7 Series range: A perfect blend of luxury, efficiency and sports performance.



The success story of the BMW 7 Series rolls on through 2011, underpinned by its blend of outstanding touring comfort in a luxurious ambience, superior sports performance and exceptional efficiency. As a byword for driving pleasure in a luxury-segment sedan, the 7 Series meets the highest expectations of customers worldwide when it comes to aesthetic appeal and innovative technology. A broad range of drive systems also play their part in shaping the groundbreaking character of the BMW 7 Series. Three petrol engines and two diesel units – with outputs ranging from 180 kW/245 hp in the BMW 730d to the 400 kW/544 hp of the 12-cylinder BMW 760Li flagship – are complemented by two models equipped with BMW xDrive intelligent all-wheel drive. And then there is the mightily impressive BMW ActiveHybrid 7, whose interplay of combustion engine and electric motor is extraordinarily effective in every respect. From autumn 2011, the BMW 7 Series will also benefit from a number of carefully selected additions to its options list. Indeed, the introduction of the M Sport package option for the BMW ActiveHybrid 7 places an even more alluring combination of luxury, efficiency and sports performance within its customers' reach.

Offering a spread of driver assistance systems and mobility services without parallel in the luxury segment, the BMW ConnectedDrive range for the BMW 7 Series uses intelligent networking to set new standards in the optimisation of comfort, safety and infotainment usage. And with new functions slated to arrive in autumn 2011, the line-up is poised for another upgrade. For example, the latest version of BMW Night Vision with pedestrian recognition includes additional visual and audible alerts to warn the driver even more effectively if pedestrians or cyclists are about to move into the car's path. The new Real-Time Traffic Information function works in conjunction with a navigation system to give the driver extremely precise information on the traffic situation on motorways, country roads and selected city routes (see chapter 2.7: BMW ConnectedDrive). And the new Apps function allows reception of Web Radio stations and in-car use of online services Facebook and Twitter.

Setting the dynamic benchmark for hybrid sedans: the BMW ActiveHybrid 7 with M Sport package.

The intelligent interplay of a V8 petrol engine with BMW TwinPower Turbo technology and three-phase synchronous electric motor in the BMW ActiveHybrid 7 gives both driving pleasure and efficiency a significant boost. ActiveHybrid technology generates a combined system output of 342 kW/465 hp, giving the BMW ActiveHybrid 7 acceleration of 0 to 100 km/h (62 mph) in 4.9 seconds and average fuel economy – 9.4 l/100 km (30 mpg imp) in the EU test cycle – no other car in its output class can match. All of which makes the BMW ActiveHybrid 7 the world's most dynamic hybrid sedan. What's more, the introduction of the M Sport package for this model in autumn 2011 will give drivers an even more intense experience of what it has to offer and provide the perfect visual showcase for its talents.

The M Sport package for the BMW ActiveHybrid 7 comprises an aerodynamics package, additional chrome trim elements for the bespoke front and rear aprons, illuminated M door sills and BMW Individual High Gloss Shadow Line trim for the side window surrounds. And exclusive Carbon Black metallic paintwork can also be specified, if desired. 19-inch M light-alloy wheels in double-spoke design – fitted with mixed tyres – will add the finishing touches to the M Sport package's dynamic styling upgrade, although 20-inch M light-alloy wheels in double-spoke design (with mixed tyres) are also available as an option. The M Sport package also includes the electronically controlled Dynamic Drive roll stabilisation system.

The interior design modifications that come as part of the M Sport package shine a particularly bright spotlight on driving pleasure. For example, sports seats with leather upholstery ensure optimum lateral support. Plus, the driver enjoys the benefit of an M driver's footrest and M leather steering wheel with multifunction buttons, which will also be available as an individual option for the BMW ActiveHybrid 7. The BMW Individual roof liner in the colour shade Anthracite and Brushed Aluminium interior trim strips round off an ambience dominated by sports performance.



2.5 The BMW Z4: Debut for new four-cylinder engines with BMW TwinPower Turbo technology and exclusive Design Pure Balance equipment package.

With its classic styling, powerful engines and excellent driving dynamics, the BMW Z4 has already established its segment leadership at the premium end of the roadster market. Now this sporty two-seater boasts a new highlight. From autumn 2011, two model versions will be equipped with state-of-the-art four-cylinder petrol engines featuring BMW TwinPower Turbo technology. The new 2.0-litre engines are fitted in the BMW Z4 sDrive20i and in the BMW Z4 sDrive28i, which now replace the naturally aspirated six-cylinder BMW Z4 sDrive23i and BMW Z4 sDrive30i models. Combining improved efficiency and performance with a simultaneous reduction in fuel consumption and emissions, the new 135 kW/184 hp and 180 kW/245 hp engines are also lighter in weight thanks to an all-aluminium crankcase. This reduces the load on the front axle, for improved agility and handling.

The BMW Z4 is equipped as standard with a six-speed manual transmission, but optionally the new engines can be combined with an eight-speed automatic transmission. All models in the BMW Z4 range will in future feature Servotronic speed-sensitive power steering as standard. The BMW Z4 sDrive 35i will also get 18-inch multispoke alloy wheels. The popular roadster range will also be available with the new Design Pure Balance equipment package for extra styling enhancement. Exclusively in combination with this package, Mineral White metallic paintwork is available.

BMW Z4 sDrive28i and BMW Z4 sDrive20i with BMW TwinPower Turbo technology.

The new four-cylinder petrol engines are key components in the BMW EfficientDynamics strategy, which aims to combine increased driving enjoyment with reduced fuel consumption and emissions. Both versions are based on the same reduced-friction 1997 cc core engine, their different output ratings being due mainly to different injection and turbocharging technology. Key features of the world-exclusive BMW TwinPower Turbo technology include High Precision Injection direct injection, twin-scroll turbocharging, Double-Vanos variable camshaft timing and VALVETRONIC variable valve timing. These features give the new four-cylinder engine

the sort of power which in a naturally aspirated engine would require more cylinders and larger displacement. At the same time, with their all-aluminium crankcase, these engines are lighter and more compact than a six-cylinder engine of equivalent power. This has obvious benefits for driving dynamics: the reduced load on the front axle results in greater agility and further improved steering and cornering characteristics.

More dynamic performance, reduced fuel consumption.

In the version fitted in the new BMW Z4 sDrive28i, the 1997 cc four-cylinder engine develops maximum power of 180 kW/245 hp at 5,000 rpm, which is almost a match for the 190 kW/258 hp six-cylinder unit it replaces. And on torque it actually goes one better. With peak torque of 350 Newton metres (258 lb-ft) (+40 Nm / 29 lb-ft), which is available from 1,250 rpm, the new engine is noticeably more responsive. The lively power delivery from just above idle continues all the way into the higher engine load range. The resulting 0 to 100 km/h (62 mph) acceleration time for the BMW Z4 sDrive28i is just 5.6 seconds, which is 0.1 seconds faster than for the predecessor BMW Z4 sDrive30i (0.4 seconds faster for automatic versions). The new four-cylinder unit also offers better in-gear acceleration. Top speed remains unchanged at 250 km/h (155 mph).

Despite the performance upgrade, the roadster also boasts substantially improved fuel consumption. Average fuel consumption for the BMW Z4 sDrive28i in the EU test cycle has improved by an impressive 1.7 litres – or 20 per cent – to 6.8 litres/100 km (41.4 mpg imp). And there is a corresponding reduction in CO₂ emissions, which now stand at 159 grams per kilometre.

The four-cylinder engine fitted in the BMW Z4 sDrive20i is based on an identical core design. Due to modified injection and turbocharging technology, however, this version delivers 135 kW/184 hp of power at 4,800 rpm, with peak torque of 270 Newton metres (199 lb-ft) at 1,250 rpm. Despite a torque increase of 20 Newton metres (14.7 lb-ft), this model too boasts a reduction in average EU fuel consumption of 1.7 litres, or approximately 20 per cent, on its six-cylinder predecessor, the BMW Z4 sDrive23i, while delivering a 0-100 km/h (62 mph) sprint time of 6.9 seconds and a top speed of 235 km/h (146 mph).

Twin-scroll turbocharging.

The new four-cylinder engines also feature twin-scroll turbocharging. This means that the exhaust stream from cylinders 1 and 4, and the exhaust stream from cylinders 2 and 3, follow separate spiral-shaped paths to the turbine wheel. This reduces exhaust back-pressure at low engine rpm, allowing the energy of the exhaust gas pulses to be utilised as efficiently as possible. The result is instant throttle response and typical BMW fast-revving performance.

VALVETRONIC, Double-Vanos and direct injection.

The ability of these engines to deliver large amounts of power, while simultaneously cutting emissions, is also assisted by VALVETRONIC variable valve timing and Double-Vanos variable camshaft timing. The latest VALVETRONIC system features a faster-acting, optimised stepper motor with integrated sensor. Seamlessly variable control of intake valve lift dispenses with the need for a throttle valve. Instead, the air mass is controlled inside the engine, resulting in faster response. At the same time, pumping losses have been significantly reduced.

The excellent efficiency of the turbocharged engines is also down to the High Precision Injection petrol direct-injection system. Centrally positioned between the valves, solenoid injectors with a maximum injection pressure of 200 bar precisely control the supply of fuel. The fuel is injected very close to the spark plug, resulting in clean and homogeneous combustion. The cooling effect of the directly injected fuel also results in a higher compression ratio than on port injection engines, bringing further efficiency improvements.

Exceptional performance based on innovative design features.

The exceptional performance of the new four-cylinder petrol engines is due last but not least to various innovative features of the core engine. For example balancer shafts positioned at different heights result in optimised vibration absorption, while a centrifugal pendulum absorber integrated in the dual-mass flywheel brings a noticeable reduction in irregular running at low engine rpm. The driver can therefore make full use of the strong low-end torque without sacrificing smoothness. In fact, the new 2.0-litre four-cylinder engines achieve the same standard of smoothness as a six-cylinder engine.

Efficiency is further improved by the use of state-of-the-art ancillary units like the computer-controlled oil pump and the on-demand electric coolant pump. Also, both the new roadster models feature Auto Start-Stop as standard on the six-speed manual versions.

Optional eight-speed automatic transmission: more comfort, with no increase in fuel consumption.

The BMW Z4 sDrive28i and BMW Z4 sDrive20i are equipped as standard with a six-speed manual transmission. Optionally, however, drivers can now leave the shifting to a new eight-speed automatic transmission which is very similar in terms of size and weight to the previous six-speed unit. The two additional ratios provide an appreciable improvement in smoothness, sporty performance and efficiency. All automatic versions feature a sports steering wheel, which is equipped as standard with paddle shifts, so that the driver can also shift gears manually. The right-hand paddle is used for changing up and the left-hand paddle for changing down. A restyled selector lever is standard with the eight-speed automatic.

The new eight-speed automatic transmission features fast reaction and shift times, direct downshift capability, minimal torque converter slip and low friction losses, along with a wide ratio spread that has benefits both for sprinting performance and for low-rpm cruising. The electronic transmission controller allows the shift characteristics to be altered as required, to cater for a sporty or a more relaxed driving style. Improved overall efficiency means that the BMW Z4 with eight-speed automatic transmission offers identical fuel consumption and emissions performance to the corresponding manual version.

New Design Pure Balance equipment package and exclusive Mineral White metallic exterior paint finish for the BMW Z4.

With the new Design Pure Balance package, the BMW designers have developed an elegant trim package tailored specifically to this popular roadster model. It features an extensive leather interior, with the new Cohiba Brown shade and contrasting Lotus White stitching providing attractive highlights. The package is topped off by further leather trim elements in Black, with stitching in Umbra, plus Fineline Anthracite wood and standard-fitted sports seats.

For the first time the BMW Z4 will be available in Mineral White metallic, which is offered exclusively in combination with the new interior equipment package. Alternatively, the Design Pure Balance package can also be combined with other exterior paint finishes. The new package replaces the previous “Design Pure White” package.

2.6 BMW EfficientDynamics: A pioneering concept, now with even more widespread impact.



The BMW brand's rigorously pursued blanket implementation strategy for its BMW EfficientDynamics technology is reflected impressively in its current range. Newly developed engines with BMW TwinPower Turbo technology are now bringing the virtues of enhanced driving pleasure and optimised efficiency to several model series. Measures designed to cut fuel consumption, such as the Auto Start-Stop function, will appear in an even broader selection of BMW vehicles from autumn 2011. And innovative functions such as the ECO PRO mode have been included in a large number of representatives from various model series at an early stage.

The impact of BMW EfficientDynamics therefore continues to spread. For many years now, innovations developed for BMW cars to reduce their fuel consumption and CO₂ output have had an extremely positive influence on emissions generated by road traffic. Indeed, in contrast to other carmakers who only offer fuel consumption-reducing technology in selected models or charge extra for it as an option, BMW offers an Efficient Dynamics package as standard on all of its new BMW cars. The characteristics of individual model concepts affect which features are included in each model. However, the reach of BMW EfficientDynamics is gradually extending into new areas here as well.

BMW TwinPower Turbo: the most efficient route to greater driving pleasure.

The introduction of the globally unique BMW TwinPower Turbo technology package sees BMW rolling out this extremely efficient form of power enhancement to its four-cylinder engines as well. BMW TwinPower Turbo technology boosts driving pleasure to a level that conventional naturally-aspirated engines could only achieve with far larger displacement, which would mean an increase in weight and, by extension, fuel consumption. Here, the BMW engine developers' many years of experience in the construction of extremely high-performance turbocharged engines come into play. In 1973 the BMW 2002 turbo became Europe's first series-produced car to be fitted with a turbocharger.

The latest version of BMW TwinPower Turbo technology for four- and six-cylinder petrol engines combines a turbocharging system based on the twin-scroll principle with High Precision Injection direct injection, VALVETRONIC variable valve control and Double-Vanos variable camshaft control. From autumn 2011 the 3.0-litre six-cylinder in-line engine will share the technology with a pair of four-cylinder engines with 1.6-litre displacement and two other 2.0-litre units. The new four-cylinder powerplants will be available for the new BMW 1 Series, BMW X1, BMW X3, BMW Z4 and BMW 5 Series.

Auto Start-Stop function: zero fuel consumption in neutral – also available with an automatic gearbox.

BMW has also performed pioneering deeds in introducing the Auto Start-Stop function across its model portfolio since it was first fitted to all BMW 1 Series models in 2007. Autumn 2011 will see another rise in the number of models equipped as standard with this automatic engine shut-off at junctions or in traffic tailbacks. In addition to an increasing number of models with a manual gearbox, BMW will offer more automatic models with the Auto Start-Stop function than any other manufacturer. The technology can now be combined with an automatic transmission in further BMW 5 Series and BMW 6 Series models, as well as elsewhere in the BMW model range.

In cars with manual transmission, the engine is switched off automatically as soon as the driver draws to a halt, moves the gearshift lever into the neutral position and takes his foot off the clutch. The engine then restarts without hesitation when the driver presses down on the clutch pedal again. In automatic models the engine shuts down when the car comes to a standstill. To move off again, all the driver needs to do is take his foot off the brake pedal and the engine sparks back into life. This comfort-optimising operation is underpinned by the integration of a hydraulic impulse storage unit, which enables the automatic gearbox to build up engine power more quickly, ready for the car to move off again.

ECO PRO mode: maximum efficiency at the touch of a button.

ECO PRO mode, which is activated by pressing the driving mode button, helps the driver to maintain a relaxed driving style at low revs and, in so doing,

optimise fuel efficiency. It achieves this by carrying out adjustments to the engine management, accelerator mapping and, if necessary, the shift characteristics of the automatic transmission. In addition, the output of electrically operated functions such as the climate control system and seat and exterior mirror heating are carefully regulated to ensure extremely efficient energy management. Special displays inform the driver of the extra range, in kilometres, achieved as a result. The driver is also given helpful tips on how to further optimise the car's efficiency. ECO PRO mode comes as standard in all variants of the new BMW 1 Series range and is also available for the six-cylinder variants of the new BMW 6 Series and in the four- and six-cylinder BMW 5 Series Sedan and BMW 5 Series Touring models.

2.7 BMW ConnectedDrive: The latest in intelligent integration for enhanced comfort, infotainment and safety.



With BMW ConnectedDrive, BMW already offers a unique portfolio of innovative functions and technologies for intelligent integration of driver, vehicle and outside world. These feature increased comfort, provide a new dimension in infotainment and significantly improve safety in BMW vehicles. BMW ConnectedDrive made its debut back in 1999 at the Frankfurt International Motor Show (IAA). Today this concept comprises an ever-growing number of mobility services and driver assistance systems, which combine the varied roles of personal assistant, protector and entertainer. In the second half of 2011, many more new functions are set to join the BMW ConnectedDrive portfolio.

BMW Live: infotainment services via the customer's mobile phone.

One of the latest attractive new services from BMW ConnectedDrive is BMW Live. Using any internet-capable mobile phone, and subject to data charges, it allows a limited number of the existing BMW Online services to be accessed via Bluetooth. All the available Online functions are transmitted by Bluetooth to the in-dash display. They can be operated easily and intuitively using the iDrive Controller, with the customer's mobile phone serving as the modem. From launch, BMW Live will provide free news via RSS feeds, weather information and the functions Google Local Search, Google Panoramio and Google Street View. To activate their favourite news feeds, customers simply input the relevant domain. The portal then automatically searches for the associated RSS feeds on the website. Headlines can be read aloud via BMW's text-to-speech function. The weather data, which includes both the current weather conditions and a four-day forecast, is presented on the monitor in clear, easily readable colour images.

The Google functions offered by BMW Live – Google Local Search, Panoramio and Street View – work similarly to the functions available in the current BMW Online system. The start page offers location selection, search box, categories and history. Addresses found using Google Local Search can be imported directly into the vehicle's navigation system. It is also possible, using the iDrive Controller, to select and display destination images

from Google Panoramio and Street View, both while stationary and when on the move. The new BMW Live service from BMW ConnectedDrive is at present only available in the new BMW 1 Series. Customers can configure this service to their own individual requirements. Further BMW Live applications will shortly be made available worldwide (except in the USA, Canada, China, Japan, South Korea and Taiwan).

Collision Warning system and No Passing Info display.

BMW ConnectedDrive uses a single tiny multifunction camera, mounted on the rear-view mirror, to implement a number of different driver assistance systems. In the new BMW 1 Series, BMW is now the first premium manufacturer to use such a camera also for monitoring traffic ahead.

The image recognition system continuously scans the traffic and gives an audible warning if it identifies a potential collision risk. If the driver is too close to preceding vehicles, the system produces an acute audible warning and a visual signal appears in the instrument cluster. At speeds upwards of 50 km/h (30 mph), the brake system is primed and the activation threshold of the hydraulic Brake Assist system is lowered. These measures, which are activated simultaneously with the visual and audible warnings, are designed to help the driver to react effectively in an emergency. There is no automatic braking intervention. The sensitivity of the automatic Collision Warning system can be individually configured by the driver using the iDrive Controller.

The camera system also continuously monitors speed restriction signs and other traffic signs, and relays this information to the driver. For the first time, this BMW ConnectedDrive function can now also display no-overtaking information. The system automatically detects the beginning and end of an overtaking prohibition and informs the driver by displaying a no-overtaking symbol in the central instrument cluster. The rear-view mirror camera also detects warnings relating to current conditions which appear, for example, on variable-message overhead traffic signs, and can identify traffic signs that apply just to trucks or in wet weather. All this data is temporarily stored in the system so that if the driver stops for a short break, the last-displayed limits and prohibitions are immediately reactivated when he sets off again.

Hands-free tailgate opener – innovative system for more convenient tailgate or boot opening.

BMW ConnectedDrive can always be counted on to come up with pioneering technology, and one of its latest intelligent solutions in the field of driver comfort and convenience is no exception. Hands-free foot-activated tailgate opening is a first in the premium class. Customers standing behind the car can open the boot or tailgate with a short movement of their foot under the centre of the rear bumper, without using their hands. The tailgate (or boot) is then automatically opened and raised, either by spring force or, depending on specification, by the tailgate lift.

The vehicle is fitted with sensors placed at different heights in the rear bumper trim, which are able to identify a person standing behind the vehicle.

The sensors can identify the foot “command” by monitoring the area of the leg between the shin and the tip of the foot. They then send a signal containing special algorithms to the on-board computer. Access is only authorised, however, if the system simultaneously identifies the Comfort Access control unit (the key), which the person must be carrying with them.

The bootlid or tailgate is then unlocked and raised automatically, without hand contact. Key authorisation provides the safeguard which ensures correct operation at all times. It means that the system cannot be confused by objects underneath the car or, say, by animals running in and out under the bumper.

Real-Time Traffic Information (RTTI) shortens journey times.

The BMW ConnectedDrive Real-Time Traffic Information (RTTI) system specially developed for BMW navigation systems launches a new era in real-time traffic information for motorists. The real-time information, which is taken into account when calculating routes and diversions, is relayed to the vehicle with unrivalled reliability and precision. The system is mobile phone-based, using the vehicle’s built-in SIM card, and has the advantage over radio-based traffic information of being faster and offering more extensive coverage. This means that much more data can be used to analyse the traffic situation, and that this data can be updated more frequently. RTTI covers motorways and main roads, as well as main and secondary roads in urban areas. If congestion is reported on a BMW driver’s present route, the system is therefore equipped to provide precise details of an alternative route.

With a wealth of detailed information at its disposal, the navigation system

is always able to work out the quickest route to the driver's intended destination under the prevailing conditions.

The system monitors the dynamic network connections of mobile phones in vehicles in the area to generate anonymous mobile location data. The number and speed of location changes within the mobile phone network allows an accurate picture to be obtained of current traffic flows. Further real-time data, capable of providing information about traffic jams and congestion, is also obtained from truck fleets and taxis whose navigation systems are linked to a control centre. Data is also obtained from local authority traffic management systems, which provide precise information about traffic density on urban roads. Coloured markings on the in-car map display indicate how freely traffic is flowing on the various roads. The information is updated at three-minute intervals. Through RTTI, with its extensive data about the intricate road networks of Germany, the United Kingdom, France and Italy, BMW Connected Drive is moving steadily forward with the intelligent integration of driver, vehicle and outside world.

Connected driving – watch this space.

The BMW concept vehicle BMW Vision ConnectedDrive provides an early insight into ways in which vehicles of the future will become an even more integral part of a connected lifestyle. This two-seater roadster displayed at the 2011 Geneva Motor Show communicates with driver and passenger, with the outside world, and with the internet, and incorporates a large number of innovative functions and ideas. BMW ConnectedDrive is evolving all the time: BMW engineers are already working on ingenious, purpose-designed solutions for filtering and pre-sorting data.

The focus is on supplying the right information at the right time. In future, being "online" virtually anytime, anywhere will become the norm. Connectivity will be permanently available, without first having to active an internet connection. Online data will be available anytime, anywhere, courtesy of a worldwide data cloud. And increasingly, intelligent connectivity with the outside world will also help to prevent accidents with other vehicles and road users.