

# BMW at the 22nd Auto Mobil International Leipzig 2014. Contents.



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# 1. **BMW at the 22nd Auto Mobil International Leipzig 2014. (Summary)**

BMW is presenting innovative ways of experiencing the driving pleasure for which BMW is renowned with German and European premieres of new models at the Auto Mobil International 2014 in Leipzig. The BMW 2 Series Active Tourer, for example, sees the premium car maker once again venturing into a new vehicle segment. The BMW X4 brings the unique Sports Activity Coupe concept developed by BMW into the mid-size class for the first time. And the BMW M4 Convertible turns passion for extreme performance into an incomparably intense experience. The three model premieres therefore combine everyday mobility with inspirational emotionality, active lifestyle, joy in technology, premium quality and performance – all in their own quite different but equally appealing ways.

The constantly expanding variety in the BMW model range reflects a future focus guided by a talent for innovation and an awareness of new customer requirements and social challenges. The latest vehicle concepts are also distinguished by product attributes and quality hallmarks beloved of premium cars from the BMW brand. For example, the BMW 2 Series Active Tourer brings together a new drive concept and impressive versatility with dynamic driving properties. The generous space for passengers and luggage offered by the BMW 2 Series Active Tourer creates the ideal platform for active leisure pursuits. The BMW X4, meanwhile, embraces a feeling of independence through its unmistakable design and a versatility that allows it to venture off the beaten track. And the BMW M4 Convertible is another car that likes to operate beyond everyday boundaries. The open-top four-seater delivers unbeatable driving pleasure both over a quick lap on the race track and when gliding smoothly down a country road, the wind accelerating through your hair at ever greater speeds.

The presentation of the first two models from the new BMW i brand continues the trailblazing spirit of this year's Auto Mobil International (AMI). Visitors to the Leipzig exhibition centre from 31 May to 8 June will be able to admire not only the pure-electric BMW i3, but also the forthcoming BMW i8 plug-in hybrid sports car. These two models have a very close connection to the AMI venue: both are built at BMW Plant Leipzig as part of a cutting-edge manufacturing process defined by the highest possible quality standards and an unsurpassed level of sustainability.

**German premiere: the BMW 2 Series Active Tourer, made in Leipzig.**

The new BMW 2 Series Active Tourer, which is poised for its German premiere in Leipzig, sees BMW breaking new ground when it comes to blending functionality of space and comfort with the brand's hallmark dynamic ability, style and elegance within a premium compact car. The BMW 2 Series Active Tourer sports compact dimensions – 4,342 millimetres long, 1,800 millimetres wide and 1,555 millimetres high – but still offers a raised seating position, variable rear seat bench and generously-sized luggage compartment (468–1,510 litres).

BMW has given the BMW 2 Series Active Tourer sophisticated front-wheel drive in order to satisfy its requirements in terms of space, versatility and functionality within a compact footprint. The advanced nature of this system allows the BMW 2 Series Active Tourer to meet the high dynamic standards which apply to every BMW. Three state-of-the-art power units with three or four cylinders and a power spectrum ranging from 100 kW/136 hp to 170 kW/231 hp ensure the BMW 2 Series Active Tourer (fuel consumption combined: 5.8–4.1 l/100 km [48.7– 68.9 mpg imp]; CO<sub>2</sub> emissions combined: 135–109 g/km) provides the driving pleasure customers expect from the brand. The engines are teamed with extensive BMW EfficientDynamics technology to maximise efficiency and minimise CO<sub>2</sub> emissions.

The BMW 2 Series Active Tourer will be produced at BMW Plant Leipzig from summer 2014. With the aim of fulfilling the broadest possible spread of customer requirements, the new model will also be offered in a range of new trim variants alongside the base version. The options are Advantage, Sport Line, Luxury Line and M Sport. The new BMW 2 Series Active Tourer will be available in Germany from 27 September 2014 priced from €27,200.

**European premiere: the BMW X4, the first Sports Activity Coupe in the mid-size segment.**

The European premiere of the BMW X4 at the AMI 2014 also heralds the arrival of a new type of car in the premium mid-size segment. The BMW X4 blends the BMW X model blueprint with the sporting elegance of a classic coupe and space for five people. Large air intakes in the front apron, a coupe-esque downward-sloping roofline, the muscular contours of the rear wings and the diffuser-look rear section underline its dynamic character.

In keeping with the spirited character of the new BMW X4 (fuel consumption combined: 8.3–5.2 l/100 km [34–54.3 mpg imp]; CO<sub>2</sub> emissions combined: 193–138 g/km), customers can choose from three petrol and three diesel versions of the BMW EfficientDynamics engine family, covering a power range from 135 kW/184 hp to 230 kW/313 hp. All engines meet the EU6 exhaust

emissions standard. The car's sporting credentials are reinforced by the intelligent all-wheel-drive system BMW xDrive and the exclusive range of equipment fitted as standard. This includes features such as variable sport steering, Performance Control and a sports leather steering wheel with gearshift paddles.

**European premiere: the BMW M4 Convertible, lifting the lid on elite performance.**

Also celebrating its European premiere in Leipzig is the new BMW M4 Convertible, with which BMW M GmbH will extend the open-top high-performance sports car's impressive history into a fifth generation. The four-seater follows in the tyre tracks of the BMW M4 Coupe and BMW M3 Sedan as the third representative of this beguiling model series and fuses its passion for supreme performance with a stylish, distinctive appearance and the thrill of sporty, dynamic open-top motoring.

The BMW M4 Convertible (fuel consumption combined: 9.1 l/100 km [31 mpg imp]; CO<sub>2</sub> emissions combined: 213 g/km) is powered by a newly developed 3.0-litre six-cylinder in-line engine with M TwinPower Turbo technology. The high-revving unit develops maximum output of 317 kW/431 hp, and its peak torque of 550 Nm (406 lb-ft) is on tap between 1,850 and 5,500 rpm. Armed with the optional seven-speed M Double Clutch Transmission, the BMW M4 Convertible accelerates from 0-100 km/h (62 mph) in 4.4 seconds.

Like the BMW M3 Sedan and BMW M4 Coupe, the BMW M4 Convertible also displays a strict adherence to the intelligent lightweight construction principle. For example, the bonnet and front side panels are manufactured from aluminium and the drive shaft and precision strut in the engine compartment are made from carbon-fibre-reinforced plastic (CFRP). The three-section folding metal roof of the BMW M4 Convertible has full interior lining and represents a compelling proposition with its excellent soundproofing and winter-proof construction. The roof can be opened and closed in 20 seconds – at speeds of up to 18 km/h (11 mph), if required.

**Car production at BMW Plant Leipzig: flexible, efficient, quality-focused and sustainable.**

AMI 2014 is the most important motor show of the year in Germany, and companies from around the world come together at the Leipzig exhibition centre to present products and new technology in the areas of cars, parts, accessories, maintenance, service and repairs. In 2012 the event attracted almost 300,000 visitors from more than 35 countries. BMW's presence at the Leipzig show holds additional significance for the company thanks to its close

association with the city; premium cars from the brand have been built at BMW Plant Leipzig for nine years now. BMW Plant Leipzig stands out within the BMW Group's global production network with its impressive efficiency, flexibility and quality, and – as the exclusive location for production of cars from the BMW i brand – it has also developed into a pioneer in the field of sustainable vehicle concepts and manufacturing techniques.

The BMW X1, BMW 1 Series 5-door, BMW 2 Series Coupe, BMW i3 and BMW i8 currently roll off the assembly line in Leipzig. And from summer 2014 they will be joined by the BMW 2 Series Active Tourer. Hundreds of millions of euros have recently been invested in both the production start-up for the BMW i models and the expansion of production capacity for BMW cars. At the same time, the permanent workforce at BMW Plant Leipzig has grown from around 2,600 to nearly 4,000 employees.

Further information on official fuel consumption figures, specific CO<sub>2</sub> emission values and the electric power consumption of new passenger cars is included in the following guideline: "Leitfaden über Kraftstoffverbrauch, die CO<sub>2</sub> emissions und den Stromverbrauch neuer Personenkraftwagen" (Guideline for fuel consumption, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained from all dealerships, from the Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <http://www.dat.de/en/offers/publications/guideline-for-fuel-consumption.html>. LeitfadenCO<sub>2</sub> (GuidelineCO<sub>2</sub>) (PDF – 2.7 MB)



## **2. BMW at the 22nd Auto Mobil International Leipzig 2014. (Long version)**

### **2.1 Flexibility and versatility teamed with hallmark BMW dynamics: The BMW 2 Series Active Tourer.**

With the BMW 2 Series Active Tourer, BMW presents a vehicle in the premium compact segment which combines spatial functionality and comfort with the trademark BMW attributes of driving dynamics, style and elegance. Measuring just 4,342 millimetres long, 1,800 millimetres wide and 1,555 millimetres in height, this car combines compact dimensions on the outside with a distinctly spacious interior, making it perfectly suited to cope with the growing demands of mobility.

New turbocharged engines with three and four cylinders, a comprehensive package of BMW EfficientDynamics measures and the extensive connectivity provided by BMW ConnectedDrive guarantee a driving experience that centres on sporty performance and exemplary efficiency.

#### **Dynamism and functionality of space combined in classic BMW fashion.**

In order to fulfil the exacting demands for space, versatility and functionality in the premium compact class, BMW has opted for a sophisticated front-wheel-drive system for the BMW 2 Series Active Tourer which is able to deliver the degree of driver engagement expected of the brand's models. Together with the long wheelbase of 2,670 millimetres and raised roofline, this configuration enables the room inside to be maximised, resulting in an unprecedented feeling of spaciousness. The driver and front passenger enjoy a far higher seating position than in a sedan, which affords a commanding all-round view at the same time as making it easier to get in and out. The wealth of storage facilities and the option of a fold-flat passenger seat backrest are just two examples of the interior's impressive flexibility and cleverly devised layout. The cabin has a light and spacious feel to it, with all surfaces horizontally structured in a layered look. There is also the option of a large panoramic roof that allows light to flood into the interior.

The brand identity with its overriding sense of dynamism is clearly present in the BMW 2 Series Active Tourer too. It shines through in trademark features such as the slightly forward-slanting BMW kidney grille at the front end flanked by the distinctive twin circular headlights. The short front overhang in particular is highly unusual for a front-wheel-drive car, and is just as much a classic BMW styling cue as the short overhang at the rear, the long wheelbase, the Hofmeister kink in the rear side windows and the L-shaped

rear lights. Crisp contours and an eye-catching swage line at the sides give added impact to the wheel arches and inject the BMW 2 Series Active Tourer with forward thrust even when stationary. Moving inside, the controls for the radio, air conditioning and air vents are angled towards the driver in another unmistakable BMW design trait.

### **Maximum versatility and functionality.**

The versatile luggage compartment, whose capacity can be enlarged from 468 to 1,510 litres, and the 40:20:40 split-folding rear backrest fitted as standard exemplify this model's excellent everyday practicality. Flexibility is further enhanced by a sliding rear seat, allowing either rear seat legroom or luggage compartment capacity to be increased as required. One particularly smart touch is the foldable boot floor that conceals a storage compartment with a handy multifunction tray. The optionally adjustable rear backrest offers a choice of added comfort for the three rear seats or extra storage space. Access to the luggage compartment couldn't be easier thanks to the large, broad, wide-opening tailgate, which can furthermore be optionally specified with pushbutton automatic opening and closing or the Smart Opener function for supreme ease of operation through touchless gesture control.

### **Latest-generation engines running on three or four cylinders.**

The new BMW 2 Series Active Tourer is being launched with a choice of three powerful, light and fuel-efficient three and four-cylinder drive units that form part of a new generation of engines. They are installed transversely and boast a compact design along with BMW TwinPower Turbo technology, at the same time as complying with the EU6 emissions standard.

The new three-cylinder petrol unit stands for exceptional efficiency and great performance abilities. In the BMW 218i Active Tourer (fuel consumption combined: 4.9 l/100 km [57.6 mpg imp]; CO<sub>2</sub> emissions combined: 115 g/km) with a six-speed manual gearbox, this cutting-edge powerhouse marks its premiere in a model from the BMW core brand.

The engine has a displacement of 1.5 litres, generates 100 kW/136 hp and excels with its spontaneous response to the slightest throttle input, hearty appetite for revs and high pulling power. The design of three-cylinder engines means they are not subject to first and second-order inertia forces, while the balancer shaft included on the BMW unit ensures that it operates even more smoothly over the entire rev range.

Topping the bill at market launch is the BMW 225i Active Tourer (fuel consumption combined: 5.8 l/100 km [48.7 mpg imp]; CO<sub>2</sub> emissions combined: 135 g/km) with eight-speed Steptronic transmission as standard.

With an output of 170 kW/231 hp, a time of 6.6 seconds for the 0 to 100 km/h (62 mph) dash and a top speed of 240 km/h (149 mph), the model's four-cylinder engine raises the bar for dynamic performance in its class.

Hard at work under the bonnet of the BMW 218d Active Tourer (fuel consumption combined: 4.1 l/100 km [68.9 mpg imp]; CO<sub>2</sub> emissions combined: 109 g/km) is a four-cylinder diesel engine delivering 110 kW/150 hp. A member of the same new engine family as its two petrol counterparts, it provides a peak torque of 330 Nm (243 lb-ft). This unit serves to reaffirm the exceptionally dynamic performance qualities of diesel engines from BMW, working in conjunction with the standard six-speed manual gearbox to propel the BMW 218d Active Tourer from standstill to 100 km/h (62 mph) in 8.9 seconds and on to a top speed of 208 km/h (129 mph). From November 2014 an optional eight-speed Steptronic transmission will also be available for this model variant.

### **The BMW among front-wheel-drive cars.**

Like all BMW models, the new BMW 2 Series Active Tourer makes its mark with great driving dynamics and the sort of driving experience the brand is renowned for. The newly developed chassis, comprising a single-joint spring strut axle at the front and a multi-link rear axle, combines agility and directional precision with excellent handling stability and suspension comfort. The front drive axle in the new BMW 2 Series Active Tourer has undergone extensive fine-tuning, ensuring that it endows the car with optimum driving dynamics and wonderfully precise steering feedback. The electromechanical steering and the system's functional arrangement combine to produce a driving sensation that is devoid of interfering torque steer.

The intelligent use of high-tensile and ultra-high-tensile multi-phase steels makes a decisive contribution to safety standards in the BMW 2 Series Active Tourer, while also helping to keep the vehicle's weight down. Apart from being a crucial factor in the model's exceptional driving dynamics, this lightweight engineering is just one among many BMW EfficientDynamics technology elements. These also include the Auto Start Stop function, Brake Energy Regeneration, Optimum Gearshift Indicator, on-demand operation of ancillary units and the integral Air Curtain, which uses two vertical air inlets in the front bumper to direct the airstream along the front wheels.

### **Five model variants for individual customer requirements.**

In addition to the basic version, BMW offers the BMW 2 Series Active Tourer in four further variants that even more effectively meet customer requirements both inside and out as well as with individual equipment and fittings. Standard equipment for the BMW 2 Series Active Tourer already includes the Radio



Professional and a hands-free telephone facility with Bluetooth interface, the BMW iDrive operating system with a controller on the centre console and a 6.5-inch control display, a rain sensor with automatic headlight control, a sports leather steering wheel, Intelligent Emergency Call as well as Collision Warning with City Braking function. The Advantage, Sport Line and Luxury Line variants further feature two-zone air conditioning, Park Distance Control at the rear, fog lamps, cruise control with braking function, and a multifunction steering wheel as standard. The Sport Line further highlights the dynamic character of the BMW 2 Series Active Tourer with such features as light-alloy wheels and sports seats. The high-gloss black kidney grille bars at the front, model-specific air intakes and accent strip on the rear apron underline the vehicle's presence on the road. The exhaust tailpipes come in galvanised black chrome to match. In the Luxury Line model, the focus is on elegance and exclusivity, as already highlighted on the outside by discreet chrome applications and inside by exquisite leather upholstery including heated seats for the driver and front passenger. From the end of 2014 the BMW 2 Series Active Tourer will also be available as an M Sport model. With an M Aerodynamics package, High-gloss Shadow Line, M Sport suspension, 17 or 18-inch large M light-alloy wheels and an M leather steering wheel and sports seats with specific upholstery, the BMW 2 Series Active Tourer M Sport exudes maximum road presence. At the same time the range will be extended to include variants equipped with the xDrive intelligent all-wheel-drive system. The BMW 2 Series Active Tourer goes on sale in Germany on 27 September 2014 with prices starting at 27,200 euros.

### **High degree of connectivity for enhanced safety and comfort.**

Standards of safety and comfort aboard the BMW 2 Series Active Tourer are boosted by the assistance systems and various infotainment features that are collectively known as BMW ConnectedDrive. The Traffic Jam Assistant, for example, works using a mono camera. It makes motorway driving less stressful under monotonous conditions: in dense traffic at speeds of up to 60 km/h (37 mph) it lets the vehicle "go with the flow", enabling the driver to get through the congestion in a more relaxed state. It automatically maintains the desired distance from the vehicle ahead and autonomously controls the car's speed all the way to a standstill while providing active steering input. In this way the vehicle helps drivers to stay in lane as long as they keep at least one hand on the steering wheel.

BMW ConnectedDrive Services & Apps bring smartphone applications into the vehicle and allow innovative features like the Concierge Service or Real Time Traffic Information to be added. This can also be done at a later stage and, in many cases, for flexible periods of time. The functionality of the

BMW 2 Series Active Tourer can thus be vastly enhanced and updated at any point.

The BMW 2 Series Active Tourer is the first model in the premium compact class to be made available with a Head-Up Display, which projects all relevant driving information into the driver's field of vision in full colour. Instead of being displayed on the windscreen itself, the information is shown on a screen that extends out between the steering wheel and windscreen. This enables drivers to view all key information without having to divert their attention from the road.

## 2.2 Powerful presence: The BMW X4.



The new BMW X4 (fuel consumption combined: 8.3–5.2 l/100 km [34.0–54.3 mpg imp]; CO<sub>2</sub> emissions combined: 193–138 g/km) melds the hallmark features of the successful BMW X family with the sporting elegance of a classical coupe. With the BMW X4, BMW now brings this unique concept of the Sports Activity Coupe to the premium mid-size segment. This dynamic pedigree is underlined by a wide range of cutting-edge high-performance engines, the xDrive all-wheel-drive system and an exclusive spread of standard equipment features such as variable sport steering, Performance Control and a sports leather steering wheel with gearshift paddles.

### **Extrovert and dynamic appearance.**

The new BMW X4 is based on the technical blueprint of the BMW X3, but displays a sporting character very much its own and takes dynamics to another new level. That much is clear when you view the new model head-on. The large air intakes positioned on the outer edges of the front end and the character lines in the front apron allow the BMW X4 – with its signature twin headlights and fog lamps – both optionally available with LED technology – to maximise its visual presence on the road. The roofline reaches its highest point above the driver and then swoops down smoothly to the trailing edge of the tailgate, mimicking the design language of a classical sporting coupe. The signature swage line running along the flanks of BMW models is split into two on the BMW X4. The first section rises dynamically from the front wheel arches to the rear door handles, while the second part draws the eye to the muscular sculpting of the rear wings. The rear end, complete with L-shaped LED lights in exclusive BMW X4 design and diffuser-look styling, likewise highlights the outstanding dynamic ability of the new BMW X4 – even before it turns a wheel.

The driver and front passenger sit 20 millimetres lower than in the BMW X3. In conjunction with the two-seat look of the rear, this accentuates the coupe character of the new BMW in the classy and exclusive interior as well. At the same time, the BMW X4 offers generous levels of space for up to five people and – thanks to the standard 40:20:40 split rear seat backrest – impressive variability.

### **Unparalleled engine power combined with supreme refinement.**

In keeping with the vivacious character of the new BMW X4, customers can choose from three petrol engines and a trio of diesel units from the BMW EfficientDynamics engine family, whose output ranges from 135 kW/184 hp to 230 kW/313 hp. All the engines meet the EU6 exhaust gas standard. The BMW TwinPower Turbo technology of the state-of-the-art engines offers a promise of superb performance married with exceptionally low fuel consumption. For example, the flagship petrol unit in the BMW X4 xDrive35i (fuel consumption combined: 8.3 l/100 km [34 mpg imp]; CO<sub>2</sub> emissions combined: 193 g/km) develops an outstanding 225 kW/306 hp and peak torque of 400 Nm (295 lb-ft). The BMW X4 xDrive35i requires just 5.5 seconds to sprint from 0 to 100 km/h (62 mph).

An equally impressive performer in terms of power delivery and CO<sub>2</sub> efficiency is the BMW X4 xDrive35d (fuel consumption combined: 6.0 l/100 km [47.1 mpg imp]; CO<sub>2</sub> emissions combined: 157 g/km). Its 3.0-litre six-cylinder in-line diesel engine generates 230 kW/313 hp and peak torque of 630 Nm (465 lb-ft). The BMW X4 xDrive35d accelerates from 0 to 100 km/h (62 mph) in 5.2 seconds. Also powered by a 3.0-litre straight-six diesel unit is the BMW X4 xDrive30d (fuel consumption combined: 6.1–5.9 l/100 km [46.3–47.9 mpg imp]; CO<sub>2</sub> emissions combined: 159–156 g/km). It delivers 190 kW/258 hp and peak torque of 560 Nm (413 lb-ft).

The new-generation 2.0-litre diesel engine in the BMW X4 xDrive20d (fuel consumption combined: 5.6–5.2 l/100 km [50.4–54.3 mpg imp]; CO<sub>2</sub> emissions combined: 146–138 g/km) with eight-speed Steptronic transmission also sets the benchmark when it comes to fuel economy and CO<sub>2</sub> emissions. Its newly developed four-cylinder unit produces 140 kW/190 hp and peak torque of 400 Nm (295 lb-ft). Both the BMW X4 xDrive28i (fuel consumption combined: 7.4–7.3 l/100 km [38.2–38.7 mpg imp]; CO<sub>2</sub> emissions combined: 172–169 g/km) and BMW X4 xDrive20i (fuel consumption combined: 7.3–7.2 l/100 km [38.7–39.2 mpg imp]; CO<sub>2</sub> emissions combined: 171–168 g/km) are fitted with lightweight and powerful four-cylinder units – producing 180 kW/245 hp and 135 kW/184 hp respectively.

### **BMW EfficientDynamics: driving pleasure meets fuel economy.**

The unparalleled BMW EfficientDynamics technology package also minimises the fuel consumption and emissions of the new BMW X4. Included are features such as the Auto Start Stop function and coasting function (if an eight-speed automatic gearbox is fitted), Brake Energy Regeneration and on-demand operation of ancillary units, ensuring an admirable degree of environmental compatibility to go with maximum driving pleasure. Also

available as an option to add further efficiency to the mix are fourth-generation reduced-rolling-resistance tyres, which reduce the CO<sub>2</sub> emissions of selected variants of the BMW X4 by another 7 g/km.

**BMW ConnectedDrive: Services & Apps and assistance systems.**

The BMW ConnectedDrive features available for the new BMW X4 allow BMW to restate once again its leadership in the link-up of driver, vehicle and outside world. Among the highlights in the new BMW X4 are the full-colour BMW Head-Up Display, the anti-dazzle High Beam Assistant, and Driving Assistant Plus including Lane Departure Warning, Active Cruise Control with Stop & Go function, preventive pedestrian protection and a Collision Warning system, which applies the brakes with anything up to maximum stopping power as required.

Added to which, the optional ConnectedDrive Services also allow drivers to sign up to innovative services such as Real Time Traffic Information (RTTI), the Concierge Service and Remote Services. Facebook, Twitter, AUPEO! personalised internet radio and music platforms like Deezer and Napster have also been optimised for in-car usage and can be accessed easily on board the BMW X4.

## **2.3 A new dimension in aesthetic appeal and sporting ability: The BMW M4 Convertible.**



The arrival of the new BMW M4 Convertible (fuel consumption combined: 9.1 l/100 km [32.5 mpg imp]; CO<sub>2</sub> emissions combined: 213 g/km) sees BMW M GmbH making another alluring addition to its legendary high-performance sports car line-up. The new BMW M4 Convertible replicates the performance figures of the new BMW M3 Sedan and the new BMW M4 Coupe, but emphasises its stylish and distinctive appearance through its individual character and places the fascination of sporty and dynamic open-top driving at centre stage. Here BMW M GmbH draws inspiration from a long tradition: the new BMW M4 Convertible high-performance sports car for both track and road writes a new chapter in the history of the open-top variant – now in its fifth generation.

The BMW M4 Convertible shares the elegant lines of its open-top 4 Series siblings. Its design language allows it to skilfully blend a distinctive and graceful silhouette boasting finely balanced proportions when the roof is open with an exceptionally dynamic coupe line, shorn of B-pillars, with the hardtop closed. At the same time, the BMW M4 Convertible's styling cues – including a signature power dome for the bonnet, eye-catching exterior mirrors in twin-stalk style and flared front and rear wheel arches bulging over forged light-alloy wheels with mixed tyres (available in 18 or 19-inch design) – all identify it clearly as a member of the BMW M3/BMW M4 model family.

Powering the BMW M4 Convertible is the newly developed six-cylinder in-line engine with M TwinPower Turbo technology and high-revving character already familiar from the BMW M3 Sedan and the BMW M4 Coupe. The power unit generates maximum output of 317 kW/431 hp from its 3.0-litre displacement and serves up peak torque of 550 Newton metres (406 lb-ft) across a wide rev band. The BMW M4 Convertible therefore offers the driver not only exceptionally sporty performance attributes – the sprint from 0 to 100 km/h (62 mph) takes just 4.4 seconds (with the optional seven-speed M Double Clutch Transmission) – but also sufficient reserves of power to cruise along in relaxed but rapid style with the roof down.

Like the BMW M3 Sedan and BMW M4 Coupe, the BMW M4 Convertible also displays a strict adherence to the intelligent lightweight construction principle. For example, the bonnet and front side panels are made from aluminium, as are many components of the high-performance chassis. Added

to which, ultra-lightweight and – thanks to its hugely impressive rigidity – also extremely durable carbon-fibre-reinforced plastic (CFRP) is employed in many areas of the new M4 Convertible. The drive shaft is one example, the use of CFRP allowing it to be constructed as a single-piece unit. This makes for a significant weight saving and a reduction in rotating masses. The CFRP high-precision front strut brace in the engine compartment, meanwhile, weighs only 1.5 kilograms yet offers rigidity superior to that of a comparable aluminium component. It therefore plays a key part in the car's excellent steering response and precision.

The three-section folding metal roof of the BMW M4 Convertible has full interior lining and represents a compelling proposition with its excellent soundproofing and winter-proof construction. The roof opens at the touch of a button in under 20 seconds – while travelling at up to 18 km/h (11 mph), if required.

Complementing its already extensive standard specification, the new BMW M4 Convertible can also be ordered with a wealth of attractive options to further enhance its aesthetic appeal, dynamic prowess and comfort levels. And for that distinctive personal touch, the exclusive BMW Individual range of equipment offers the prospect of a unique driving experience. Special colours and materials can be fine-tuned to the driver's wishes.

## 2.4 BMW i on the grid with two models: Electric mobility courtesy of the BMW i3 and the BMW i8.



BMW i stands for tailor-made vehicle concepts, sustainability along the entire value chain, complementary mobility services and a new understanding of premium. The brand takes into consideration worldwide ecological, economic and social change. In addition to the BMW i3 (fuel consumption combined: 0.0 l/100 km; CO<sub>2</sub> emissions combined: 0 g/km), which celebrated its premiere in 2013, BMW i will be offering a further, uniquely fascinating model as of 2014 – the plug-in hybrid sports car BMW i8 (fuel consumption combined: 2.1–0.0 l/100 km [134+ mpg]; CO<sub>2</sub> emissions combined: 49–0 g/km).

Conceptual and technological development at BMW i is underpinned by extensive research and development work. At the same time, there have been large-scale field studies to examine the behaviour of purely electrically powered vehicles in everyday traffic conditions. In the process, a great deal of valuable experience has been gained and is reflected in the innovative vehicle concepts and mobility solutions offered by BMW i. Characteristic BMW driving pleasure in conjunction with emission-free mobility, cutting-edge design, intelligent lightweight construction as well as resource-conserving and energy-saving production methods complement each other to create the unique premium characteristics of BMW i automobiles such as the new all-electric BMW i3 and the upcoming BMW i8 plug-in hybrid sports car.

### **Sustainability that also embraces the production process.**

What makes the BMW i approach so unique is the revolutionary, holistically sustainable concept which ranges from initial development and design, production and utilisation right up to recycling and offers, in all respects, sustainability at the same level as conventional BMW standards in terms of quality and driving pleasure. BMW i thinks beyond the actual vehicle itself and makes allowances for the entire value chain. For example, BMW i vehicles are produced at the BMW Leipzig plant using electricity that is gained directly from wind turbines located on the factory premises and – thanks to a new production method – built using a fraction of the energy that is required for conventional vehicle construction. For the very first time at this factory, premium automobiles are being produced that are designed from the outset to be powered solely by electricity or by a plug-in hybrid drive system respectively. These are vehicles that, unlike so-called conversion models, are not based on conventional automobile structures and merely equipped with



additional electric components, but vehicles that are designed right from the start to attain sustainable electric mobility.

### **BMW LifeDrive concept lowers vehicle weight.**

Sustainable electric mobility calls for completely new solutions – which also applies to the vehicle architecture. At BMW i, this solution is termed “LifeDrive”, a vehicle architecture especially designed for the electric vehicle. This innovation not only more than compensates for the weight of the battery, but also lowers the centre of gravity, guaranteeing a high degree of occupant safety. The LifeDrive architecture of the BMW i3 and the BMW i8 comprises two modules – the Life Module as a passenger compartment and the Drive Module, a suspension set-up featuring integrated drive technology.

The Life Module consists of high-strength, extremely light carbon, a material that is 50 per cent lighter than steel but significantly more rigid. The BMW Group is the world's first company to industrialise the CFRP production process for economical usage in automobile production. Thanks to the use of this material, it was possible to dispense with the B pillar in the entrance area of both the BMW i3 and the BMW i8, thereby conveying a distinct feeling of spaciousness and permitting convenient access to the interior. The Drive Module is made of lightweight aluminium and accommodates all suspension, heating/air conditioning and drive components as well as the battery. All in all, this means more room for the passengers and, thanks to the low centre of gravity, typical BMW agility and road-holding characteristics.

### **BMW eDrive guarantees zero-emission driving pleasure.**

The BMW eDrive concept, i.e. an electric motor and a liquid-cooled lithium-ion high-voltage battery, was developed by BMW. The electric motor accelerates from standstill with maximum torque and enables zero-emission driving by using 100 percent renewable energy sources. Over its lifetime the BMW i3 thus leaves behind a CO<sub>2</sub> footprint only about half that of the reference vehicle, the World Green Car of the Year 2008, the BMW 118d (fuel consumption combined: 4.5 l/100 km [62.8 mpg imp]; CO<sub>2</sub> emissions: 119 g/km). At the same time, typical BMW driving pleasure remains the trademark of the BMW i3 and, of course, the BMW i8 as well.

### **BMW i3 – compact and sporty.**

The BMW i3 is the first all-electric series vehicle produced by BMW i and was designed right from the start to be powered solely by electricity. The BMW i3 creates entirely new and pathbreaking possibilities to experience driving pleasure, sustainability and networking in urban traffic conditions. The visionary design of the BMW i3 authentically expresses both the typical BMW sportiness and the efficiency of the 4-seater car alike. Its innovative vehicle

concept combines lightness, stability and safety with a remarkably high level of spatial comfort. In perfect interplay with the driver assistance systems and BMW ConnectedDrive mobility services developed exclusively for BMW i, as well as the services provided by 360° ELECTRIC, emission-free mobility within the urban environment becomes both a fascinating and practical everyday experience that also convinces in terms of fuel economy. For example, ongoing maintenance costs for a BMW i3 in Germany are around 30 per cent lower than those of a BMW 320d (fuel consumption combined: 4.7 l/100 km [60.1 mpg imp]; CO<sub>2</sub> emissions: 119 g/km).

### **Dynamic appearance and spacious interior.**

The BMW i3 boasts a new interpretation of typical BMW design characteristics. At the front, the flat double kidney grille sporting a colour accent and the U-shaped headlights attract immediate attention. Like the roof and the tailgate, the bonnet, under which a 35-litre storage space is provided, is always finished in black, regardless of the exterior body colour, giving the car a flatter and more dynamic appearance. Viewed from the side, the BMW i3 looks particularly dynamic, thanks to 19-inch forged alloy wheels, short overhangs and a flowing silhouette. The front and rear doors open in opposite directions, permitting convenient access thanks to the large door openings and the B pillar being integrated into the door. The U-shaped headlights with LED daytime driving lights at the front and the likewise U-shaped taillights are also striking features of the BMW i3.

In spite of its extremely compact exterior length of just under four metres, the BMW i3 offers its occupants a surprisingly generous amount of space. The spacious and airy interior convinces with a lounge-like, relaxing atmosphere. The distinctive styling of the instrument panel and door elements convey a sense of lightness and the interior elements made of renewable raw materials enable occupants to experience the sustainability of this new vehicle concept at any time.

The electric motor of the BMW i3 delivers a maximum power output of 125 kW/170 hp and a maximum torque of 250 Nm (184 lb-ft), transferring spontaneously developed power to the rear wheels via a single-stage gearbox. The BMW i3 sprints from 0 to 100 km/h (62 mph) in just 7.2 seconds, whilst a speed of 60 km/h (approx. 37 mph) is reached from a standstill in a mere 3.7 seconds. The low centre of gravity and well-balanced axle load distribution ensure a high level of directional stability and agility. The energy storage module facilitates a range of 130 to 160 kilometres (approx. 80 to 100 miles) in everyday operation. Depending on the drive mode, vehicle range can be extended by between 20 and 40 kilometres (approx. 12 and 24 miles).

### **BMW i8 – trailblazer in the sports car segment.**

The BMW i8 was intentionally conceived right from the start as a high-performing and exceptionally efficient plug-in hybrid sports car. The model-specific plug-in hybrid system of the BMW i8, which was exclusively developed and produced by the BMW Group, marks a new evolutionary milestone in the development of the company's Efficient Dynamics technology. The basic principle of Efficient Dynamics – enhanced driving pleasure, lower fuel consumption – is particularly resolutely implemented in the BMW i8. With the performance characteristics of a thoroughbred sports car and the fuel economy of a small car, the BMW i8 plug-in hybrid sets benchmarks that can only be achieved by incorporating the revolutionary LifeDrive vehicle concept. As a result, the BMW i8 is the trailblazer of a new generation of sports cars that are defined not only by performance, but also by intelligent solutions to the challenges of individual mobility of the future.

The BMW i8 boasts an entirely new sports car design featuring many aerodynamically refined details. At the same time, the 2+2-seater car is immediately recognisable as a model of the BMW i brand and a sports car of a new generation. At the front, the bonnet is encompassed by slightly higher wheel arches and, together with the almost closed kidney grille, shapes an extremely flat and muscular frontal view. The precise swage line emphasises the wedge shape of the body and, together with the sloping roofline and the C pillar, creates an aerodynamic and sporty exterior design. In order to further optimise fuel economy, the BMW i8 ensures aerodynamically favourable airflow within all areas of the body, including Stream Flow air routing from the side to the rear, a smooth underside and the diffuser located beneath the rear end. Optional laser headlights developed exclusively by BMW with three-fold light intensity, doubled high beam range and extremely low energy consumption are unique worldwide.

In a world-first, laser headlights developed by BMW are now available as an option for a series-produced model. They boast three times the light intensity and double the range of conventional headlights, as well as extremely low energy consumption. Tiny laser diodes generate a very bright, white light that is pleasant on the eye. Compared to LED headlights, which are already highly efficient, they cut energy usage by at least a further 30 per cent.

The interior of the BMW i8 conveys sportiness, dynamics and lightness. Distinct driver orientation and a modern cockpit design characterise the sports car of the future. All data required for driving such as speed, range and state of charge are shown on the instrument display in three-dimensional form. Familiar from other BMW models, the central control display on the instrument panel provides a representation of all further vehicle functions, including the extensive

BMW ConnectedDrive services, which have been especially adapted to suit the demands of the plug-in hybrid technology featured in the BMW i8.

The technical highlight of the BMW i8 is undoubtedly BMW eDrive, drive technology developed by BMW for use in all electric and plug-in hybrid models. This is supplemented by the completely new 1.5-litre, three-cylinder petrol engine. Power from the two motors (electric at the front and petrol at the rear) is transferred to the road without any noticeable interruption of traction and, in SPORT mode, using four-wheel drive technology. Thanks to an overall system power output of 266 kW/362 hp, the BMW i8 offers the performance of a sports-car: 0–100 km/h (62 mph) in 4.4 seconds, with top speed being electronically limited to 250 km/h (approx. 155 mph). Average fuel consumption of the BMW i8 as per ECE test cycle for plug-in hybrid vehicles is 2.1 litres/100 kilometres (134.5 mpg imp), coupled with a CO<sub>2</sub> emission level of 49 grams per kilometre. Maximum possible vehicle range in solely electric operation is approximately 35 kilometres (22 miles), whereby the battery of the plug-in hybrid can also be constantly recharged by the three-cylinder petrol engine during the journey. This means that during overland journeys for example, the BMW i8 can be driven through towns and cities at any time entirely by electric power, whilst outside built-up areas, the battery is recharged by the combustion engine so that sufficient capacity is available to drive through the next town using only the power from the electric motor.

### **360° ELECTRIC and BMW ConnectedDrive make electric mobility simple.**

In addition to the actual vehicle, the 360° ELECTRIC programme from BMW i offers customers an extensive range of products and premium services guaranteed to satisfy all needs and provide answers to all questions. These include recharging at home using the BMW i Wallbox, recharging at public charging stations, mobility assurance and the integration of innovative mobility services offered by BMW ConnectedDrive. The programme supports the comfortable, reliable and flexible use of the electric vehicle and provides answers to all questions pertaining to electric mobility. As a result, the 360° ELECTRIC programme makes a significant contribution towards making a BMW i customer's everyday life considerably easier.

Every BMW i is fitted as standard with a SIM card and a navigation system, the range of functions of which is supplemented by BMW ConnectedDrive services that have been specifically developed for BMW i. The Dynamic Range Assistant accompanies route planning and the current journey. If the destination chosen in the navigation system is outside the vehicle's range, the driver is assisted by the recommendation to change either to the ECO PRO mode or the ECO PRO+ mode and by the calculation of an economically

more favourable alternative route. Should it become necessary to recharge the battery at a public charging station, the respective stations available within the vicinity are then displayed to the driver.

BMW i vehicles achieve a new dimension in the networking of the driver and the car. The BMW i Remote app also provides useful mobility planning data on the customer's smartphone. Both inside and outside the vehicle, BMW i ConnectedDrive offers intermodal routing that is unique worldwide and incorporates public transport connections, parking spaces and footpaths into mobility planning. From travelling in the BMW i to the search for a parking space or taking the bus or the subway right up to the final stage of the journey covered on foot, BMW ConnectedDrive services for BMW i guide the customer accurately and efficiently to any desired destination.

## 2.5 The home of automotive evolution and revolution: BMW Plant Leipzig.



The BMW Group is gearing Plant Leipzig up for the future. Beyond the investment already made in the production of BMW i models, the plant is also preparing for the addition of new model series to its traditional production roster. Extra investment worth hundreds of millions of euros – notably in the press shop and body shop – has significantly increased flexibility and vertical integration through the use of highly innovative and efficient technologies. For example, from 2014 the BMW 2 Series Active Tourer will join the selection of models rolling off the assembly line in Leipzig.

The expansion of the plant brings with it growth in the regular workforce. At the end of 2010, the number of permanent employees at the plant stood at around 2,600. It has since increased to nearly 4,000. The expansion of the plant into a production centre for electric vehicles has generated 800 of the 1,400 new jobs.

### **Investment in traditional production halls for new products: the BMW 2 Series Active Tourer will be built in Leipzig from 2014.**

The investment and workforce growth for traditional production at Plant Leipzig are a key reason for production of the BMW 2 Series Active Tourer at the site from 2014. The start of production will see Leipzig become the first facility to build a BMW with front-wheel drive. The lion's share of the investment has been channelled into a new body shop for the BMW 2 Series Active Tourer and two additional high-speed servo presses. This allows as many pressings as possible for all models series to be manufactured directly at the plant. The press shop at BMW Plant Leipzig will be equipped with three large presses, two coil lines and one tryout press from 2014.

Plant Leipzig has been producing the BMW 2 Series Coupe since November 2013. This means that the BMW X1, BMW 1 Series 5-door, BMW 2 Series Coupe and, from summer 2014, the BMW 2 Series Active Tourer will all be built on a single assembly line – flexibly, according to customer specification.

### **Leipzig becomes a production centre for electric mobility.**

The extra resources channelled into building “traditional” vehicles have come in addition to the around €400 million of investment for production of BMW i models. Series production of the BMW i3 began on schedule in September 2013 using totally new and innovative materials and processes.

From May 2014 the BMW i8 will also be built here for customers around the world. A press shop for CFRP components, a production hall for painted plastic parts, a CFRP body shop and an assembly area have all been built at Leipzig for production of BMW i models.

**Setting new standards in sustainable production.**

Four wind turbines, each generating 2.5 MW, have been constructed on the plant site to supply energy for the production of electrically powered vehicles. These turbines provide the electric energy needed to build the BMW i models. A BMW i3 requires 50 per cent less energy and 70 per cent less water to produce than a traditional vehicle. The BMW Group is therefore setting new standards in clean production and strengthening its position as a leader in sustainability.