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The all-new BMW 330e iPerformance.

- Everyday usability, paired with efficiency and driving dynamics.
- Featuring technology transferred from BMW i.
- 14 miles in all electric mode.

Woodcliff Lake, N.J.: March, 2016... The all-new BMW 330e iPerformance adds another highly innovative variant to the BMW 3 Series line-up with its advanced plug-in hybrid drive system. For the first time, cutting-edge BMW i technologies have been integrated into the world's most successful premium model. The BMW 3 Series Sedan has already set standards for sports performance and fuel economy in its segment using conventional combustion engines. Key ingredients are its intelligent lightweight design, outstanding aerodynamics for its class and the extensive use of BMW EfficientDynamics technology fitted as standard. The all new BMW 330e iPerformance will be available in summer 2016 at dealers starting at \$44,695 including Destination and Handling.

The combustion engine fitted in the BMW 330e iPerformance is based on the four-cylinder gasoline unit with BMW TwinPower Turbo technology that has already won the International Engine of the Year Award on two occasions. Stand-out characteristics include its sporty power delivery, output of 180 hp and peak torque of 215 lb-ft.

The electric motor, developing 87 hp with maximum peak torque of 184 lb-ft, and the power electronics are derived directly from the BMW eDrive technology featured as standard in the BMW i3 and BMW i8 models. The motor is powered by a lithium-ion battery with a capacity

of 7.6 kWh (gross)/5.7 kWh (net). The model-specific concept of the high-voltage battery, including its battery management system and highly efficient direct cooling system derive from BMW i. The battery can be recharged at any domestic power socket and is mounted flat in a particularly crash-safe position underneath the load compartment. The power electronics form a single integrated system that drives the electric motor via a liquid-cooled inverter, manages the energy flow from the high-voltage battery to the on-board electrical systems and provides centralized control of hybrid-specific functions.

The BMW 330e iPerformance consequently offers a system output of 248 hp and peak torque of 310 lb-ft, allowing a sprint from 0 to 60 mph in 5.9 seconds and reach a top speed of 140 mph. Pure-electric driving is possible at speeds of up to 75 mph and with a range of around 14 miles. The electric boost function is permanently enabled. The electric motor supplements the power from the combustion engine with 74 lb-ft of torque and can deliver a brief extra boost– depending on the position of the accelerator – of up to 184 lb-ft.

The power generated by both the combustion engine and the electric motor is channelled to the BMW 330e iPerformance model's rear wheels via an eight-speed Steptronic Sport Automatic transmission with shift paddles. The transmission ratios take effect for both drive systems, lowering the mechanical and thermal loads placed on the electric motor by sustained high revs. This has a positive effect on the operating life of the electric drive system. It also means a torque converter is not required, which partially cancels out the extra weight of the additional drive unit. Just like conventionally powered BMW models, the advanced Steptronic transmission's low friction losses allow for additional contribution to the high efficiency of the car's drive system.

BMW iPerformance.

BMW 330e iPerformance drivers can choose from three BMW eDrive-specific programs – AUTO eDRIVE, MAX eDRIVE and SAVE BATTERY – via the eDrive button in the center console. These settings allow the plug-in hybrid drive system to be adapted to the way the car is being used at any point in time.

AUTO eDRIVE: This setting ensures the combustion engine and electric motor work optimize all driving situations and enable a pure-electric top speed of 50 mph. This is the default setting and is activated each time the car is started up.

MAX eDRIVE: In this mode the BMW 330e iPerformance uses electric power only, allowing it to drive for up to 14 miles with zero local emissions. In so doing, it draws on the electric drive system's full power output and reaches a top speed of 75 mph. The combustion engine can activate at any time if the accelerator is pushed down beyond its kick down position when additional power is required, e.g. for overtaking.

SAVE BATTERY: This mode contains two operating settings. If the high-voltage battery's charge is below 50 percent, the battery is charged to 50 percent by the combustion engine. If over 50 percent of battery charge remains, the charge level is "frozen", so that the remaining electric energy can be used for part of the upcoming journey.

BMW Efficiency and Dynamics.

The Driving Dynamics Control switch on the center console allows the remaining settings to be adapted, the ECO PRO, COMFORT, SPORT and available SPORT+ modes are all activated using this switch. Just like steering and chassis functions and the shift characteristics of the eight-speed Steptronic transmission, these modes also make changes to the operating strategy of the hybrid drive system. In COMFORT mode, which prioritizes a fine balance of comfort and efficiency, as well as hallmark BMW dynamics, the use of the electric motor is regulated in such a way that it helps to ensure both relaxed and economical driving. If required, the electric motor teams up with the combustion engine to maximize power delivery. Top-end performance using the full system output of the combustion engine and electric motor combined is the focus of SPORT and SPORT+ modes. In these settings the engine and motor are both permanently active. This allows the drive system to react instantaneously to every movement of the accelerator. In ECO PRO mode, the efficiency potential of electrification is utilized particularly extensively. Intelligent hybrid functionality allows the electric motor and combustion engine to work together with the greatest possible overall efficiency. The extremely efficient energy management for the drive systems involves carefully regulating the power output of electrically operated convenience functions such as the climate control system, seat heating and exterior mirror heating. This also helps to maximize the car's range.

Intelligent Energy Management.

The BMW 330e iPerformance comes with an integrated, hybrid-specific Proactive Driving Assistant that works using the BMW navigation system. This function represents the interplay between BMW EfficientDynamics and BMW ConnectedDrive technology. When the route guidance function is active, the navigation system collates the available information on the route ahead and uses it to manage the responses of the two drive units. The system accesses both the static data from the interactive map, such as speed restrictions and gradient information, and real-time information on the current traffic situation (Real Time Traffic Information – RTTI). This proactive energy management uses the information as a basis to identify particular stretches of the route where the electric drive system will be preferred over the combustion engine. It ensures that the car drives through residential areas or – if the battery has sufficient charge – entire cross-town links on electric power alone and approaches the destination using only the electric drive system. The system also prepares to use electric energy for uphill sections of road, so that the system's

full recuperation potential can be used on a subsequent downhill stretch. The Proactive Driving Assistant ensures the BMW 330e is equipped to offer locally emission-free driving, but also to cover long stretches extremely efficiently and with less impact on the environment.

BMW 360° ELECTRIC solutions and home charging.

As a plug-in hybrid, the BMW 330e iPerformance can also be charged externally via the main power supply. The empty lithium-ion high-voltage battery can be fully replenished in just two hours and 30 minutes using a BMW i Wallbox Level II 240V charger (charging power: 3.5 kW, can be installed at home or the workplace). Alternatively, the BMW 330e iPerformance can also be charged from empty in 6-7 hours from a conventional domestic power socket (Level I 120V charger) using the standard charging cable supplied. The charging solutions available from BMW 360° ELECTRIC allow for easy charging while being on the road. The BMW i mobility service ChargeNow opens up access to the largest network of public charging stations worldwide (covering over 30,000 charging points managed by partners in 22 countries). BMW ConnectedDrive, the BMW ConnectedDrive app and the ChargeNow app make locating and using charging stations run by partners an extremely fast and easy process, while the ChargeNow card allows convenient and cash-free billing and payment.

The car is hooked up to the power supply via the charging socket, which is located in the front wing on the driver's side, between the front wheel arch and the A-pillar. A flap with an integral sealing system protects it against ingress from moisture and dust. The charging socket itself has a corona ring, which uses a colour scheme to inform the user which stage of charging has been reached. If the corona ring flashes blue, the BMW 330e iPerformance is in charging mode. It then changes to a solid green light once the charging process has been completed. A solid blue ring indicates a pause in charging, and a flashing yellow ring tells you a system check is taking place. A flashing red corona ring indicates that the charging system is not active. The BMW 330e comes with its own standard charging cable – stored away in a special bag in the trunk and secured with a net – to connect it to the power supply. If no stationary charging options are available, the empty battery can be brought up to at least 50 percent of full charge while on the move by activating SAVE BATTERY using the eDrive button.

Level load compartment floor and unrestricted through-loading facility.

The neat integration of the high-voltage battery (gross capacity: 7.6 kWh, net capacity: 5.7 kWh) under the load compartment gives the BMW 330e iPerformance a level load compartment floor and full use of the through-loading system with 40:20:40 split rear seat



backrests. The combined primary trunk capacity is 13 cubic ft. (vs. 17). Access to the secondary luggage area in the storage tray under the load compartment floor is restricted.

In order to maximize the car's load capacity, the stainless-steel pressure tank was also positioned underneath the rear seat bench in semi-saddle tank form. It offers a usable capacity of 10.8 gallons (vs. 15.8). Fuel vapors in the BMW 330e iPerformance is trapped by an active carbon filter system, as is standard practice with vehicles powered by a combustion engine. In conventional drive systems, the fuel collected by cleaning out the active carbon filter is channelled back into the engine's combustion process once the filter has reached a pre-set degree of saturation. However, the filter can only be cleaned when the engine is running and, as the engine in the BMW 330e is not constantly in use, this cleaning process happens far less frequently. The intelligent positioning of the electric drive system's components assure the car's finely balanced weight distribution – virtually 50 percent at the front axle, 50 percent at the rear axle.

BMW ConnectedDrive.

BMW ConnectedDrive links the driver and the vehicle with the environment. The technology enables access to the most important vehicle information. The driver can call up data – such as the battery charge, available ChargeNow public charging stations and journey distances covered – on the display or pre-set a temperature for the passenger compartment. The BMW 330e iPerformance comes as standard with auxiliary heating and cooling (output: 5 kW). These functions can be activated by a push of a button on the car key, via the BMW ConnectedDrive smartphone app or using a two-week timer on the iDrive operating system. Running the heating or cooling functions while the car is charging does not restrict its electric range.

The innovative BMW eDrive technology in the new BMW 330e iPerformance once again underlines BMW's leading role in the premium segment when it comes to powertrain electrification. BMW eDrive technology includes a number of cutting-edge plug-in hybrid components and makes a significant contribution to reducing fuel consumption and emissions. BMW eDrive is one of the most cutting-edge elements of the ground-breaking BMW EfficientDynamics suite of technology.

Locally emission-free driving.

BMW eDrive is the new drive system technology used in all electrically powered vehicles from BMW i and the plug-in hybrid models from BMW. Alongside BMW TwinPower Turbo technology for combustion engines, intelligent lightweight design and optimized aerodynamics, BMW eDrive technology is therefore one of the most important elements in the EfficientDynamics strategy designed to increase power and further reduce fuel consumption. In addition, BMW eDrive offers the option of driving on electric power alone and therefore with zero local emissions – yet at the same time provides the option to cover long distances when the two drive systems team up.

BMW eDrive technology ensures extremely dynamic acceleration with instantaneous responses of the electric motor generating remarkable torque. The eBoost function enhances both drive systems under acceleration. The most important components of BMW eDrive technology are the synchronous electric motor (including the power electronics developed by BMW), the lithium-ion high-voltage battery and intelligent energy management. The latter ensures the electric motor and combustion engine in plug-in hybrid models work together as effectively as possible according to the situation at hand.

BMW eDrive technology was initially developed for the all-electric BMW i3 and BMW i8 plug-in hybrid sports car – which led the way in electric mobility in the premium sector. The fine-tuning of vehicle-specific elements, such as the battery cells, cooling management, power electronics and operating strategy, has involved the transfer of knowledge from the BMW i3 and BMW i8 to the development of new BMW iPerformance models. All components are adapted precisely to the vehicle at hand and optimized in terms of performance, efficiency, safety and durability.

BMW iPerformance technology.

BMW iPerformance technology essentially spans the electric motor, the lithium-ion highvoltage battery and the power electronics. Based on a shared eDrive strategy, all BMW plug-in hybrid models offer supreme power delivery by combining their two drive systems. BMW eDrive makes all-electric driving in urban areas and over cross-country routes a marketable proposition. An important element of the operating strategy is the condition based use of externally sourced and recuperated electric energy to maximize the vehicle's efficiency. The components of the BMW iPerformance architecture are tailored to each particular vehicle concept and can be combined with four cylinder gasoline engines as well as with classical rear-wheel drive, BMW xDrive or electrified all-wheel drive.

Plug-in hybrid.

In plug-in hybrid vehicles, intelligent energy management ensures the combustion engine and electric motor work together to maximum effect in all driving situations. Their operating strategy is based on the vehicle starting up on electric power only. BMW's plug-in hybrid vehicles prioritize electric mode at low and moderate speeds. Under greater acceleration and at higher speeds, the combustion engine is utilized. The boost function pulls the torque of both drive systems to maximize the car's dynamic performance. BMW eDrive ensures that the combustion engine runs efficiently (electric assist) at higher speeds. When the route guidance function of the car's navigation system is activated, the proactive function initiates an anticipatory operating strategy which optimizes efficiency and maximizes the electric driving experience.

Like the BMW i8, BMW iPerformance models (BMW X5 xDrive40e, BMW 330e, BMW 740e xDrive) can – at the touch of a button in MAX eDRIVE mode – run on all electric power up to 75 mph. The combustion engine only comes into play when the accelerator's kick down threshold is passed. In SAVE BATTERY mode the battery's charge can be maintained to enable electric driving later on in the journey. If the charge level drops below 50 percent, the battery is replenished.

Fast and convenient battery charging.

The high-voltage batteries of the new BMW plug-in hybrid models can be charged extremely easily, conveniently and quickly – both at home and while on the move – using BMW 360° ELECTRIC solutions. The battery can be powered up again from a domestic socket using the standard charging cable supplied or from a BMW i Wallbox (charging power: 3.5 kW). When it comes to topping up the battery during a journey, the BMW i mobility service, ChargeNow, gives customers access to the world's largest public charging network of over 30,000 charging points run by partners in 22 countries.

More Information as well as images and video:

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BMW Group In America

BMW of North America, LLC has been present in the United States since 1975. Rolls-Royce Motor Cars NA, LLC began distributing vehicles in 2003. The BMW Group in the United States has grown to include marketing, sales, and financial service organizations for the BMW brand of motor vehicles, including motorcycles, the MINI brand, and the Rolls-Royce brand of Motor Cars; Designworks, a strategic design consultancy based in California; a technology office in Silicon Valley and various other operations throughout the country. BMW Manufacturing Co., LLC in South Carolina is part of BMW Group's global manufacturing network and is the exclusive manufacturing plant for all X5 and X3 Sports Activity Vehicles and X6 and X4 Sports Activity Coupes. The BMW Group sales organization is represented in the U.S. through networks of 340 BMW passenger car and BMW Sports Activity Vehicle centers, 153 BMW motorcycle retailers, 125 MINI passenger car dealers, and 36 Rolls-Royce Motor Car dealers. BMW (US) Holding Corp., the BMW Group's sales headquarters for North America, is located in Woodcliff Lake, New Jersey.

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Journalist note: Information about BMW and its products in the USA is available to journalists on-line at <u>www.bmwusanews.com</u>.

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