BMW Motorrad Concept e.
Design concept for a BMW electro-scooter.

Munich. Individual mobility is increasingly defined in terms of sustainability. The BMW Group has taken on the challenges of a rapidly changing world and is now developing serial production solutions to meet the mobility needs of the future. As an integrated part of the BMW Group, BMW Motorrad is also addressing issues of individual single-track mobility and future customer needs. In this connection, BMW Motorrad is expanding its business activities to include a new facet: that of "Urban Mobility".

Building on almost 90 years of experienced in the field of motorised two-wheel vehicles, BMW Motorrad is drawing on the conceptual benefits of single-track vehicles to develop innovative solutions, adding a new dimension to the area of urban commuting.

Before the end of this year, BMW Motorrad will establish its new "Urban Mobility" area with two premium vehicles in the maxi scooter segment. The BMW maxi scooters combine the functionality of a scooter with the riding pleasure of a motorcycle. Both vehicles are powered by high-performance and efficient 2-cylinder combustion engines.

Based on the BMW Group's sustainability strategy, BMW Motorrad aims to put a premium offer on the market in the area of electromobility in the foreseeable future. At the Frankfurt International Motor Show (IAA), BMW will be presenting its design concept in this area for the first time: "BMW Concept e".

Visionary design for a new drive concept.
The design study BMW Concept e embodies the vision of an electrically powered scooter made by BMW Motorrad. Increasing limitations in traffic space, growing traffic density as well as both ecological and economical challenges give rise to new demands in the area of private transport in the major conurbation
areas in particular. An e-scooter with sustainable technological solutions and the aesthetic design of the Concept e provides a response to these changing urban mobility needs.

At the IAA in Frankfurt, BMW i presents visionary vehicles which are individually tailored to their respective purpose - the BMW i3 Concept and the BMW i8 Concept. They have a completely new "LifeDrive Architecture" specially developed for electrical drive and radically different from conventional vehicle construction. With its fascinating overall concept, the BMW i8 Concept with plug-in hybrid drive is the vision of a sustainable sports car come true. The BMW i3 Concept is the automobile with consistently sustainable design, conceived specifically for an urban setting.

With its Concept e, BMW Motorrad shows how attractive and fascinating the interpretation of the theme of electrical drive on two wheels can be in terms of design, while at the same time attracting attention to its new business area "Urban Mobility".

**Concept e - a vision with a future.**

The Concept e is a vision: BMW Motorrad designers have developed the style and shaping of the e-scooter of the future - electric, digital, dynamic. The designers deliberately allowed themselves plenty of freedom so as to be able to strike out new, creative paths in the design of components and surfaces.

The shaping and precision achieved reflect the core values of BMW Motorrad: emotion, dynamic performance and innovation. At the same time, the purist, clear design, colouring and choice of materials instantly suggest a clean, efficient yet agile single-track vehicle which allows one to move effortlessly through city traffic.

So the design concept study Concept e is more than just an idea for a new vehicle. In addition to technical functionality and quality, the BMW Motorrad designers attach importance to an emotional dialogue between rider and vehicle. Their basic premise is that a vehicle has to do more than just function - it has to
arouse the rider’s emotions, too. It has to inspire the rider again and again, as well as reflect its specific technological features.

So in the case of the Concept e, the main aim was to translate the special character of electric drive technology to the vehicle’s outward appearance.

The Concept e is the conceptual blueprint of a scooter able to set new standards with innovative premium electrical drive and provide a sound alternative form of mobility suitable for everyday use in the dense traffic of the constantly expanding conurbation areas and cities of the world today.

**Hallmark BMW Motorrad design elements.**

The BMW Concept e is clearly identifiable as a member of the BMW Motorrad family. As in other BMW motorcycles, the so-called split face runs from the upper trim section to above the front wheel cover, giving the Concept e an unmistakable, dynamic front view.

The successful BMW Motorrad design style is also reflected in the styling of the twin-tipped spoiler in the floating panel of the front trim, a boomerang-shaped, aerodynamically formed floating panel. The short, sporty rear highlights the active riding character of the electrically powered scooter, giving it a visual sense of dynamic performance which is underscored by the low cut windshield.

**Colour and material concept blends in with overall concept.**

The dynamic performance, fascination and especially the environmental compatibility of electrical mobility is reflected in the colour and material concept. The front and rear side trim sections finished in “Light white” generate a fascinating contrast with components such as the upper trim section in “Black chrome light” and side sills coated in “Black chrome dark”, thereby emphasising the scooter's technological features. The vehicle's overall impression of high quality is borne out by finely cut details in “Natural aluminium”, the asymmetrically designed, solid-milled holder for the front trim section and the central tunnel in “Textured steel”. The design of the light alloy wheels is derived from the styling of the BMW i automobiles.
Made from acrylic glass and featuring a rear-set metal grid and "Concept e" lettering, the two side covers of the battery and drive unit in “Electric yellow” symbolise the technical character of an electrically powered scooter. In combination with other accentuations in “Electric yellow” such as the front trim section, the rear section and the hollow-bore wheel axle, these stand for the vehicle's specific properties of maximum environmental compatibility, supreme dynamic performance and easy handling. To match this, the charging socket is positioned in the front section of the central tunnel and features a transparent plastic cover.

The Concept e highlights its visionary character by dispensing with conventional rear mirrors. Instead there are two video cameras integrated in the glass of the rear light cluster which clearly displays the situation on the road behind the rider on two LCD monitors installed in the cockpit. Speed and other relevant data is shown on a digital display in the cockpit which is reduced to the essentials.

**Innovative technology in a future serial production vehicle.**
The later serial production vehicle will fully meet customer expectations of a single-track vehicle offering sustainable mobility. The special arrangement of all drive components and the design of the vehicle’s geometry will allow agile handling typical of a scooter as well as a high degree of functionality.

For the power electronics and battery technology, BMW Motorrad draws on the innovative e-technology and extensive expertise of the BMW Group. BMW i high voltage technology (> 60 volts) with the very highest safety standards enables electrically powered vehicles to equal the acceleration rates of a maxi scooter with combustion engine. The generous storage capacity of the battery, an intelligent battery management system and efficient brake energy recuperation ensure a realistic range of 100 kilometres for everyday use. What is more, BMW Motorrad developers are aiming to achieve a continuous output and maximum speed which will enable safe overtaking on urban motorways when carrying a passenger.
The battery is charged at regular household power sockets as found in Europe, the USA, Canada and Japan. There is no need for a special charging station. When the battery is completely flat, the charging period is less than three hours. Practical experience with concept vehicles has already shown that the battery rarely runs out completely, so charging times are generally shorter.

In this way, the future serial production vehicle will provide a long-term, zero-emissions city travel option which is suitable for everyday use.