BMW GROUP
Corporate Communications

Press release
26 July 2021

Stimulating ideas for urban mobility: BMW Group Research unveils innovative concepts for cargo bike and e-scooter.

+++ Innovative design concepts for city-centre travel +++ Electrified bicycle Concept DYNAMIC CARGO promises high variability, everyday usability and sheer cycling pleasure +++ e-scooter Concept CLEVER COMMUTE with remarkably compact design thanks to folding mechanism +++

Munich. In recent years, there has been an increase in traffic in many city centres, and the mobility requirements of the people who live there remain high. In its role as a premium provider for individual mobility, the BMW Group is actively helping to create the liveable city of the future. Here, its approach to mobility also looks beyond the company's core business. The BMW Group has already presented a number of innovative micromobility solutions to the public in the past, including the BMW Motorrad X2City, the Personal Mover Concept and the BMW Vision E³ Way elevated road concept. With the unveiling of the electrified bicycle Concept DYNAMIC CARGO and the e-scooter Concept CLEVER COMMUTE, the BMW Group engineers are once again demonstrating their unrivalled ability to transfer know-how from the automotive sector to concepts for micromobility vehicles.

Concept DYNAMIC CARGO: unexpected cycling pleasure plus exceptional variability.

- Compact, three-wheeled cargo bike concept with high agility, flexible usage options and increased year-round suitability
- Variably usable loading platform with innovative attachments for transporting loads and/or children as well as for leisure activities

Bicycles offer great flexibility of use, produce zero emissions and are one of the fastest and most efficient means of transport in urban areas. However, rainy, cold or slippery conditions are usually all it takes for the majority of cyclists to switch to public transport or their car instead. The same applies when they need to carry loads that are too large for a standard luggage rack to handle, such as a larger food shop, or to transport children. A wide range of cargo bikes are now available that offer an additional alternative to using the car for urban trips. However, many cargo bike concepts

are wider and, above all, longer than normal bicycles due to the requirements for transporting loads and/or children. In conjunction with the resulting additional weight and the possible payload, this leads to restrictions of varying degrees compared to normal bicycles, particularly with regard to driving agility and handling.

"Our goal was to develop a concept that retains the agility and driving feel of a normal bicycle while adding innovative, safe transport options" says Jochen Karg, Head of Vehicle Concepts in the BMW Group's New Technologies and China division. "The "Concept DYNAMIC CARGO" is the first dynamic 'pick-up' cargo bike that combines driving pleasure with flexible use and increased year-round suitability."

The key component of the three-wheeled Concept DYNAMIC CARGO is the front main frame, which is connected to the rear section via a pivot axle and tilts in corners. The rear section remains stable through all corners without tilting towards the road. This combines with the electrified powertrain – which is activated as soon as the rider starts to pedal and drives the two rear wheels – to make the cargo bike just as easy to ride as a standard bicycle. As well as producing far greater riding stability in all weather conditions compared to two-wheeler designs, the rear wheels with their rigid, non-pivoting axle mounting also provide the basis for a versatile, pick-up-style transport platform. This can be fitted with a selection of innovative modular attachments for carrying luggage and/or children. The modular design principle paves the way for many more use cases, too. The non-pivoting design of the transport platform has the additional benefit that the rider is barely aware of any extra weight being carried, enabling safe, stable transportation of all loads while also ensuring a pleasurable riding experience.

The concept is rounded off by a facility for adding a modular system of weather protection. Together with the superior riding safety, which proves especially useful in adverse weather, this makes the Concept DYNAMIC CARGO an attractive means of transport all year round.

Although the BMW Group will not manufacture the Concept DYNAMIC CARGO itself, it is already in discussions with potential licensees.

Concept CLEVER COMMUTE: the perfect companion for the "last mile".

- Ergonomic design suitable for everyday use, excellent riding stability and extremely compact when packed up
- Genuine mixed-mobility option: innovative "public transport mode" makes it easy to incorporate travel on public transport into longer journeys
- Ideal for park & ride: minimal size when packed makes it ideal for carrying in the car boot

E-scooters have firmly established themselves in the urban mobility mix, thanks to sharing schemes in particular. They offer flexible usability, zero local emissions and the ability to get city dwellers to their destination extremely quickly over short "last-mile" urban journeys. The uptake of e-scooters for private ownership has been relatively slow to date. Robust models that can be ridden safely are difficult to take onto public transport or carry by car due to their size, while small, more portable models suffer from poor riding stability.

With its Concept CLEVER COMMUTE, the BMW Group is now presenting an e-scooter that folds easily for carrying on public transport and/or by car without compromising on riding stability in any way. In public transport mode, the footboard folds up at the sides and the rear wheel pivots into the resulting aperture from below. This mechanism shortens the wheelbase of the CLEVER COMMUTE substantially so that it can even be carried on an escalator without difficulty. This is an important requirement if the journey includes underground transport routes. It can also be rolled along on both wheels in this mode, rather like a trolley case. And the front wheel's integral hub motor provides an electric impulse that makes it easier to push the CLEVER COMMUTE up ramps. The e-scooter's compact dimensions when folded up means it should be possible to take it on all forms of public transport free of charge.

The CLEVER COMMUTE can be folded up to a size that fits easily into small vehicle boots, with larger boots able to accommodate several of them for family outings. In the BMW Group range, this means that the CLEVER COMMUTE fits into luggage compartments lengthways from the 3 Series upwards, for example, without any need to fold down the rear backrest, and it can be carried crossways in MINI boots.

With its unique product characteristics, the CLEVER COMMUTE is a versatile companion in the city and allows any journey to be completed quickly, safely and easily. Its transformability makes it a truly ideal solution for multimodal travel.

Although the BMW Group will not manufacture the Concept CLEVER COMMUTE itself, it is already in discussions with potential licensees.

Both concepts are designed in such a way that the electric range can be scaled with regard to the respective application. One final very important feature for city use is the battery pack, which can be removed and charged at home.

In the event of enquiries please contact:
Martin Tholund, Press Spokesperson Innovation, Design, Technology, Digital Car
Tel.: +49 (0) 151 601 77126, e-mail: Martin.Tholund@bmwgroup.com

Carolin Seidel, Press Spokesperson Innovation, Design, Technology, Digital Car
Tel.: +49 (0) 151 601 90340, e-mail: Carolin.Seidel@bmw.de

Internet: www.press.bmw.de
E-mail: presse@bmwgroup.com

The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2020, the BMW Group sold over 2.3 million passenger vehicles and more than 169,000 motorcycles worldwide. The profit before tax in the financial year 2020 was € 5.222 billion on revenues amounting to € 98.990 billion. As of 31 December 2020, the BMW Group had a workforce of 120,726 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company set the course for the future at an early stage and consistently makes sustainability and efficient resource management central to its strategic direction, from the supply chain through production to the end of the use phase of all products.

www.bmwgroup.com
Facebook: http://www.facebook.com/BMWGroup
Twitter: http://twitter.com/BMWGroup
YouTube: http://www.youtube.com/BMWGroupView
Instagram: https://www.instagram.com/bmwgroup
LinkedIn: https://www.linkedin.com/company/bmw-group/