BMW Nederland Corporate Communications

Persbericht

13 september 2018 BMW Group and city of Rotterdam sign Memorandum of Understanding.

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Electric City Drive as first concrete project of several urban mobility initiatives.

Rotterdam. Significant ambitions in sustainability, air quality and energy transition, plus potential to innovate and experiment. This is the position reached by BMW Group and the Municipality of Rotterdam, following the signing of a Memorandum of Understanding on Wednesday evening (September 12) in the city. Over the next three years, BMW and the Municipality have agreed to work together on meeting challenges from the Paris climate agreement, while answering questions that the energy transition calls for, with some concrete steps and tangible projects. This agreement makes Rotterdam the first city outside Germany to embark on such an energy transition testing collaboration.

Concrete steps.

Following the signing of the MOU, BMW Group and the City of Rotterdam demonstrated to press and stakeholders the first major scheme of the agreement – a pilot project called 'Electric City Drive' – during the BMW Group Visionary Mobility Experience event in the city. This pilot project has been set up to encourage a greater level of electric driving in the centre of the city among drivers of plug-in hybrid electric vehicles (PHEVs). PHEVs have both a combustion engine and an electric motor in combination with a battery which allows the car to travel electrically for a certain distance. A PHEV can also charge just like fully electric vehicles via a charging station. If the vehicle user drives and recharges electrically, the PHEV also contributes to improving air quality and reducing CO2 emissions in inner cities.

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BMW recognizes that the future of electric driving also has consequences for what our cities and districts will look like. "BMW wants to help shape the future of mobility", says Peter Schwarzenbauer, Member of the Board of Management of BMW AG, MINI, Rolls-Royce, BMW Motorrad, Customer Engagement and Digital Business Innovation BMW Group.

Arno Bonte, Vice Mayor of Rotterdam, responsible for Sustainability, Air Quality and Energy Transition, shares this vision: "It is particularly valuable to combine expertise and technology. This

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way we can take concrete steps that could also be interesting for other cities in our region. Through our international networks, we can also help other cities around the world." Bonte said: "I think it is important to work quickly in this area, and this fast start is very welcome. I expect to be able to announce additional projects soon."

Electric City Drive

The pilot includes an area within Rotterdam and involves owners of a BMW or MINI PHEV model who live and / or work in and around Rotterdam and therefore often go to town. They can register via www.rotterdam.nl/wonen-leven/electric-city-drive/. The central question in this study is: how are drivers encouraged to use the fully electric mode of their PHEVs and charge sufficiently within a special geographically defined area in the city, referred to as the 'Electric City Drive area'? All participants receive the 'Rotterdampas' as thanks for their participation. "Plug-in hybrids offer a next step to higher quality of life and make the environment cleaner, healthier and quieter, where it matters most: in the city", says Stefanie Wurst, Managing Director BMW Group Nederland.

Intelligent combination

"In addition to a rich history in mobility, we have the expertise and knowledge of new solutions, from electric vehicles to the management of parking spaces and charging infrastructure," says Schwarzenbauer. "But the power of all that knowledge and technology comes from intelligent combinations. We need partners to realize a real impact," he said. Bonte added: "Rotterdam likes to offer the space to test new technologies in practice. BMW is coming here with Electric City Drive to help persuade plug-in hybrid drivers entering the city, to switch directly to the electric mode of their car. This way, no unnecessary fossil mileage is consumed and emissions remain minimal. I wholeheartedly welcome that.

Hands-on

BMW and the municipality are also investigating the use of heavy electric trucks and the charging infrastructure that goes with them. Schwarzenbauer has high expectations of the cooperation with Rotterdam: "The city is known for its concrete approach and learning from practice. I am looking forward to working with that Rotterdam decisiveness." The Municipality of Rotterdam and BMW Group Netherlands are entering into a partnership for a period of three years. BMW is

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one of the many partners who, together with the Municipality in Rotterdam, have committed themselves to achieving the goals of the Paris Climate Agreement. BMW has previously entered into similar collaborations with the cities of Berlin, Munich and Hamburg.

Electric City Drive in practice.

As soon as the car approaches the Electric City Drive area, the car suggests that the driver, via the central information display on the dashboard, should manually switch to full electric mode. A special Electric City Drive app has been developed for this pilot project. This is linked to the ConnectedDrive system of the BMW or MINI. The app keeps track of how often the participant drives his / her car and runs emission-free within the Electric City Drive area and then awards points as a reward, based on several factors including:

- The number of charging events per 100 kilometers;
- The number of kilo-hours charged (kWh) per 100 kilometers;
- The percentage of emission-free kilometers inside and outside the Electric City Drive area;
- The percentage of journeys made with the Electric City Drive app.

Through the app, participants can view statistics on charging and electric driving and compare their results with other participants.

The sequel.

The pilot project uses BMW and MINI PHEV models and an app that runs on the driver's smartphone. The medium-term goal is a scenario in which the vehicle's software recognizes an Electric City Drive area and automatically switches the car to electric drive. An adaptation of the vehicle's software, making the app superfluous, is currently in the test phase. With a successful outcome of the pilot project in Rotterdam, every manufacturer will be able to use the Electric City Drive technology by adapting the software of their PHEV model and, equally important, every city can implement the concept.

The Electric City Drive project takes place for four months between September and December of this year. The research is being carried out by the Erasmus University in Rotterdam. The pilot helps BMW Group and the City of Rotterdam in many areas, such as the identification and

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elimination of barriers that prevent PHEV drivers from electric driving or recharging

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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 14 countries; the company has a global sales network in more than 140 countries.

In 2017, the BMW Group sold over 2,463,500 passenger vehicles and more than 164,000 motorcycles worldwide. The profit before tax in the financial year 2016 was approximately \in 9.67 billion on revenues amounting to \in 94.16 billion. As of 31 December 2016, the BMW Group had a workforce of 124,729 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company has therefore established ecological and social sustainability throughout the value chain, comprehensive product responsibility and a clear commitment to conserving resources as an integral part of its strategy.

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