



Rolls-Royce

Media Information 7 September 2017

- Check against delivery -

Statement Klaus Fröhlich Member of the Board of Management of BMW AG, Development Preview IAA 2017 7 September 2017

Ladies and Gentlemen,

Welcome to our Research & Innovation Centre! Harald Krüger just outlined some of our company's goals. I'd like to show you how we are realizing them.

Since 2001, our BMW and MINI brands have focused on the premium segment and Rolls-Royce on the pinnacle of luxury.

In 2007, Strategy Number ONE took us into a new dimension: we launched new services and our BMW EfficientDynamics measures. And, of course, we launched our concept for sustainable mobility: BMW i.

Strategy Number ONE was a success.

In 2016, it moved on to the next stage – Strategy NUMBER ONE > NEXT. This is already in full implementation and will set new standards. Our development work and innovative strength are key factors here.

To maintain our lead, we have stepped up our efforts and pace even more over the last two years. And with good reason!

Company Bayerische Motoren Werke Aktiengesellschaft

Postal Address BMW AG 80788 Munich

Telephone +49 89 382-24544

Internet www.bmwgroup.com





Corporate Communications

Media Information 7 September 2017 Subject Statement by Klaus Fröhlich, Member of the Board of Management of BMW AG for Development, IAA Preview 2017 Page 2

Because the environment is changing radically. It is more tense and volatile than 10 years ago.

1. The actions of some have severely compromised the credibility and trustworthiness of our industry. As a result, we now face tighter – and sometimes irrational – approaches to legislation. Around the world, regulations on fuel consumption, emissions and safety are changing faster than ever before.

The BMW Group has had a clear stance throughout:

- We were the only ones to deliver on the voluntary agreement on CO₂ emissions: Since 1995, we have cut our average fleet emissions by over 40 percent.
- And when it comes to cutting emissions, we don't just follow the letter of the law. We deliver on its principles. Independent tests show that our emissions are the lowest. And we use superior technologies to our competitors.

2. Established competitors are changing, and new ones are trying to secure a market share for themselves. Electrification and digitalisation are the two big game-changers. Our new competitors are mainly digital companies. They focus on future technologies and customer data.

To compete with them, we have developed our skills and expertise, adapted our processes and forged intelligent partnerships. We will maintain our leading position – not only in premium mobility but also in electric mobility, autonomous driving and connected vehicles. And BMW i – the original – is our innovation platform to do so.

Moving forward, we will explore new approaches.





Corporate Communications

Media Information 7 September 2017 Subject Statement by Klaus Fröhlich, Member of the Board of Management of BMW AG for Development, IAA Preview 2017 Page 3

Back in 2016, for example, we restructured our R&D section to focus on two key topic areas:

<u>Digitalisation</u> with a focus on enhancing connectivity, using artificial intelligence and developing self-driving premium vehicles.

Drive technologies including Efficient Dynamics NEXT ICEs (internal combustion engines) with 48-volt systems and the development of electrified vehicles powered by battery or fuel-cell.

The trend towards electric mobility is irreversible. But it will happen in different ways and at various speeds in different parts of the world. (The change in China is just one example.) Customers all over the world will prefer different types of powertrain for a very long time.

So from 2020 onwards, we will meet their needs by offering all types of drive trains in all vehicle classes. And we are the only car company worldwide to do so. Our customers will be able to choose between super-efficient, super-clean combustion engines, plug-in hybrids, and all-electric battery-powered vehicles.

Our fully flexible architectures and modular systems ensure we can act quickly and in response to market conditions. Our future vehicle architectures and flexible production facilities mean we can take fast decisions about which models to make, and with what type of drivetrain.

Back in 2010, we were also the first manufacturer to decide to fully integrate PHEVs into our rear- and front-wheel drive architectures. As a result, we are already in a position to offer nine electrified vehicles in 2017.

We are already the third largest provider of electric mobility, worldwide.





Media Information 7 September 2017 Date Statement by Klaus Fröhlich, Member of the Board of Management Subject of BMW AG for Development, IAA Preview 2017 4

Page

As the enhancement of the two architectures continues and with double battery capacity, we are now ready to integrate BEVs as well. Our vehicle architectures on the one hand, and our modular systems for powertrains on the other will give us unique flexibility.

Gen 5 fully-electric drivetrains will be with us in 2021, launched with the BMW iNEXT. Based on a scalable modular system, Gen 5 technologies will also fit into models we are launching today. So we will be able to electrify all of our products - fully or partially - in order to meet demand.

So now, everything we need is in place:

Battery-powered vehicles will enter mass-production and become widely accessible. And with up to 700 km of range, they will be practical for daily use.

Our plug-in hybrids - or "Power PHEVs" will set new standards in performance and with ranges of up to 100 km.

And our combustion-powered drives will incorporate 48-volt recuperation systems. With minimum emissions, they will continue to set standards.

When it comes to electric drives, we have greater expertise and more in-house value creation than any of our competitors. We are just investing for example €200 million in our new battery technology research centre alone.

From electric motors to power electronics and battery systems: for us, in-house production or build-to-print are the way forward. We want full technical control of our systems.

At the moment, we are gradually adapting all of our vehicle production plants for electric drives. And our efforts are paying off:





Media Information

Date 7 September 2017

Subject Statement by Klaus Fröhlich, Member of the Board of Management of BMW AG for Development, IAA Preview 2017

Page

5

Our market share for electric drives in Europe is already three times higher than our market share for combustion-powered cars. This year, we will deliver over 100,000 BEVs and PHEVs to customers. By 2025, our customers will have 25 all-electric or partially electric vehicles to choose from.

So, to sum up:

Electrified products will be available from all of our brands. We will offer the broadest range in the market ... as well as supreme flexibility. We will be the NUMBER ONE in the world of premium electric mobility – against established and new competitors.

As BMW i enters its second stage of development, our competitors continue to invest in solitary platforms. But BMW i is about more than just electric mobility.

BMW i is – and always has been – our incubator, our hub for innovations. BMW i is the original! And with the launch of the BMW iNEXT, it will be at the vanguard of future technologies.

This brings me to the topic of autonomous driving. The car of the future will be even more intelligent, and capable of driving itself. So it will have additional functions for our customers.

Here, as ever, we focus on customer value: we want the customer to decide how they will drive. Because without choice, there can be no "Sheer Driving Pleasure".

From the 7 Series to the whole range, BMW vehicles already use partly automated assistance systems every day, for extra safety and comfort. Lanekeeping and longitudinal control on motorways, for example, are done purely by





Media Information 7 September 2017 Subject Statement by Klaus Fröhlich, Member of the Board of Management of BMW AG for Development, IAA Preview 2017 Page 6

the car. Not just at up to 60 km/h but at up to 210 km/h – and they have been since 2015!

Now, however, it's time to forge ahead – not just step by step, incrementally working our way up from level 2, but by mastering level 5 from the very beginning. That's because autonomous driving requires the full range of factors: system leaps, additional redundancy requirements, computing power and connectivity.

This is why we are preparing to offer highly autonomous driving by 2021, when the iNEXT is launched – wherever legislation allows it. And based on this, we will implement – again fully flexible – levels 3 to 5 in our vehicle range.

We are in a good position to realize all four enablers: HD real-time mapping, sensor technologies, artificial intelligence and environment modelling, and motion control.

Over the last ten years, we have developed our own expertise. But we are also partnering the world's top innovators.

Over the longer term however, safety systems will no longer be differentiators. State-of-the-art technology will take hold worldwide.

That's why more and more OEMs and TIER1s are joining our open platform – which is becoming a center of excellence for autonomous driving.

So, that was my update on our Strategy NUMBER ONE > NEXT technology campaign.

Thank you!





-

Media Information

Date 7 September 2017

Subject

statement by Klaus Fröhlich, Member of the Board of Management of BMW AG for Development, IAA Preview 2017

Page

7

For questions please contact:

Paloma Brunckhorst, Product Communications BMW i Telephone: +49 89 382-22322 Paloma.Brunckhorst@bmwgroup.com

Niklas Drechsler, BMW Group Innovations and Design Communications Telephone: +49 89 382-28149 Niklas.Drechsler@bmwgroup.com

Alexander Bilgeri, Head of BMW Group Product, Technology, Sports Communications and Services Telephone: +49 89 382-19175 Alexander.Bilgeri@bmwgroup.com

Internet: <u>www.press.bmwgroup.com</u> e-mail: <u>presse@bmw.de</u>