

## MAHLE positions itself for the future

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Financial Statements on April 26, 2017

Speakers:

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The spoken word applies.

Ladies and Gentlemen,

I am pleased to welcome you to our annual press conference on the Financial Statements.

Today, my colleagues and I would like to explain the balance sheet figures for the MAHLE Group's 2016 business year. We would also like to describe how we have already geared our company toward the change in the automotive industry and how we plan to continue this process. To present the 2016 business year, I am joined by our CFO, Michael Frick, and Michael Glowatzki, member of the Management Board and Director of Human Resources.

### **Strategic decisions characterize the 2016 business year**

It is patently clear that the automotive industry is undergoing a profound transformation. It is therefore crucial that we set a course that allows us to take advantage of the opportunities arising from these changes. And that is exactly what we are doing with our parallel approach—it involves developing both combustion engine products and e-mobility products at the same time. Implementing this dual strategy has strongly characterized our 2016 business year.

In 2016, the MAHLE Group increased its total sales by 7.3 percent to EUR 12.3 billion. Changes in the consolidation group also contributed to this sharp sales growth. The acquisitions of Delphi Thermal and Kokusan Denki—now called MAHLE Electric Drives Japan—were disclosed for the full year for the first time. Our organic growth amounted to 3.4 percent; we have thus also grown significantly faster than in previous years in our existing business segments. EBIT came to EUR 473 million or 3.8 percent of sales. At EUR 63 million, the net income for the year did not fulfill our expectations. This is owing to the major changes in our company, which we will henceforth comment on.

Last year saw us integrate around 9,000 new colleagues from the acquired companies. We have thus considerably expanded our areas of competence in both thermal management and mechatronics as well as in electric drives. At the end of 2016, the MAHLE Group had a total headcount of around 77,000 employees—1.3 percent more than in the previous year.

As already reported in 2016, we are still in the process of bringing these acquired units up to the earnings level of our existing divisions. While we made great strides in 2016, we have not yet reached our goal. We also divested ourselves of those business segments in which we could not achieve a globally leading market position. For instance, we sold our industrial filtration business in October of last year and our forging activities in Germany in January 2017. Furthermore, we made a joint decision with Bosch to sell our joint venture Bosch Mahle Turbo Systems (BMTS).

### **Innovative strength bolstered in new product areas**

We have considerably increased our investments in research and development in order to tap into new product segments for MAHLE. In 2016, our R&D expenditure amounted to roughly EUR 750 million, which corresponds to a rise of around EUR 100 million (or about +15%) compared with the previous year. The number of employees working in research and development at MAHLE has more than doubled over the past five years; today there are 6,000. We will increase these investments again this year.

This realignment has brought about considerable change in our company. At the beginning of 2016, we launched the newly created Mechatronics division, in which we have concentrated all our electrics and electronics products. We were successful in increasing sales in this new business segment by EUR 52 million to EUR 374 million, a plus of 16.3 percent. We aim to maintain this dynamic growth in our e-mobility activities, which is why we are in the process of taking over the Spanish electronics specialist Nagares this quarter. Thereby we will benefit from additional skills and products in the field of e-mobility, because the Nagares product range includes electronics for drives as well as battery and charging technology.

### **The internal combustion engine has a future**

Our dual strategy, however, also implies that we will continue to make every effort in refining the combustion engine. We are convinced that the combustion engine will remain the leading technology for achieving mobility in the years to come. In light of the global increase in vehicle production and the fact that even hybrid vehicles cannot exist without it, we expect demand for components and combustion engine systems to rise further over the coming years. According to forecasts, around 108 million

passenger cars and light commercial vehicles will be produced in 2030. Of these, roughly 97 million will run with combustion engines—either as individual drives or in combination with an electric motor in hybrid vehicles. For comparison: this figure was 93 million in 2016.

In addition, there are heavy-duty commercial vehicles, for which an alternative to the combustion engine on long-haul routes is currently unimaginable. The combustion engine thus needs to be further optimized if we are to be effective in achieving the climate targets. MAHLE technologies will make an important contribution to this pursuit over the next few years.

But before I explain how we are implementing our dual strategy in the different technological fields, Mr. Frick will comment on the 2016 business year.

## Economic performance in 2016—a significant increase in sales and organic growth

Ladies and Gentlemen,

I would now like to provide you with details about the MAHLE Group's economic performance. Our total sales figure of EUR 12.3 billion is equivalent to an increase of 7.3 percent. The group also achieved considerable organic growth of 3.4 percent. Changes in the consolidation group to the amount of EUR 529 million contributed to this rise in sales. This is because the sales for the full year from the acquisitions made as at June 30, 2015, were disclosed for the first time in the period under report. Furthermore, exchange rate effects of EUR 104 million had a negative impact.

At nearly EUR 4.3 billion, the greatest contribution to sales came from our Thermal Management business unit—representing 35 percent of group sales. The inclusion of the acquired units also accounts for roughly two-thirds of the 14-percent increase in sales in this case. Organic growth amounted to a good six percent.

With sales of EUR 2.7 billion, the Engine Components business unit remained at the level of the previous year—when adjusted for exchange rate effects, sales remained stable. We were able to make substantial gains in the assembled camshaft business, which were attributable to production ramp-ups in China and the United States as well as production expansions in Europe. The demand for valves and power cell units—for both passenger cars and commercial vehicles—also developed positively.

With sales of around EUR 2.2 billion, the Filtration and Engine Peripherals business unit also concluded the year under review at almost the same level as in the successful year of 2015. Among the best-selling products were air intake modules as well as air and oil filter modules. We merged three locations in Santa Catarina/Mexico, and expanded the plant in Timisoara/Romania.

The Aftermarket business unit recorded sales of EUR 899 million and grew by 7.7 percent in the period under review. The substantial portfolio expansion in the repair shop equipment segment led to a near doubling of sales, contributing to the strong organic growth of around seven percent.

With the exception of South America, we have achieved good growth rates in all regions. The development in Asia/Pacific, in particular, exceeded our expectations with an increase of 10.6 percent. However, our North American and European businesses also recorded pleasing growth rates.

And now we come to the key earnings figures.

At EUR 1,079 million, we achieved EBITDA at the previous year's level. Earnings before interest and taxes (EBIT) came to EUR 473 million, or 3.8 percent of sales. The 2016 net income amounted to EUR 63 million. The substantial difference between EBIT and the net income for the year is mainly attributable to special effects. The financial result thus includes effects from the initiation of the sale of the joint venture Bosch Mahle Turbo Systems (BMTS).

However, our investments in the future—that is to say, in the expansion of existing business segments and the establishment of new ones—had a particular impact on profit. This can most notably be seen in our significantly increased expenditures for research and development at our 15 development locations around the world. Our research and development ratio now lies at 6.1 percent of sales—and thus at a new record high. In the previous year, it was still at 5.7 percent. Depreciation arising from the strategic investments made over the previous years within the context of corporate acquisitions also had a negative effect on profit. In accordance with our obligation, hidden reserves were disclosed during the course of the acquisitions, giving rise to goodwill. The resulting standard depreciation negatively impacted results by hundreds of millions in the year under review, reducing the margin by more than one percentage point. When adjusted accordingly, the EBIT margin amounts to 5.0 percent.

At EUR 563 million, our expenditure on tangible fixed assets remained at the level of the previous year; at 4.6 percent, the investment ratio was slightly lower. Aside from Germany, the regional focus of the investing activities was primarily on Eastern Europe and North America, as well as the Asia/Pacific region. Investments in Eastern Europe included the expansion of plants in Poland, the Czech Republic, and Romania. Overall, capital expenditure on tangible fixed assets in European markets made up 47 percent of the total volume.

Approximately 25 percent of the investments were made in North America, where the focus was on expanding the Mexican locations. A further 20 percent was invested in the Asia/Pacific region, particularly in China and Japan. In China, we primarily increased investments in our new plant in Changshu for the air conditioning compressor product group, which will open in May. In Japan, we invested in locations for our Mechatronics division, among others. The MAHLE Group is represented in 34 countries with around 170 production and development locations.

### **Solid basis for long-term positioning**

Our positioning as a foundation-owned company enables us to plan for the long term and develop our company strategically. An almost unchanged equity ratio of 34 percent provides a good basis on which we can build. We not only drew up our strategic orientation in 2016, but also several programs to increase our profitability. For example, we have further concentrated our purchasing activities in existing and new business segments and are already seeing the first signs of progress. In 2016, we also launched a uniform production system, which will exploit the opportunities presented by Industry 4.0.

Overall, the MAHLE Group stands on a strong economic basis. For example, the fact that we increased the cash flow from our operative business by 34 percent in 2016 in comparison with the previous year demonstrates that we are on the right path. Regular communication with our investors reveals that not only our customers but also the financial markets are convinced of our strategy.

Mr. Scheider will now talk in detail about how we approach the different markets and which solutions we are using to implement our strategy.



Thank you, Mr. Frick.

Ladies and Gentlemen,

I would now like to refer to some specific examples that demonstrate how we are fulfilling our commitment to maintaining a globally leading role in terms of both the internal combustion engine and e-mobility.

### **MAHLE continues to exploit the potential of the internal combustion engine**

The combustion engine still offers significant optimization prospects, which we also want to exploit in order to achieve the CO<sub>2</sub> targets over the large number of vehicles with this drive technology. After all, with the MAHLE portfolio alone, a further reduction of around ten percent can be achieved in CO<sub>2</sub> emissions. This figure is based on the new WLTC (Worldwide Harmonized Light-Duty Vehicles Test Cycle).

Our path is leading us to the further optimization of engine mechanics, among other activities. The focus here is on reducing frictional loss. This approach also addresses real driving conditions, irrespective of cycles and standards. To this end, we are developing extremely resilient and also weight-optimized engine components, which are perfectly coordinated in the networked system and ensure maximum efficiency. For example, our latest generation of lightweight pistons in conjunction with friction-optimized piston ring packs bring about a CO<sub>2</sub> reduction of more than two percent. At the same time, our components facilitate the use of low-viscosity engine oils, which further reduce frictional resistance and the need for lubricating oil. This involves a significant alleviation of the burden on the oil system, which is reflected in improvements in consumption. All in all, by combining low-viscosity oils with our solutions for reducing friction on the engine components and achieving an optimized oil circuit, we are able to reduce CO<sub>2</sub> emissions in gasoline engines by up to five percent.

Further measures taken by MAHLE for the ongoing development of the combustion engine powertrain include, for example, innovations in the air pathway, which can save up to three percent of CO<sub>2</sub>, as well as intelligent thermal management, which can generate additional savings of around two percent—in each case relating to the gasoline engine.

### **Alternative fuels make CO<sub>2</sub>-neutral combustion engines possible**

We are also committed to the development and use of alternative fuels. They already offer considerable potential in reducing CO<sub>2</sub> in the short term. For example, we developed a CNG engine in 2016 and installed it in a demonstrator vehicle. Our monovalent CNG engine demonstrated a savings potential of more than 25 percent CO<sub>2</sub> (WLTC) in comparison with a gasoline engine of the same output. Consequently, we have already developed a means of reducing CO<sub>2</sub> that is ready for series production and can be used immediately in the vehicle population. The German government also sees the advantage of natural gas and therefore extended the tax concession to 2026 in February.

Further improvements can be achieved if alternative liquid fuels are added to conventional fuels. A nationwide upgrade from E10 to E20 is conceivable. Synthetic production would save up to ten percent of CO<sub>2</sub> emissions. Technically, it would already possible to design a suitable engine today. In the long term, synthetic fuels even facilitate CO<sub>2</sub>-neutral individual mobility with the combustion engine too, since they bind just as much CO<sub>2</sub> during production as they later emit during combustion. MAHLE is therefore making the case in the industry and in politics for the effective promotion of alternative fuels—that is to say, synthetically produced fuels, ethanol, and CNG. Alternative fuels constitute the fastest route to reducing CO<sub>2</sub> in the transportation sector.

At the same time, no major interventions in the supply infrastructure would be necessary. Furthermore, they also represent a long-term solution to producing climate-friendly commercial vehicle powertrains.

## The diesel engine remains indispensable for climate protection

When we talk about climate protection, we need to face the fact that we will only achieve these targets in the short term if we also exploit and further develop the diesel technology. By the end of the decade, 80 percent of new diesel engines will be equipped with SCR technology. AdBlue resolves the nitrogen oxide issue in new vehicles. Fine particulates are already at an extremely low value. Moreover, it is noteworthy that a Euro 6 diesel engine emits around 15 to 20 percent less CO<sub>2</sub> than current gasoline engines. And the diesel engine still has potential for further optimization. Without it, the CO<sub>2</sub> targets are therefore barely achievable—if at all.

## MAHLE is an innovation driver in e-mobility

There is, however, no doubt that e-mobility is the key to CO<sub>2</sub>-neutral individual transport in the long term. MAHLE aims to be one of the innovation drivers in this field too. But before e-mobility can become a mass product, numerous issues still need to be addressed. These include infrastructural measures and solutions—particularly the availability of fast-charging stations. The generation of electrical power is also a central aspect of the carbon footprint of electric vehicles. Only once electricity can be largely generated in a CO<sub>2</sub>-neutral way will e-mobility make a sustainable contribution toward the climate targets beyond achieving zero-emissions locally.

At MAHLE, two key topics are aimed at improving the electric vehicle in order to make it competitive in the medium term and attractive to the end customer.

1. The first is thermal management. This encompasses both interior air conditioning, which directly influences the cruising range, and the temperature control of sensitive components, such as the battery, drive motor, and power electronics.
2. The second is the electric powertrain and electric auxiliary components.

## Thermal management as an enabler for e-mobility

Let's talk about thermal management first. When it comes to electric vehicles, the optimization of hot and cold currents provides the basis for power output, cruising range, and service life. Integrated and intelligent thermal management is therefore a prerequisite for establishing e-mobility. MAHLE has already developed numerous innovations for the thermal soaking of batteries in electric vehicles and plug-in hybrids. These have since gone into series production. Our solutions ensure constant temperature levels and an even temperature distribution between battery cells—a prerequisite for high-performance storage systems with a long service life. In 2016, we received orders for our solutions from customers all over the world. We expect the requirements for battery thermal management to continue to increase significantly in terms of more powerful batteries or fast-charging functions. Added to this is the fact that the drive motor and power electronics in electric vehicles will also need to be cooled and integrated in a holistic thermal management system. Our expertise pays off here as well. With a holistic approach to thermal management, we are generating an overall sales potential in the range of a high three-digit Euro amount per vehicle.

## Electric drive solutions from MAHLE are in demand worldwide

I would now like to discuss electric powertrains and electric auxiliary components. We are developing highly efficient drive systems, power electronics, and electric auxiliary components. Solutions for every kind of vehicle: from scooters and machinery to commercial vehicles and passenger cars. In this area, we were able to win a series of orders in 2016. From as early as 2017, we will be supplying new cooling systems, electric compressors, and electric drives to several manufacturers of battery-powered electric vehicles—including some entirely new vehicle manufacturers. In 2018, complete MAHLE drive units for pedelecs will go into series production. We have gained new customers in this area too in the last twelve months. MAHLE thereby covers the entire e-mobility spectrum.

We are also working on an urban mobility concept, which is based on a 48-volt system and will be presented in detail at the IAA. We are convinced that 48-volt systems provide an excellent basis for urban use. This is

because the systems are not as complex as for vehicles in the high-voltage range, which makes them more economical. At the same time, they offer sufficient power reserves in an urban environment. The best possible output at the lowest weight and limited installation space play a particularly important role in this segment. As with the combustion engine, a holistic systems approach to development is also required in this case.

### **MAHLE expands its holistic systems competence for e-mobility**

Strategically, we have taken a major step toward reaching our goal of having the holistic systems competence for electrification and e-mobility within our company. The acquisition of Nagares this year will give us access to additional skills in power electronics and control units, for example. The company is represented on the market with voltage converters, components for charging electronics, battery management systems, and control systems for thermal management solutions, among other products. Customers include major vehicle manufacturers from Europe, the United States, and Japan. Nagares also has a great deal of experience in the development of electric vehicles and operates a competent development center in Valencia. We aim to expand this location as there is a large number of qualified engineers in the region. Nagares maintains excellent relations with the two local universities and has established a joint chair and several cooperation projects for research and advanced engineering with the university in Valencia (Universidad Politecnica de Valencia).

## MAHLE solutions for the environment—even beyond the powertrain technology

However, MAHLE is also working on innovations that will benefit the environment beyond the powertrain technology. For example, in 2016, we developed the world's first air conditioning solution to production maturity that uses CO<sub>2</sub> as a refrigerant. We can now offer an environmentally-friendly response to one of the European Union's stipulations. As of January 2017, all newly registered vehicles are required to operate with a refrigerant that is significantly less damaging to the climate. The R744 CO<sub>2</sub> refrigerant is an environmentally-friendly alternative to traditional refrigerants because, with it being a natural substance, it does not need to be chemically produced and is climate-neutral with a GWP (Global Warming Potential) of 1.

The new refrigerant places high technical demands on both the components and the overall system, as it operates at a significantly higher pressure than previously used refrigerants, among other things. We developed the world's first R744 HVAC system for a premium manufacturer and participated as a systems partner in this project. Since the end of 2016, we have been supplying the system components in series.

When used in electric vehicles, R744 has the advantage of taking the strain off the electric auxiliary heater for longer when using the heat pump at low temperatures. During the winter months, this contributes to the energy management and thus to an increased cruising range.

### Outlook

To conclude, I would like to provide an outlook for 2017.

We are cautiously optimistic in our assessment of the ongoing business development. The market forecasts for 2017 are good and the first quarter has exceeded our expectations. The drivers of this pleasing development are the positive developments in Europe, Asia, and North America, where we got off to a better start than expected in the new year. Furthermore, we see a certain degree of recovery in South America, even though at a low level. The expected stagnation in China has failed to materialize so far. The promotion of vehicles with a displacement of up to 1.6 liters—which has now partially expired—led to anticipatory effects in 2016, while 2017

continues to progress favorably. The development in India also continues to be dynamic.

Nevertheless, we have been cautious with our forecasts for 2017, because the political uncertainties are greater than they have been for a long time. We note with growing concern the tendencies toward trade barriers, protectionism, and the belief some countries have of being better off alone than in the European Community.

In view of the current situation, the importance of maintaining a balanced presence in the world regions is evident. We are therefore continuing our course of evenly distributing sales across the core markets of Europe, North and South America, and Asia/Pacific. After all, this strategy is not only much more effective in protecting us against individual market fluctuations, but it also aids us in holding our ground against the competition. We are further expanding our presence in Asia and, in four weeks' time, will open a new plant for air conditioning compressors in China—also on account of the continued excellent opportunities for growth this region has to offer.

As you can see, a lot has changed in the MAHLE Group, and this change will continue on in the coming years. MAHLE thus remains an attractive partner for existing and new customers in the field of mobility.

Thank you very much for your attention. We will now be happy to take your questions.

[approx. 3,100 words = 30 min]