



**“Bosch Limited Q4 FY16 Earnings Conference Call”**  
**May 25, 2016**



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**Moderator:** Ladies and Gentlemen, Good Day, and Welcome to the Bosch Limited Q4 FY16 Earnings Conference Call hosted by Batlivala & Karani Securities India Private Limited. As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing '\*' and then '0' on your touchtone telephone. Please note that this conference is being recorded. I now hand the conference over to Mr. Annamalai Jayaraj from B&K Securities. Thank you and over to you, sir.

**Annamalai Jayaraj:** Good afternoon, everyone. On behalf of B&K Securities, welcome the 4Q FY16 and FY16 full year post results conference call of Bosh Limited. I also take this opportunity to welcome the senior management team from Bosch Limited. We have with us today Dr. Steffen Berns – Managing Director, Mr. Soumitra Bhattacharya – Joint Managing Director and CFO and Mr. S. Karthik – Vice President and Company Secretary. I would now hand invite Dr. Steffen Berns for his opening remarks to be followed by a question-answer session. Over to you, sir.

**Steffen Berns:** Thank you, Mr. Jayaraj. Good afternoon Ladies and Gentlemen. Before we look into the quarterly results January 2016 to March 2016 quarter of our Company, I would like to brief you about the overall domestic automotive market development in the last quarter, looking at production volumes except the two wheelers.

During the quarter ended March 2016, the India automotive market grew by 5% against the quarter ended March 2015. Heavy commercial vehicles grew strongly by 24.5% continuing their positive momentum due to strong growth seen in replacement demand and in infrastructure growth. The light commercial vehicle segment saw a growth of 12.9% due to improved exports and low base effects. Tractor industry saw a turnaround growing by 9.9% in anticipation of good monsoon and on a low base of previous year. Passenger car segment grew by 4.1% due to strong growth in export sales. Traditionally, the launch of new models and discounts pushed passenger car sales. The three wheeler segment saw a decline of 3.3% mainly due to decrease in exports.

We now look at how the Company has performed in the January to March 2016 quarter. The Company clocked net sales in income from operations of Rs. 26,354 million, an increase of 12.2% over the same period of 2015. The mobility solution segment grew at 12.7%, once again outperforming the Indian automotive market growth where the business beyond mobility solutions had a good growth of 8.9%. The domestic sales for this quarter grew by 15.5%, thereof mobility solutions by strong 17.7% and business beyond mobility solutions remains flat. Net sales and income from operations from exports declined by 9.1% with exports in the mobility solution segment declining to the extent of 17.4% mainly due to decline in markets like China and Brazil. In mobility solutions, diesel systems and gasoline systems achieved double-digit growth while starter motors and generators remained flat because of reduced exports.



In business beyond mobility solutions, power tools division declined by 3.1% mainly due to muted growth in the construction and infrastructure sector. Security systems saw strong double-digit growth due to growth in video systems and public address systems. Thermotechnology division also developed strongly this quarter mainly due to onetime export orders. Other operating income has increased from Rs.399 million in January to March 2015 to Rs.792 million in January to March quarter of 2016 due to write-back of excess provision of earlier years no longer required an increase in export incentives. Material cost as a percentage of net sales and income from operations has increased marginally from 53.2% in the January to March quarter 2015 to 53.8% in the current quarter of 2016. This is mainly due to adverse exchange rate impact partly offset by favorable mix impact.

The employee cost has increased to Rs. 3,580 million in the quarter ended March 2016 from Rs. 3,194 million in corresponding quarter of 2015, the increase of 12.1% due to regular increase in salary and wages. Depreciation has declined by 13.3% in the quarter ended March 2016 as against the quarter ended March 2015. We made capital additions worth Rs. 2,700 million during the current quarter mainly in building infrastructure for our development center in Adugodi which has longer use for life than the regular machinery which is generally capitalized attracting lower depreciation. We plan to invest approximately Rs. 7,700 million in the current year 2016 both for infrastructure and technology to be prepared for the market growth in mid-term. We have planned for capacity increase in Nasik and Bidadi plant for operations in common rail pumps, injectors and their parts.

Other expenses stood at Rs. 3,565 million in January to March quarter 2016 as compared to Rs. 3,513 million in the second quarter of 2015, a marginal increase of 1.5% due to onetime seasonal impact of previous year. Operating profit is higher by 26.7% in the current quarter compared to the corresponding quarter in the previous year. Higher sales, favorable product mix, reduction in depreciation, continued focus on operational efficiencies and realization of benefit from organizational restructuring undertaken in the previous year has contributed to the increased operating profit on a quarter-on-quarter basis. The other income has decreased from Rs. 1,328 million in the quarter ended March 2015 to Rs. 1,017 million in the current quarter of 2016, a reduction of 23.4%. The reduction is on account of decrease in profit on sale of marketable securities consequent to change in the rural government indexation benefit on mutual funds as announced in Union Budget 2014. In the quarter ended March 2016 the Company posted a profit before tax of Rs. 5,613 million as compared to Rs. 4,430 million in the same quarter of 2015, an increase by 26.7%. As a percent of sales PBT stood at 21.3% in the current quarter as compared to 18.9% in the corresponding quarter of 2015. Consequently, profit after tax has increased by 30.8% for the quarter ended March 2016 against the quarter ended March 2015.

To summarize the quarter results, our top-line increased by 12.2% driven by strong performance of both our mobility solutions and beyond mobility solutions segment. Our continued growth in the domestic market substantially above the growth rate of the automotive production is



noteworthy. Profit before tax increased substantially due to the improvement in the operating efficiency as explained earlier. This is the first whole year of 12 months after we changed our financial year to the April to March cycle. The yearly numbers are not comparable as last year's numbers that are from 15 months, however I will give you a synopsis of key results of April 2015 to March 2016 as compared with April 2014 to March 2015. The Company clocked net sales and income from operations of Rs. 104,157 million, so Rs. 10,400 crores, the increase of 9.5% over April 2015 to March 2016.

The mobility solutions segment registered a growth of 8.5% and business beyond mobility solutions grew by 17.3%. Domestic sales grew by 11.1% with both segments growing in double-digits. Exports declined by 1.1% coming majorly from the automotive segment. Material cost as a percentage of net sales and income from operations has increased marginally from 53.8% in April to March 2015 to 54% in the current period of 2015-16. The employee cost in absolute value has increased by 4.3%. However, as a percentage of sales it has reduced from 14.0% in 2014-15 to 13.4% in current year 2015-16. The Company posted a profit before tax of Rs. 18,591 million which increased by 23.6% in comparison to Rs. 15,037 million in 2014-15. As a percent of sales, it stood at 17.8% in the current year as compared to 15.8% in the corresponding period of 2014-15. Profit after tax has increased by 23.2% during April 2015 to March 2016 to Rs. 12,459 million during 2014-15.

Consolidated financial statement for the Group has been prepared for the first time. Accordingly, one subsidiary company which is MICO Trading Private Limited and an associate company Newtech Filter India Private Limited has been consolidated. The subsidiary company does not have any operations hence there is no impact on the Group's financial statement. The associate company has been consolidated using the equity method wherein the investments of Bosch Limited in the associate company has been reduced by Rs.81 million for share of losses of the associate company.

There has been an intense discussion in the past month about the introduction of BS-VI legislation in the country. India will be the first country worldwide to skip one level of emission legislation and to take two steps in four years, a time typically taken for one step. We have taken this as a challenge and do support of BS-VI emission norms by 2020. Bosch has the right products, experience and testing infrastructure for the same. Bosch's ambition is to make diesel engines into air cleaning machines according to our slogan, 'Invented for Life'. We are engaged in close interactions with our customers to define the BS-VI strategies for all applications.

The Board of Directors at its meeting held on February 5th, 2016, had approved the sale of starter motors and generators business of the company to a 100% subsidiary of the Bosch Group for a lump sum consideration of Rs. 104,862 million on a slump sale basis subject to approval of the shareholders. The bought resolution in favor of the sale was passed by the shareholders by way of postal ballot and e-voting. The results of the voting were communicated to the stock exchange



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on April 4, 2016. The next steps for the same are in progress and checked to be completed as per planned timeline. The business transfer agreement is yet to be executed by the Company as on date.

Our forecast for this year remains cautiously optimistic. We see a continued recovery in the commercial vehicles segment due to replacement demand and some pre-buy effect for the BS-IV emission norms which will become effective Pan-India from April 2017. Passenger vehicle are expected to grow moderately. LCV segment has started showing signs of recovery. However, as liquidity in the market is limited, pressure on the growth of the LCV segment will remain. The tractor segment could have a good year if there is normal rainfall during the monsoon season as predicted by the Indian meteorological department. Our mid to long-term forecast for India remains positive. While the proposed emission legislation timelines are challenging, we have the necessary products, competence and infrastructure to support our customers.

We have continued our investments in to the future in our people, technology, infrastructure and new locations. We continue to be optimistic on India and our growth potential in the country.

Thank you and questions please.

- Moderator:** Thank you very much. Ladies and Gentlemen, we will now begin the question-and-answer session. Our first question is from the line of Basudeb Banerjee from Antique Finance. Please go ahead.
- Basudeb Banerjee:** On a year-on-year basis I suppose the revenue is not comparable because the alternate and starter business that has been removed from the revenues, is it right sir?
- Steffen Berns:** So alternator and starter motors business is still with Bosch Limited because the sale has not been completed.
- Basudeb Banerjee:** From which quarter it will be applicable?
- Steffen Berns:** No, no it is on track as I said and the effect date of completion is not yet through but currently it is planned for August 2016.
- Basudeb Banerjee:** Yes, so just wanted to know your other expenses have been remaining quite muted even like it is lowest in the last fourth quarters where your revenue is up almost 14%. So any one-ups or write-backs in other expense line items sir and is margin look pretty strong because of that?
- Steffen Berns:** No there is nothing, it is actually good performance mainly or entirely in the domestic market which has led to this, there are no special effects in these numbers.



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**Basudeb Banerjee:** And how much has been the passenger vehicle, diesel, gasoline combined dedicated products as a percentage of your revenue and how much has been aftermarket this quarter?

**Steffen Berns:** We do not share the specific shares of our business, so I can tell you how the market has developed which was 5% to 6% in passenger cars but not how the revenue split for our business has developed.

**Basudeb Banerjee:** And how is your aftermarket strategy panning out and how do you see it in the next two to three years, which are the products you are adding?

**Steffen Berns:** So last year it was good, previous year it was rather muted, but last year it picked up quite well in spite of still liquidity problems in the market, but we were able to overcome this, we did number of special sales and promotional activities and with this we had some good growth in aftermarket last year.

**Basudeb Banerjee:** And sir last quarter, with crude again moving up and government saying that they are in no mood to draw back the excise duty hikes which they have done, so in case the diesel retail prices move up further significantly from these levels, do you see any risk to the demand for diesel cars down the line once again or even impact on the CV industry?

**Steffen Berns:** No, for us its always as per our understanding the most relevant factor is the differential between diesel and gasoline and if this is stable then there should not be any impact in the diesel to gasoline shares.

**Moderator:** Thank you. Our next question is from the line of Pramodh Amthe from CIMB. Please go ahead.

**Pramodh Amthe:** Two questions, one, since the exports were weaker this year, what is the proportion of export value to your sales now and what is the outlook on exports, are you adding any new products into the basket?

**Steffen Berns:** So the exports of sales, if we talk about the year actually have reduced from 12.4% to 10.7%, exports without services. So it is a reduction of some 1.5% - 1.7% points and this was due to good domestic market and due to weak export markets, especially in the automotive industry we had some good exports earlier to Russia, to Brazil and also some special orders because of a stronger increase in China in the previous years we had some special exports business to China and this has come down now between the growth in China itself was much lower than in the previous years. And future, it depends on how the overall worldwide economy is going to develop and also it always depends which country is localizing at what level, but this was not the reason for the downward trend in our exports this year.

**Pramodh Amthe:** And second question is with regard to royalty, what was it as a percentage of sales for the full year, has anything changed? And second, considering that India is taking two steps at a same



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time, is there more demand for technology from the parent and hence your thought process on loyalty payment to be paid to the Bosch to be hiked up?

**Soumitra Bhattacharya:** First of all, we have a very organized way of doing technology transfer and this is always kept at arm's length and we also have a big base of our own development and application in India. Keeping that in mind if you look at our percentage which is about 1.6% between 1.5% and 1.6% this is also by industry standards one of the most optimal. So we will continue to do technology transfer where required at arm's length keeping in mind the interest of both and our numbers are pretty much lower than average industry standard.

**Moderator:** Thank you. Our next question is from the line of Sonal Gupta from UBS. Please go ahead.

**Sonal Gupta:** Sir, one was to understand the higher other operating income in this quarter, is there any special factor for that?

**Soumitra Bhattacharya:** In case of this other operating income we have had small amount of reversal on account of excess provision which we get for employee benefits. But if you look at in terms of the total number which we explained earlier, it is insignificant. So only as a subset in this area this is a portion which is there and this is also a normal process that we do where we create provisions based on business needs and in case and when not required we again bring it back.

**Sonal Gupta:** And the other thing I just wanted to touch upon was, one, to understand in terms of your localization levels for BS-IV on the CRDI side, I mean could you give us some sense on what level of localization you have there?

**Steffen Berns:** So we are producing all the components required locally but not for all vehicles and therefore it depends always on nonspecific vehicles, we cannot give you the overall percentage but the overall localization for BS-IV is relatively high.

**Sonal Gupta:** And would it be the highest on the commercial vehicles or is it lowest, I mean relatively speaking versus passenger cars would commercial vehicles be more localized or less localized?

**Soumitra Bhattacharya:** As we mentioned before, we do not give specific numbers but we have a very strong and robust process of localization, so we do not segregate into commercial vehicles or tractors or passenger cars, we simply take a product, we see what is optimal time to get in our localized manufacturing both from in-house as well as outsourcing and our focus has always been on localization at the right volumes and we will continue doing it.

**Sonal Gupta:** And my last question was just to understand, I mean given there has been a lot of negative press and even court decisions coming against the diesel engines especially on the passenger car side, I mean do you see any shift from the OEM side in terms of more shift towards petrol? And given that you also have plans in terms of having gasoline direct injection, are you accelerating those



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programs too because I guess if diesel goes down then probably we will see more gasoline direct injection. So if you could just talk about that and what are you seeing?

**Steffen Berns:**

There are two matters in the discussion currently which we have to differentiate, one is BS-VI introduction, so new emission levels from April 2020 onwards and I have mentioned in my speech that we are fully supporting this and we are currently working together with the OEMs to define the strategies and then get the right products and be prepared for this new emission legislation. The second point is the ban in diesel vehicles of more than 2 liter cubic capacity, this so far has been limited to the National Capital Region, so Delhi region and two days ago there has been press statement that also catalyzed introducing this but we have not read the official text and therefore we do not know the details about this. If you look at the overall diesel vehicle population, the volume of engines above 2 liters limited to Delhi and Kerala is still relatively low volume and this is impacting some of our customers significantly but for Bosch serving all different kinds of segments, the effect is limited. The question, what is going to happen in the long run with BS-VI coming into effect and how this then would impact the overall cost of engines and vehicles and the buying behavior of the customers is difficult to predict, we assume that the diesel share overall is going to reduce, especially in the smaller and less expensive vehicles but this will be compensated to some parts because the value of the system we are supplying is going to increase but the overall calculation how much is positive and how much is negative, at the moment nobody knows.

**Sonal Gupta:**

Sir but just a follow-up on that, are you seeing any increase in interest from OEMs on the gasoline direct injection side?

**Steffen Berns:**

Sorry I missed this point. At the moment the customers are very busy in defining their strategies and see what can be done to meet diesel BS-VI and then what can be replaced by more or less existing or planned gasoline volumes. There have been quite a few discussions and also some projects on the gasoline direct injection side before which are continued but at short-term now for the same customers to start completing new engine developments both on diesel and on gasoline direct injection side we do not see it to a large extent. So this would probably come as a very second step.

**Moderator:**

Thank you. Our next question is from the line of Akshit Sinha from Credit Suisse. Please go ahead.

**Akshit Sinha:**

Sir my first question is that you mentioned that the diesel growth this quarter has been in double-digits, so far this year it was in mid-single-digits like in 3Q it was 5%. So what has driven this improvement? I know that tractor growth has picked up this quarter but we are also seeing that the share of diesel in the passenger cars has been coming down. So is the pickup in tractor more than enough to offset the same?



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**Steffen Berns:** Well, our diesel sales has been very good and this has been driven by very strong development in the commercial vehicles, in the heavy commercial vehicle we have more than 20% growth and in the light commercial vehicle we have more than 13% growth and also in tractors we had 7% growth and in the cars and utility vehicles we also had positive development and diesel share went down slightly but this could not compensate the very positive effect from the other three segments which I mentioned earlier. So because of very strong sales in commercial vehicles and tractors, the results have been positive, on top of this we have also seen very strong developments on our gasoline side, this was strong because of growing market shares in the gasoline systems and also because of two wheeler business now is getting stronger and as said earlier, also automotive aftermarket has grown. So this is a positive news from the mobility systems division and then in the non-mobility systems we also had several divisions, security, technology, packaging, just to name a few which have seen very good growth.

**Akshit Sinha:** So currently within your gasoline division how much will be two wheelers as a percent of that, as a ballpark, roughly?

**Steffen Berns:** At the moment it is still very small.

**Akshit Sinha:** So I think I suppose gasoline is around 6% to 7% of your total revenues, going ahead how big do you think this division can grow? Of course one thing is that how does the pickup in two wheeler segment happens, but can you continue to gain market share in the passenger cars in the gasoline?

**Steffen Berns:** Well, there is lot of scope to gain market share, how successful we are going to be we will have to see but we have gained some good projects with many different customers, so we have a very broad customer base by now and we are getting into more volumes and the potential for electronic fuel injection on two wheelers is very good, actually with BS-VI for two wheelers which is corresponding to Euro-V for two wheelers, there will be a replacement of the carburetor by electronic engine management systems and we are talking about large volumes here and therefore we assume by 2022 this is going to be substantial business.

**Akshit Sinha:** And for the BS-IV trucks that are being developed, I know that you do not divulge customer level information, but at an aggregate is it right to say that common rail system is the most preferred solution and on most of the trucks common rail systems are there, is it right to say that?

**Steffen Berns:** Yes, that is correct.

**Akshit Sinha:** And final question, what has been the growth in aftermarket division for the full year?

**Steffen Berns:** We had close to 10% growth.

**Moderator:** Thank you. Our next question is from the line of Pranav Tendulkar` from Forefront Capital. Please go ahead.

- Pranav Tendulkar:** I just wanted to ask the starter motor business that you are selling to the parent, slump sell, what are the three parameters for the same business i.e. revenue I know but what is the EBIT and capital employed in the business?
- Steffen Berns:** When we informed the investors we told you that the EBIT is marginal and capital employed, so what we stated is turnover is 10%, the EBIT is marginal share and the capital employed, sorry I do not have the current number available.
- Pranav Tendulkar:** So in the PV segment as a total how much percent of your total revenue will be contributing to MHCV and HCV?
- Steffen Berns:** We neither share the turnover nor the EBIT of different segments.
- Pranav Tendulkar:** No, I am asking a different question, I am asking HCV and MHCV as a percent of revenue roughly will be how much?
- Steffen Berns:** This is what I said, we do not share the turnover or revenue of different segments of our business.
- Moderator:** Thank you. Our next question is from the line of Prayesh Jain from IIFL. Please go ahead.
- Prayesh Jain:** On the starters and motors business I just wanted to understand that now the targeting date of August, so if the sale happens in August so for FY17 you will have five months of sales and the entire financials in the Bosch Limited and for the seven months it will not be there, is the understanding correct?
- Soumitra Bhattacharya:** Your understanding is correct.
- Moderator:** Thank you. Our next question is from the line of Pulkit Singhal from Motilal Oswal. Please go ahead.
- Pulkit Singhal:** You mentioned about the two wheeler BS-VI opportunity of replacement of the carburetor by the electronic management system, so how much would that increase the price of a two wheeler by and do you think the OEMs are already preparing for the same, is the government intent there for implementation of this in two wheelers?
- Steffen Berns:** So the first question, because this is very price sensitive market of course we try and the overall industry tries to keep the increase as low as possible, specific values I cannot share with you but it is only going to be a minor percentage increase on the overall two wheeler price. Our understanding currently is that if the draft legislation which is currently a draft is going to become little low and is going to become effective then there is no way other than to introduce engine management system because the NOX, the Nitrogen Oxide emissions have to be reduced by 85% and this is not possible with a carburetor as we see it today. And therefore you must



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assume that everybody now is thinking about how to introduce something like engine management system in an effective way.

**Pulkit Singhal:**

And in case of passenger vehicle and for the implementation of BS-VI, would it mean that all the new model launches post FY18 onwards would acquire BS-VI in them, how does it play out, I mean is it only after 2020 that the new models would have it or I would presume the earlier model launches should also have BS-VI?

**Steffen Berns:**

No, as per the current draft legislation which also has a draft, it is going to be effective 1st April, 2020, for both new and old models that's for current discussion, that is of course a big task for the overall industry, so whether this is going to come or whether for existing models perhaps one or two years would be added this is unclear currently, but at least the intention and the key announcement by the people responsible in the government is they want to have it both for new and for existing models on 1st April, 2020. And currently I think this is so challenging there is nobody thinking at least on the diesel side launching new vehicles already 2018, I think that is technically not possible.

**Pulkit Singhal:**

And can a BS-VI vehicle work on BS-IV fuel?

**Steffen Berns:**

No, it cannot. The exhaust gas after treatment system would be poisoned and then it would not be a BS-VI vehicle any more. So that is one of the big challenges and therefore we have always been stating that you do not only need BS-VI fuel which is 10ppm sulfur content fuel on 1st April, 2020, but you need phasing because you cannot change overnight complete vehicle fleet, and the second is you also have to do the testing and validation before with fuels from Indian refineries because BS-VI means 10ppm sulfur and low sulfur content means that its poor lubrication capabilities and therefore you need to put some additives into the fuel to compensate for the lower sulfur and this has to be tested. So that is a tricky matter and this is knowhow of the different refineries which is not shared among the industry and therefore we are strongly demanding that we need fuels from Indian refineries with respective additives to make sure that the engines afterward work.

**Pulkit Singhal:**

But I presume you would be needing that fuel in low quantities for the testing, so even if one refinery is prepared for the same it would help the testing process, is my understanding correct?

**Steffen Berns:**

Well, we must find some way how to do this and of course this testing of vehicle fleets has to be done under many different conditions, so you have to do at high altitudes and low temperature, so somewhere in Ladhak or so and you have to do somewhere in Kerala and you must make sure that everywhere you got the right fuel and if you do not have petrol stations offering this fuel yet this is a logistical challenge but most likely we have to do something about this. The second factor, there is one on the investment in refineries and second is on the quality of crude which is being purchased and this also has to be improved. So it is quite a challenge for the petrol industry



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and so far we have not been able to get any clear indications from them how they are going to do this.

**Pulkit Singhal:** So the fuel stations would basically need to have both BS-VI and BS-IV fuel simultaneously for this to kick in, I mean there would be cars on road having BS-IV and the you will have BS-VI as well.

**Steffen Berns:** No, not necessarily, if the lubrication of BS-VI fuel is used you can use this for BS-IV vehicles as well, this is only the other way around which is not working.

**Pulkit Singhal:** So can you just tell for the full year what percentage of sales is from non-auto, i.e. non-mobility solution?

**Steffen Berns:** Sorry, you are talking about the growth or about the share?

**Pulkit Singhal:** The shares, percentage of revenues.

**Steffen Berns:** Percentage of revenues is 12.8%.

**Moderator:** Thank you. Our next question is from the line of Raunak Aggrawal from Catamaran. Please go ahead.

**Raunak Aggrawal:** I have four questions, first is on the two wheeler market, how large is our presence globally or is this going to be an India driven product? Second question is related to the petrol engine, if you look at the petrol engine and the fuel injection component that goes into it, if we take that as an index of 100 how large is diesel, is it like 1.5 times more than petrol or how is it? And the third question is, when you are trying to get market share in gasoline fuel injection system how do you grab market share, is it new platforms or what is the differentiated value proposition you actually offer? And the last question is related to the BS-VI, do we intend to make turbochargers in India and do you intend to make it through the listed entity? These are my questions.

**Steffen Berns:** So two wheeler business, we have to look into different segments of two wheeler business, so we are for example on the high end bikes have been present worldwide extensively but the engines for high end bikes are more or less passenger car engines with a completely different technology. If we look at the commuter segment then India is a considerable market especially if we take internal combustion engine or gasoline engine because in China now 50% to 60% of the market has changed to e-scooters, so electro mobility vehicles and therefore the gasoline share is relatively smaller and then of course we have Southeast Asia as well, big market. So because we have specific market requirements in India, or if you may say so for the emerging markets, we are driving this business from India and having the main part of the development for the electronic management system here on the India side. The petrol engine question I did not understand.

**Raunak Aggrawal:** If the cost of fuel injection system for a petrol vehicle is 100, how is diesel fuel injection, is it 10 times expensive or it is 20% more, just an industry question I have.

**Steffen Berns:** It depends, so it's a large variety of different systems, we have **0:46:19.2** and gasoline direct injection and whatever, but 20% is definitely too low and 10 times is definitely too high, so its somewhere in between.

**Raunak Aggrawal:** Diesel is costlier than the petrol fuel injection system, right?

**Steffen Berns:** Yes, definitely. So you talk about injection pressures if you take gasoline direct injection which is on the higher side and diesel 10 times and the price is not 10 times as high but it is substantially higher around the diesel. And looking at market shares and petrol, there are different approaches, so one is global platforms of more global players coming into the country or launching their new engine platforms here and also some of the strong global players which are here which are already using Bosch and introducing more Bosch fuel injection systems, then we are also quite strong here with the Indian local OEMs and whenever they increase their share in gasoline this will also lead to an increase for us. And last question, it is easy to answer, currently there are no plans to produce turbochargers in India.

**Raunak Aggrawal:** And if in case we intend to make it will be through the listed company, right?

**Steffen Berns:** This question has not been asked internally by us, so therefore there has been no discussion and I cannot answer this point.

**Raunak Aggrawal:** Just on the petrol engine, if I understand it correctly, it is only the new platforms where you can actually get market shares because the existing ones which is already running they may not actually take a new supplier. Is this a right way to interpret that?

**Steffen Berns:** No, that is not the right way because typically if you do not make any change on the platform you do not change your supplier but if develop a new platform or an upgrade or you feel as a customer that you could get a better deal with a new supplier, there may be an opportunity or some of the customers say we are so big now we want to have dual sourcing or multiple sourcing strategy, then there is also an opportunity to win or to lose depending on which side you are. So there is a lot of dynamics in the market and but there are also some opportunities.

**Moderator:** Thank you. Our next question is from the line of Ranghan Vanky from Brilliant Securities. Please go ahead.

**Ranghan Vanky:** Can you tell me what is the R&D expenses and what is the sales per employee and what is the cash conversion cycle, number of days? And always I find you tax is always on the 30% full tax you are paying, cannot you start to reduce at least from 8%, I mean from 30% something like that every year so that at least we can increase the fixed asset. And currently we are increasing the fixed asset, how much it is going to be? And no doubt for the last 10 years you have created



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a CAGR of 23% for the investors and I wish you all the best, can you just tell me what is going to be the sales mainly any projection for 2025 or something like that, always they make for 10 years ahead like that. Thanks.

**Steffen Berns:**

So the last point, unfortunately we cannot tell you.

**Soumitra Bhattacharya:**

For R&D expenses we have a very clear as I told you there is quite a bit of people working for us, in fact nearly 400 engineers and we have a lot of localization and if I link up your R&D expenditure and if I link up your tax question, we do take all tax benefits which are applicable for R&D and our tax rate in terms of what is optimized is pretty optimized way, you will in fact see this quarter the rate has been marginally better compared to the previous quarter. Then you had a question on employees, what was your question on employees cost?

**Ranghan Vanky:**

Sales per employee.

**Soumitra Bhattacharya:**

We have approximately currently around 10,500 employees, this includes white and blue collar and you know that we had a turnover of about Rs. 10,200 crores. So you can have it.

**Ranghan Vanky:**

Attrition rate?

**Soumitra Bhattacharya:**

We are below 5%.

**Ranghan Vanky:**

And what is the global standard for the employee expenses as a percentage of sale?

**Soumitra Bhattacharya:**

There is no global standard, you cannot compare it because it is all to do with the division that you are in, a trading division will have a different percentage, a manufacturing division will have a total different.

**Ranghan Vanky:**

Average something like that, you cannot give?

**Soumitra Bhattacharya:**

No I think that would be comparing apples with oranges, what we do is we check whether our productivity both for direct and indirect is in line with our economics and that is what we focus upon. So employee cost is always a mix of what you do for trading or what you do for manufacturing.

**Moderator:**

Thank you. We have a follow-up question from the line of Basudeb Banerjee from Antique Finance. Please go ahead.

**Basudeb Banerjee:**

There is a major article recently stating that in Delhi conversion of old diesel cars to so called electric or electronic engines through a kit supplied by Bosch, could you highlight on that aspect, what is the product actually all about and whether we will be importing or making it here?

**Steffen Berns:**

We are always open to good ideas, currently we have not been approached on this matter and we do not know exactly what this is and who has been quoted in the press.



- Basudeb Banerjee:** And what about the potential of a kit converting a diesel car to a CNG vehicle as such?
- Steffen Berns:** So if you talk about BS-II and BS-III trucks as it was listed or as it sounded in this newspaper article, currently I do not have an idea on how to convert this to something electric and also converting it to CNG, and has to be a BS-IV CNG, would be quite challenging.
- Basudeb Banerjee:** Because Bosch's name was there in that article that is why I thought of asking.
- Steffen Berns:** Yes, it is a good question, we have also read the article.
- Moderator:** Thank you. Our next question is from the line of Arjun Khanna from Kotak Mahindra Asset Management. Please go ahead.
- Arjun Khanna:** Sir, my first question is in terms of emission norms for tractors, while it is not moving with BS-VI there is a thought of it moving in 2022, I was just curious, what is our thought on that and what kind of impact that could have on our current sales?
- Steffen Berns:** Our tractor emission legislation is separate from the rest talking about commercial vehicles and passenger cars and there is this so called trend legislation and you are right there being next step going to be 2022-23 and this is only going to impact tractors with high horsepower and therefore the impact on us overall is going to be relatively small for these segments of vehicles when you would need something similar to at Bharat Stage IV on the commercial vehicles. So this would mean a change in injection systems.
- Arjun Khanna:** Would this necessarily mean an electrical engine system or we could yet continue with mechanical?
- Steffen Berns:** Well, same as also for BS-IV, many people are trying different approaches and several on the last concall we had discussed this, I would not rule it out but it is not an easy way and in the end it is then a question of optimizing not only missions but also fuel economy. So it is more expensive but probably the easier way to go in for electronics.
- Arjun Khanna:** Sir my next question is in terms of smaller diesels, we talked about passenger vehicle smaller diesels may actually pricing may go up because of change to BS-VI. Just curious, what happens to three wheelers, diesel three wheelers, do you see the pricing increasing prohibitively?
- Steffen Berns:** That is a question on how exactly this can be met and whether we find any local good solution and also what would be the specification of the legislation which are not yet clear. So difficult currently to forecast, of course we are trying and industry is trying to find an affordable solution and the mileage of these three wheelers actually is surprisingly big and therefore also the payback period even if the engine is slightly more expensive would still be okay. But it is an open question how this is actually going to look.



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**Arjun Khanna:** And my last question is just a follow-up of another participant, in terms of the index, sorry to come back to that, comparing GDI with a diesel injection system, if we have to index GDI at a 100 what would be the pricing say of a diesel injection system?

**Steffen Berns:** as I said earlier, I cannot give you the numbers currently because there is a huge range of which system you are actually going to take and the variants between different vehicles, you cannot say this is diesel, this is gasoline but it is so big and I do not have the average numbers now so therefore I cannot answer this.

**Moderator:** Thank you. Our next question is from the line of Sreenath Krishnan from Sundaram Mutual Fund. Please go ahead.

**Sreenath Krishnan:** I have a couple of questions, first one is on CAPEX, what would be the CAPEX for next year FY17 and where would it be spent? And secondly, you have been speaking on **0:58:35.4** wanted to understand, apart from the fuel injection systems what are the new products that we have in the pipeline or rather which we see as potential for the next two to three years?

**Steffen Berns:** So CAPEX for the next year is Rs.770 crores, **0:58:56.8** Rs. 7,770 million if I calculate correctly and this will be spent again as this year on new office buildings in our tech center in Bangalore as well as on production facilities and investments for our new technology products, large part of which is diesel because this is relatively capital intensive.

**Sreenath Krishnan:** And the non-fuel injection opportunity in automotive space?

**Steffen Berns:** Yes, our concentration is on power train and power train first of all is fuel injection for diesel, gasoline and also for two wheelers by now. We have mentioned the e-clutch but this is not going to have large turnover within two years. But the project is making progress and is moving in a right direction. Apart from this we will be very busy with now BS-VI challenges and we will put a lot of focus into these areas, so diesel gasoline and two wheeler gasoline which I mentioned will keep us quite busy. In addition, of course in the non-automotive areas we are continuously expanding our product range be it power tools where we introduce some new mid-price range products which we are also manufacturing now in our new plant in Chennai, we are expanding the portfolio on our security technology also with locally developed products with a better price point than some of the imported products and also on the energy and the building solution, the energy side where we have grown well in solar photovoltaic products last year and we are going to extend this and also on the thermotechnology we are increasing our product specs locally manufacturing solar water heaters but on the commercial industrial boilers actually it is a big market, currently too small for local production but we are gaining some good shares with specialty boilers which we are importing and which are appreciated by the customers because of their special features and high quality. So there is a lot happening but as I told you earlier we are talking about 12.8% beyond mobility at the moment. So that is still a low share.



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**Moderator:** Thank you. Ladies and Gentlemen, that was the last question. I would now like to hand the floor over to Mr. Annamalai Jayaraj for closing comments.

**Annamalai Jayaraj:** We thank all the participants. We thank Bosh management for sparing time for the call and also providing us the opportunity to host the call. Have a good day.

**Steffen Berns:** Thank you very much, good bye.

**Moderator:** Thank you. On behalf of B&K Securities that concludes this conference. Thank you for joining us and you may now disconnect your lines.