Sector Conference Call: Efficient Natural Resources

Wednesday, 7th March 2018

Operator: Good day and welcome to the Johnson Matthey Efficient Natural Resources Sector Call. Today's conference is being recorded. At this time I would like to turn the conference over to Mr Martin Dunwoodie, Director of Investor Relations. Please go ahead, sir.

Introduction

Martin Dunwoodie

Director of IR, Johnson Matthey

Thank you. Good afternoon everyone. I'm Martin Dunwoodie, the Director of Investor Relations here at Johnson Matthey and I would like to welcome you to our call today. This is the second call in our series to give you more detail on our sectors and our strategy to deliver sustained growth and value creation. As such, we will not be giving a trading update as part of this call.

I am pleased today to be able to welcome Jane Toogood, Chief Executive for our Efficient Natural Resources sector, which will be the subject of the call. With that, I will hand over to Jane.

Efficient Natural Resources

Jane Toogood

Sector Chief Executive, Efficient Natural Resources

My Background and the Creation of Efficient Natural Resources Sector

Thank you Martin. Good afternoon, thanks for joining the call today. I am excited to talk to you today about our Efficient Natural Resources sector. I will give a brief introduction and then provide an overview of our activities, before talking through our strategy that will deliver out performance in targeted growth segments.

Hopefully you can see all the slides on the webcast and you can navigate through these yourselves as I talk. Then, at the end I'll open to Q&A.

So, if you would like to move to slide two and here you can see the cautionary statement. And now, moving through to slide three, so for those of you I haven't met or spoken to before, I just wanted to take a moment to introduce myself and give you my background.

I joined JM in February 2016. I've had about 30 years of experience in the chemicals industry, working my way across lots of different roles and running businesses in a broad variety of sectors, ranging from automotive paints, fine chemicals, pharmaceutical excipients and polymers. So I've covered many different value chains from specialty to more bulk materials.

Many of my roles have been based outside the UK, including eight years at Borealis based in Austria, before I joined Johnson Matthey. I am also currently a non-Executive Director at Victrex. As a former chemist who is precious about the impact science can have, I chose to move to JM because it's a company where science and technology are at the core of the business, giving competitive advantage and leadership and making significant impact in B2B markets and ultimately, of course, the consumers. Furthermore, JM has a great reputation with customers.

I joined JM as a Divisional Director for Precious Metal Products division and additionally took over the Process Technologies business from April last year when we created our Efficient Natural Resources sector.

A Key Part of the JM Group

If you move to slide four, here you can see that the sector accounts for around one quarter of the group's sales. It also accounts for around one third of the group's operating profit. This sector helps customers make more efficient use of scarce natural resources across a range of industries. We're helping customers solve complex problems as they transform critical resources, ranging from oil, gas, biomass and, of course, platinum group metals.

The move to a combined sector has allowed us to view the market at a wider sector level and given us a greater understanding of where our core competences may open up new potential areas of sustainable growth for the business. It has also enabled us to run our business more effectively.

Importantly, whilst we see exciting opportunities for growth in Efficient Natural Resources, our technical expertise and competences support growth across the rest of the group. This is not just in sourcing metal but, for example, because of our knowledge of materials and chemistry, we provide a starting point for many new technologies with that expertise transferred across the group.

Our skills in project engineering also enable us to support scale-up of various processes, be it in Clean Air, Health or New markets.

Structure of the Sector

Now if you move to slide five, this shows the breakdown of our business.

We currently operate in three sub-sectors: Catalyst Technologies, which comprises chemicals and oil and gas; Advanced Glass Technologies; and PGM services. Our catalyst technologies business makes up 63% of sector sales and addresses both the chemicals and oil and gas markets.

Chemicals

40% of the sector sales comes from serving chemicals markets. We sell our catalysts and license our technology to help customers process natural resources. For example, we sell both process licensing and catalysts to make methanol from coal, gas or bio feedstocks. Methanol is a key chemical feedstock made from coal or gas and we license both the technology and sell the catalyst to turn it into formaldehyde.

70% of formaldehyde is used to make resins, which are used in the wood industry to make adhesives for chipboard and plywood.

When we license technology, we work with customers to design a specific plant for them, integrated into their facilities and also provide services to help them start the plant up, once built. We get paid for our engineering work as it is done. With licenses we are typically paid in stages; as we begin our work and then finally when the plant starts up.

When we sell catalysts, we work closely with our customers in choosing the right product and in optimising its use in service. So, this can be the first fill of catalysts in a new plant or re-fill catalysts for existing plants, which typically occur every three to five years.

Oil & Gas

23% of sector sales come from the oil and gas market. Here our two main activities are, firstly, the supply of catalysts for the production of hydrogen, which is primarily used by our customers for the desulphurisation of other process streams. Secondly, we supply additives that improve the yield and reduce emissions from the FCC unit in the refinery, which is used in processing crude oil into downstream products.

For example, our range of INTERCAT FCC additives and additional systems are used in more refineries globally than any other FCC additive products. Our additives also reduce SOx, NOx and CO emissions from the FCC unit, making the refining process cleaner.

So across catalyst technologies we provide a range of products and services. As a result, different parts of our business move at different paces. Refill catalysts and additives are linked to ongoing plant activity. However, licensing and first-fill catalysts are linked to new plant builds.

In the medium term, we see little by way of new build in the major areas that we serve, such as oxo-alcohol and butanediol. Consequently licensing income is at the trough, with a limited contribution currently. And whilst we don't assume it is coming back near term, we are well positioned for recovery in this market.

Advanced glass technologies

Our advanced glass technologies business makes up 10% of sector sales and makes advanced glass materials and conductive inks, mainly for automotive use. For example, we supply the black obscuration enamel that is used in the edge of car windscreens. This is an attractive business, with a leadership position, and shares underlying technology across the group, such as material characterisation, testing, design and some engineering.

PGM Services

Our PGM services business makes up 27% of sector sales. This business is core to JM and exists primarily to support the PGM requirements of other JM businesses. We manage platinum group metals through their life cycle of refining, purification, product manufacture and recycling and are the largest secondary refiner of these metals globally.

Our Core Strengths Underpin #1 or #2 Market Positions in Almost All Our Key Segments

And now can we move on to slide six. And here you can see we have strong market positions. We operate in markets, which are highly fragmented, where success requires technology excellence. Our leadership is based on our expertise in materials characterisation, PGM chemistry, material design and surface chemistry.

We hold number one or number two positions in the vast majority of our markets, accounting for over 90% of sector sales. We have number one positions in many, including methanol, hydrogen, gas processing, FCC additives, PGM services and advanced glass technologies.

Our Strategy to Deliver Consistent Market Outperformance

So moving on to slide seven, our strategy is to deliver consistent market out performance. There are four elements to our long-term strategy, as shown on this slide, and I am going to take you through each of these in turn.

1. Maximise growth through differentiated investment by segment and region

Let's move to slide eight, maximising growth through deep understanding by segment and region. So here we have the first pillar of the strategy. There is a range of different growth rates for the markets we serve. The chart on slide eight shows the split of sector sales by these different market growth rates over ten years.

Over the medium term we expect the average medium term growth rate in JM's market segment to grow between 2-3% in catalyst technologies and advanced glass technologies, and low single-digit growth in PGMS.

We're selectively targeting our investments towards higher growth sub-sectors to enable us to grow our top line 1% faster than the average across our markets. For example, there's a shift in some geographies towards clean advantage feedstocks, such as natural gas, where we have a niche but relatively fast-growing position. We will invest to reinforce this position and to add to our offer, so we can leverage our growth in this attractive segment.

A further example would be growth in methanol in China and we are ensuring that we are well positioned to benefit from this in time.

2. Focused investment in R&D to maintain and extend technology leadership

On to slide nine now, focused investment in R&D to maintain and extend technology leadership. Technology and chemistry is core to our success and continued investment in R&D is key to our future growth. We've analysed our strategy by market segment, which included a review of our product pipeline.

This review led to us stopping over 30 projects where the products were not aligned with our strategic growth. We've transferred these additional resources onto projects developing step-change opportunities that align with our growth strategy.

For example, we are putting more resource into zeolite, a technology platform that underpins not only our sector but also other areas in JM, such as Clean Air. We were also able to help support the development of JM's battery materials with our expertise in nickel chemistry.

Of course, our R&D spend is subject to our capital allocation strategy and returns-driven criteria that JM has across the group. We are in the great position that with our leading technology, we have many areas to explore here.

3. Deliver additional value by focus on efficiency

Then moving on to slide ten, deliver additional value by focus on efficiency. And whilst we're excited about the medium-term growth opportunities, we have also got a great opportunity to drive efficiency across the sector. We have identified a range of initiatives, which can be characterised into three areas as shown on this slide; so, operational improvement, complexity reduction and organisational efficiencies.

Operational improvement first; we continue to invest in improving our manufacturing and supply chain operations, with detailed cost saving programmes in execution, which are already yielding results. For example, in procurement, a single change of a specified quality in a required material used in catalyst R&D has led to sizeable savings.

We have programmes of work looking at the performance of the PGM refineries. These address not only efficiency but also the tightening regulatory landscape consistent with JM's commitment as a responsible supplier. This is important in running a global refining network with refineries in the US, UK and China.

Secondly, complexity reduction; so a detailed analysis of our product and customer portfolio is now complete and, based on this, we have produced a detailed road map to deliver a materially simplified product portfolio over the next 24 months that we believe will meet our key customer needs better than today, helping drive growth as well as improving efficiency.

For example, in catalyst technologies we've identified opportunities to reduce the numbers of small, slow turn products. This, of course, also allows us to review stock levels and destock across areas, helping us reduce non-precious metal working capital.

Another example is in gas reforming; new technology in catalyst manufacture has allowed us to meet customer needs that previously required 16 products with a portfolio of only four.

Next, moving to organisational efficiencies, we have reduced head count by looking at spans and layers in the organisation. And this is part of the cost savings we are already delivering this year. This has also enabled faster decision-making through a simpler and flatter organisation, which has also increased our focus on our customers and R&D.

And, of course, as we have set out before, we expect cost savings of around £5 million in the second half of this year, related to our restructuring programme, which will give an annualised benefit of £12 million.

Rolling all of this up, our focus on efficiency across the Sector will help us deliver margin expansion over the medium term, growing operating profits 1% ahead of sales growth each year.

4. Explore long-term growth opportunities by extending our capabilities into adjacent markets, geographies and technologies

So if you move now onto slide 11, exploring long-term growth opportunities by extending our capabilities into adjacent markets, geographies and technologies. And the beauty of the creation of Efficient Natural Resources is that it opens up these wider opportunities for growth by looking at the nature and the value of what we're bringing to customers and markets.

Our core competencies should enable us to expand our activities into adjacent markets, geographies and technologies. We win now because of our understanding of where the depth of our core science and technology in those areas, such as materials characterisation and design, pgm chemistry, metallurgy and industrial engineering gives us a differentiated capability. And our ability to translate that capability into value for our customers and attractive market segment leadership positions for ourselves. And these are the reasons why I'm confident we'll be successful in the future.

We have a list of opportunity areas that we are systematically working through and matching our fit to. Some of these are shown here on slide 11, which I presented at the Capital Markets Day last year, but this process of course will take us some time. Having a good candidate list of opportunities, however, gives me confidence in the longer-term growth trajectory.

What the Future for Efficient Natural Resources Means for You

So moving to slide 12 and to summarise then on what this means to you, what we'll deliver. Over the medium term, our strategy will deliver out performance to our markets; specifically sales increasing 1% above growth in the markets in which we operate, with the exception of PGMS, which we will grow at low single digit over the medium term.

In addition to this, we will grow operating profit 1% point ahead of sales growth, driven by our focus on efficiency as I set out earlier. We would expect to start delivering this medium-term outlook from the next financial year.

Longer term there are some very exciting opportunities for us to capture and I look forward to discussing this in the future with your all.

So, to wrap up, thank you for listening today and I'm now happy to take any questions.

Q&A

Operator: Thank you. Ladies and gentlemen, if you would like to ask a question, please signal by pressing star one on your telephone keypad. If you are using a speakerphone, please make sure your mute function is turned off to allow your signal to reach our equipment. Again, star one to ask a question. We will pause for just a moment to allow everyone an opportunity to signal.

We will take our first question from Mr Adam Collins from Liberum; please go ahead sir.

Adam Collins (Liberum): Hello, Jane, and thank you for the presentation. I had a couple of questions please. At the 2015 Investor Day, JMAT talked about the commercialisation of new technologies in process tech and they mentioned VCM and MEG technologies. And I just wonder if you could give us an update of what became of those?

And then also you've been talking recently on the precious metal services side, the PGM recycling, about a new plant in China in due course for the processing of spent auto catalysts. I wondered if you could update us on that.

Jane Toogood: Okay, Adam. Let me start a little bit with the plant in China. So, that new plant in China has now started up and we've been commissioning that, of course, over time. And the volumes of material that are being processed in that refinery – it's in a place called Zhang Jia Gang – have been increasing as that phased start-up is completed.

If you look at the market itself, the sort of secondary PGM recycling market in China is really very early stages, so I would describe it as a nascent market. So it will be some time before that refinery is planned to make a significant contribution to earnings, but, of course it's a very important part of supporting the whole JM group with metal supply in China.

Now then, I'm just coming back to your second question there and just wanting to talk about those technologies. Both of those are in – well, this is in commercialisation now, but these new technologies take time and, of course, first customer win takes time. And I think that's probably all I'd want to say about that now, if that's okay, quite commercially sensitive information, as you will understand.

Adam Collins: Okay, thank you very much. Just on the first one, on the China recycling plant, is it processing jewellery scrap at this stage, or is its principal target end-of-life auto catalysts and primary?

Jane Toogood: So this is targeted really as an industrial refinery, okay? And more, I probably wouldn't comment but it's really targeted as an industrial refinery.

Adam Collins: Right. So that includes chemical catalysts?

Jane Toogood: Anything that's really industrial. But I don't think – we are thinking about it in the industrial space really in total, so anything that would be industrial.

Adam Collins: Right, okay, thank you.

Operator: If you find that your question has been answered, you may remove yourself from the queue by pressing star two. We will now take our next question from Alexandra Thrum from Morgan Stanley; please go ahead.

Alexandra Thrum (Morgan Stanley): Hi Jane and hi Martin, thanks for taking my questions. Just the first one is on the catalyst technologies. Are there any catalyst technologies that you are not present in that you would like to grow in, either organically or inorganically?

And the second question is, a number of energy companies have pointed to increasing capex in the chemicals and refining space. So, have you seen any evidence of this and do you expect JMAT to benefit from this?

Jane Toogood: Okay, so good question, thanks Ali. So growth, or are there areas where we are not, where we might want to grow? Well, we aren't operating in every sub-segment across the whole of the catalyst technology space and maybe there are some areas where we would like to grow more. And, of course, one can do that through many ways.

But I think we have very good positions in the segments that we're in. And I'm going to lead on to your next question there, when people have talked about capex, we have great positions, but in some of those segments at the moment, if you look at capex spend, some of those are currently over-supplied. So we don't expect capex spend in those particular sub-segments. So, I think that answers both of those questions at once, but we don't expect huge capex in some of those segments where we're strong, like oxo-alcohol, butanediol, for example.

And if you look at the cost across that whole catalyst technology space, I think we're very pleased with the leadership positions we've got. And, as I said, we're looking generally at growth opportunities where we can build adjacent technologies and build on our competences. So, we'll be looking at any opportunity that does that.

Alexandra Thrum: Thanks. Just one more question if I can, has the refill cycle normalised in China? And, if not, should we expect a pickup in refill activity this year, or next?

Jane Toogood: So, I think if you look at the Chinese markets, again, if you look at the specifics, some of the specific sub-segments are quite over-supplied at the moment. And so you might expect, as – when a market is very over-supplied, there's a lot of capacity there, there's not so much pressure on the catalyst performance.

As the demand picks up, then there's more pressure on the catalyst performance and then they tend to refill at a slightly more frequent rate. Now, if I look at what we're saying about what's going on with the markets, we're not yet expecting the – a bigger – a substantially bigger trend of growth, at the moment, in refill catalysts. They did grow quite well in the first half overall, but I don't think there's anything fundamental in terms of particular uptick in the market.

Alexandra Thrum: Thanks Jane.

Operator: Our next question comes from Neil Tyler from Redburn, please go ahead.

Neil Tyler (Redburn): Yeah, hi Jane. A quick one from me, firstly on the operating leverage you expect in the business. I understand that the falling away of the licence income made a big difference. But when we look back, particularly on what was process technologies, the sales declined sort of mid to high single digit, the operating profit fell more like 30% on a constant currency basis. And so given your outlook to grow operating profit of 1% faster than sales, I just wondered if you could expand on why there isn't more operating leverage in the business on the way back up.

And, more specifically, within catalyst technologies, it's my understanding that there's a sort of potentially major regulation on the horizon in the fuel oil industry, and removing sulphur from fuel oil, IMO 2020. And I wonder if you are able to sort of scope or scale that as an opportunity for the Catalyst Technologies business, be it either directly via the sale of catalysts, or into FCCs or indirectly into the hydrogen industry. If you can sort of talk a little bit around that and what, if anything, is included in your sort of medium-term growth projections around that regulation, thank you.

Jane Toogood: Okay, Neil. So, just in terms of what we've talked about and the strategy going forward, the first thing to say, of course, is the licensing business is splatted in the trough at the moment, as I said before. And what we've got here, as I said, is a very structured, robust plan that will improve our efficiency over the next couple of years, so it will lead to that operating profit increase. And I think it's important to know that those are structured, planned and will be brought through in a non-disruptive way to our customers. Our aim is to keep serving our customers in the best possible way as we do today.

Your comment on the regulation changes – and I wouldn't say specifically about any specific regulation change and what it might do to our business – but what I can say is in the catalyst technologies area, what we are really good at is using our competence actually to design catalysts that solve problems. And environmental regulations or regulatory changes are things where we often have solutions that can help customers by pulling on different bits of expertise.

Now I'm not going to comment on this particular piece of regulation, but generally speaking I think it would be fair to say that environmental regulation is something that actually one should welcome anyway, for the world in general, but it's actually a good thing for a business like ours, which relies on science and expertise to solve problems. So, where there are problems that might be being posed for customers who have to meet those, then we can obviously help.

And I think if you – I think that's probably – I hope that's answered your question. Is that clear enough?

Neil Tyler: Yeah, well, perhaps – yeah, I mean, it helps obviously but perhaps I can ask, in terms of the catalyst that you actually sell, do you – and that help – you refer on your website to the ability to help with desulphurisation. Is that referring specifically to the sale of catalysts into the hydrogen industry or is that talking about the SOx reduction that you mentioned in your introductory comments? I.e. do you sell catalysts that remove sulphur actually within the FCC?

Jane Toogood: Yes, yes, yes, so – yes, so we can help with sulphur removal in various different processes and so in both of those, so yes.

Neil Tyler: Okay, that's helpful, thank you.

Operator: Our next question comes from Andrew Stott from UBS; please go ahead sir.

Andrew Stott (UBS): Yeah, good afternoon Jane and Martin, thanks for the presentation. There are a couple of things I wanted to come back to. So slide 11, and I think it was a slide you also put up in September but it's the comment around new natural resource landscape and specifically the tag line, 'exploring new market spaces.'

Can you just sort of dive into that a bit more, in a bit more detail? And I'm trying to understand whether that means organic or M&A or perhaps either. So any flavour of perhaps things you're looking at that you may or may not want to reveal.

And the second question was sort of more looking at the current trading environment. I just wondered if you could shed any light on why platinum had done so well, considering what diesel data looks like. Thank you.

Jane Toogood: Okay. So thanks Andrew. I think I'm not going to surprise you actually by not giving you too much detail on bits of places where we're looking. But I think we've got lots of opportunities of places we can look at in that natural resource landscape to take our various competences to other places.

I mean, for example, at the Capital Markets Day, we gave one of the examples, which was looking at the waste to liquids, effectively. That particular piece of technology where we recently won a prize actually, the Institute of Chemical Engineers. We worked jointly with BP on this and it's the technology taking away some of the waste to liquids. It's a brilliant piece of technology. And this is one way of using a new, I could say is that a natural resource, but I would argue that that's a resource that could be extremely useful for the world if it were used properly.

So that's an example of something that we have been looking at, which is in the public domain. Now, there is quite a long list of things where we could apply our technology to do more, but I don't really feel able to talk about those at the moment, which I'm sure you will understand.

It is also true to say that whilst we've got lots of things we can do in terms of the existing business and areas to look for growth there, of course, we will continue to assess M&A opportunities. And we consider those against the usual capital allocations and returns criteria. And those sorts of M&A would probably be bolt-on type of things. So I hope that's enough colour for that without being able to say too much detail because of the commercial sensitivity.

Andrew Stott: No, that's useful, thanks.

Jane Toogood: And then you come to platinum trends. I'm just wondering what trend specifically you're wanting…

Andrew Stott: Well, I suppose the observation that pricing has held up very well – more than held up, it's done very well. And yet we've already seen a pretty much 800-900 basis point drop in diesel market share. So I was just wondering what you were seeing on the ground on the platinum market?

Jane Toogood: Okay, well, platinum prices remain pretty flat actually. Palladium prices have increased a lot. I'm sure you'll know, we publish a piece of market research regularly; I think we last published in February. And so we do give some external information about what we see here in terms of trends. And I think the thing about it is, platinum and palladium, they are used in the industrial context and they are not a bulk material, clearly. They are used in very small quantities in catalytic converters and in other processes.

And so, if you look at the sort of supply/demand story, there are some very fundamental supply and demand dynamics that are going on there that means the prices are where they are. And I think there's quite a good piece of information on that on the website in this February review, if you have a look at that, okay? So I think you can't take a growth look at this. They are very precious materials in fact and they need to be treated as such. And therefore it's a very different supply/demand picture for those materials to the overall diesel picture.

There's been quite limited investment in new primary PGM production in the last few years, and so recycled PGMs will become increasingly important, I think, as a raw material source. But I don't know about comments, particularly on the path, but I think that's what the dynamics say. You can't translate that growth dynamic over to a material like platinum.

Andrew Stott: Okay, thank you.

Operator: We will take our next question from Chetan Udeshi from JP Morgan, please go ahead.

Chetan Udeshi (JP Morgan): Yeah, hi. Thanks for the presentation. A couple of questions; first one is you mentioned that you don't see immediate recovery in some of your segments that you operate in, but would you say on a more broader sense there is some sort of recovery in the market? Because a few of your catalyst competitors or peers like Clariant and WR Grace seems to be seeing some sort of inflection in demand from the second half of last year. Is that something consistent with what you guys see in your order book or in terms of discussion with customers as well?

And second, it would be useful to just remind us the whole dynamic around why the licensing income had a sort of a tail-off over the last few years and where do we go from here. So is the business model more to sell direct catalyst versus licensing or that can change in the future? Thank you.

Jane Toogood: Thanks Chetan. Right, so let's start with the beginning of that, where you ask about uptick in the market and so on. So, I mean, you were talking about comparisons, you were talking about some other market peers. Actually if you look at the markets they are quite fragmented. If you go into the sub-segments, it is quite fragmented. And we don't operate in the same sub-segments as the people you mention there, so it's quite difficult to compare. Remember, some of our peers also don't have a licensing business.

Obviously, we are maintaining our leadership positions in all the markets in which we operate. We don't expect at the moment an uptick in the medium term in our licensing business and that's really because of the areas that we are operating in, where there is a large overcapacity and that was being built over the last – over the previous few years. And until that capacity is used up we won't expect there to be new plants built.

And if you – so then, I think that really deals with that. But basically that's why we're saying – if you look at our overall demand projection, we're saying 2-3% over the medium term. And that's what's behind that. Yeah, but particularly if you look at that overhang of capacity again, and particularly oxo-alcohols, butanediol area and that overcapacity is actually historically high levels, you know. If you look back over the past it's historically high levels, so it will take some time to work through that. Does that help?

Chetan Udeshi: Yes. And on licensing, is the business model changing or just a reflection of, as you said, overcapacity in some of your segments, which is resulting in a lower licensing income? Or are you pro-actively moving away from licensing as a sort of a business model, just structurally speaking, into the mid to long term?

Jane Toogood: No, there's no change there. And actually, I mean, really, when you look at our total portfolio in the sector, licensing is really only a very small part of the portfolio. And so, in terms of impact there, it's not massive, if you look at the overall sector performance. So as a sort, there's no change in the way we're going about the business in that sense and we continue to offer those same services and technology insights to our customers. But fundamentally, it's actually really a relatively small part of the portfolio.

Chetan Udeshi: Understood. And maybe a separate question around, just you – if I remember correctly, you had almost a £150 million of working capital increase in your PGM business I think in the first half of the current fiscal year. And none of your peers seem to have seen that level of increase. So, can you just maybe – I don't know whether it was related primarily to PGM or was that increase associated with some of the auto-cat side as well. But just in terms of understanding the reasoning behind that working capital and how competitively – in terms of competitor dynamics how does it help you, if at all? Thank you.

Jane Toogood: Okay. Let me try and explain that. So, when you look at the precious metal inventory – so the precious metal inventory, it can vary significantly because it's a function really of the whole dynamics of the precious metal market, our customers' choices and the demand from the JM businesses, okay? And we offer our customers a unique set of services, so included in that is sourcing metal, storing metal, as well as refining the metal.

Now when metal prices are higher, and if the market gets tight with a lower liquidity basically, we carry more inventory. And we have to carry more inventory so we can service our customers effectively and also the JM group effectively. And as we are the world's largest refiner of PGM, so Platinum Group Metals, this will affect us more acutely than some of the other players around. So hopefully that answers that question.

Chetan Udeshi: Thank you.

Operator: As a reminder, ladies and gentlemen, star one to ask a question. And we'll take a question from Sebastian Bray from Berenberg; please go ahead.

Sebastian Bray (Berenberg): Good afternoon and thank you for taking my questions. I would have three please. The first is on the longer-term commercial terms and margins that can be made in platinum refineries. Have you seen any potential pressure on margins from, in particular, in more readily available areas of jewellery scrap and also end-of-life auto catalysts? And how do you see this developing in the long term?

The second question is if you could give perhaps a bit more granularity on what exactly the faster areas of growth are? And, in particular, what areas are going to enable you to grow operating profit faster than sales? I think if I look at the structure of the catalyst sector as a whole, generally speaking the WR Grace's and those exposed to the refining sector tend to make the highest margins. Is this an area you are looking to get into and maybe make refinery catalysts as well as additives?

And my third question is on the best lead indicators for potentially looking at the top-line development of this segment. When I think of this I think methanol and then there's a bit of a gap. I was wondering if you could perhaps indicate any other key chemicals, which we could follow to track top line development. Thank you.

Jane Toogood: Okay, right, let's try and take those off one by one; I hope I've got them down properly. So longer term commercial terms and margins in the refinery, I mean, I can talk a bit about where I see the demand for platinum and palladium going in the future, which may give a little bit of a clue. I think palladium is going to continue as an area of strong demand and probably no end in sight for that deficit of supply compared to demand. And our market research is showing that and again I would refer you back to the website for that.

Platinum, probably a little bit less buoyant, although still rising demand from the HDD sector, which should compensate for the fall in demand from LDD. And so that gives you maybe a little bit of backdrop and market context to what might go on there. I can't give details, of course, on the specific margins that we take in our business because we don't publish those.

Then you talk about – you asked about areas that have faster growth than other areas, and, of course, some of those areas are in early stage, so I don't want to share those thoughts. I mean, I can give you one example. I referred a little bit earlier to bringing different feedstock to chemical solutions to the market and we've got some growth areas there, which is – so, for example, I think this example of waste to liquids is quite interesting, using a different feedstock, targeting different products. And in that situation we are looking at technology and the catalyst. In fact, we have developed with BP this technology and the catalyst, so that would be a good example of that.

FCC additives have been growing very well, so that's quite clear. I can't really say other higher growth targets or areas that we're targeting because I think you'll understand that that is quite commercially sensitive.

Then, in terms of best lead indicators to give to yourselves, I really can't think of anything I could give to you there. Let me just – I may have to reflect a little bit further. I mean, you could look at what's going on. Obviously methanol would be one. You can look at what's going on in hydrogen and ammonia market, formaldehyde market if you want to understand about JM. I don't know that's giving you necessarily what you might want in terms of an overall chemicals piece, if that's what you're asking. But, of course, there is also plenty of market research and there are some great market research houses that will give you an overview of the total market. So, I hope that answers the question. I hope I've understood it properly.

Sebastian Bray: That's helpful, thank you. If I could just ask a quick follow up on Advanced Glass Technologies, who are JMAT's competitors in this segment?

Jane Toogood: So, in that area the competitor would be people like Ferro.

Sebastian Bray: How do you spell...? F-e-r-r-o, or – did I hear that correctly?

Jane Toogood: Yeah.

Sebastian Bray: Thank you very much.

Operator: We will now take a question from Adam Collins from Liberum; please go ahead sir.

Adam Collins: Jane, hi, I had just three sort of quick follow-ups in relation to cash flow and working capital. So could you tell us what the mid-term R&D to sales and capex to sales is likely to be in this area? I think in the past you said R&D around 5%, but I'm not sure on capex.

The second one was on the cash flow generation, given that you're saying that licensing is likely to remain subdued. Historically that's been a source of cash because of advanced payments, so I wondered if you could just comment on that.

And then the third thing is, you are in the midst I think of a sort of global SAP roll out, a new enterprise system. And I think in the past there had been a sort of expectation in the group that could provide some potential around the PMP activities. Now I know they've been split into two divisions now but I wondered if that offers some potential around the manufacturing side of your business, looking forward.

Jane Toogood: Okay, so the R&D percentage, so you're absolutely right, we've talked before about 5% of sales to R&D spend and that's indeed the sort of level we'd expect to spend. I think, what I was trying to explain a little bit in the presentation is that we've been taking a really good hard look at the portfolio and making sure we're really investing in areas for step change growth there and making sure it meets with our strategy. And, I mean, the beauty is we're not short of ideas to do that. And so we've been making some quite careful investment decisions about where we're putting that.

We follow a very structured NPI process as well. So we have a whole bunch of stage gates that things need pass through before they move to the next stage and get the next tranche of funding. So that's the way we deal with the R&D.

I think for the capex ratio we don't normally publish that but what I can say is, of course, we do have a set of criteria that we need to fulfil for any capex spend. And there naturally the group will look at the best places to place capital across JM for the best returns for investors.

So, I mean, I don't think that will surprise you the answer but that's the whole – that's what we do with the capex. So we don't have an allocated percentage in that sense. It's about the best investment that we can make for the group.

Now, then the global SAP roll out, I mean, it is an SAP roll out that will come. In terms of efficiencies for the manufacturing, actually the efficiencies in our manufacturing comes a lot from our science, to be honest. So what we're doing in our manufacturing space, it's quite complicated chemistry and particularly in that whole refinery area.

We are doing some quite complicated chemistry in there and so an SAP system isn't something that really helps you with the complicated chemistry. A lot of that efficiency comes from deep science and deep understanding of how the different processes can interact with each other and how you might want to flow materials through. So, the SAP system isn't really a way to get to the chemistry in that sense.

And then I think the last question you asked there was – I may have lost one of those questions there. I've got…

Adam Collins: Yeah, the cash flow issues given that licensing has generated cash through advanced payments historically. Should we remain cautious around the cash flow generation of the division because of that?

Jane Toogood: So, I think, I mean, we can't comment really about – all I would say is cash remains a focus for the whole group, so I think that's really what we do. And I can't give any further indication that might amount to a trading update. I think we'll talk a bit more about that at the year end probably.

Adam Collins: Okay, thank you.

Operator: We will now take a question from Andrew Stott from UBS; please go ahead.

Andrew Stott: Oh, sorry, just a follow-up. To go back to Neil's question on operating leverage, I'm just still not clear why we wouldn't get a bit more, or whether it's just conservative guidance. Because, I think you said, Jane, £12 million of cost savings. So first of all I wanted to check on the chronology of that, please. I missed when that will be completed by.

And then if you bear in mind you're going to have volume growth of 3-4% as per your September comments, you've got those £12 million in cost savings, plus the efficiencies you are doing across your three refineries, as you mentioned earlier. I'm sort of thinking that you can do a lot better than 1% above your volumes. So, is it fair to say you are naturally being conservative – not that that's a bad thing?

Jane Toogood: Well, so let's go through it. So firstly, I mean, the licensing we're not projecting to come back, all right? The cost saving…

Andrew Stott: But, sorry, just interrupting, you are not expecting it to get worse either, are you, or are you?

Jane Toogood: No, no, we're expecting it – as I say, it feels like it's pretty much in the trough so I'm not expecting it to come back midterm. In terms of cost savings and this whole – basically cost savings is one way of putting it but we've got a whole efficiency programme here going on and this is something that you do. One thing we don't want to do is to disrupt our customers and to have any impact on the way that we do business in the markets. Because with these sorts of leadership positions you need to take good care of your customers.

Now, that means we've got a very planned, very structured approach and we've got a couple of years of cost saving programme work going on. So it's not something where you push a button and bingo, out comes some money. Life's not like that, I'm afraid.

So in terms of chronology, if you like, the sort of cost savings programmes and efficiency programmes we've got will last over a couple of years. And what we also have to make sure that we're doing, is we have to make sure we then invest as well for our future and invest in growth, and also invest in sustaining our position and make sure that we're meeting, ourselves, all the new regulatory things that will come up, as they indeed will. So there is also an element of reinvestment back into the business.

So, I think that's important to take into account when you look at the whole perspective and that's what [inaudible] exercise this is. So it's based on a very structured plan, taking into account the needs of the business, the needs of our customers and making sure we can do this in the way that is not disruptive, but is indeed very positive and builds a strong sustainable business.

Andrew Stott: Okay, thanks.

Operator: We'll take a question from Charles Wade from Citi; please go ahead.

Charles Wade (Citi): Hi Jane, just one quick question. In the past, coal to chemicals was trumpeted as a source of growth and obviously we've seen a down turn in expansion in that segment. But last year we saw some resumption in activity. And we were just wondering if you still had exposure, or positive exposure, to grow the capacity there? Specifically Chinese coal to chemicals.

Jane Toogood: Yeah, I mean, as you know, we do have leading technology in that coal-to-chemical space and we do therefore – we are therefore positioned in that. It is one part of the total business in the whole portfolio of things, so it's not something that's going to make a massive difference on the scale of the whole business. But yes, we have leading technology in that area and coal remains an important feedstock in China.

Charles Wade: Brilliant, thanks.

Operator: Again, star one to ask a question, and we will have a brief pause while we allow people an opportunity to signal. It appears there are no further questions at this time, so Miss Toogood, I would like to turn the comments back to you for any additional or closing remarks.

Jane Toogood: Okay. Well, in that case, then I guess that will bring us to the end of the call. If you've got any further questions that we haven't had time to cover, please do get in touch with the Investor Relations team, with Martin and the team. And a transcript of the call will be available to download from the website at some point tomorrow.

So with that I thank you all for your time and look forward to speaking to many of you in the future. Thank you.

Operator: Ladies and gentlemen, this concludes today's call. Thank you for your participation. You may now disconnect.

[END OF TRANSCRIPT]