

# Johnson Matthey Plc Presentation of Results for the Year Ended 31<sup>st</sup> March 2021

Thursday, 27<sup>th</sup> May 2021

# Welcome

# Martin Dunwoodie

# Director of Investor Relations, Johnson Matthey

Good morning, everyone. I'm Martin Dunwoodie, the Director of Investor Relations at Johnson Matthey. Welcome to the London Stock Exchange this morning and our full-year results presentation. Unfortunately, we don't have a live audience here today, but hopefully we will be able to see each other soon. We have a presentation followed by Q&A, as usual, with our Chief Executive Robert MacLeod, our Chief Financial Officer, Stephen Oxley, and our Sector Chief Executives for Clean Air and Efficient Natural Resources, Joan Braca and Jane Toogood. And with that, I will hand over to our Chief Executive, Robert MacLeod.

# Introduction

Robert MacLeod

CEO, Johnson Matthey

Thanks, Martin and good morning, everybody, and I hope you're all very well.

# **Robust results**

To start with, I'm very pleased that we have today delivered a robust set of results. In the context of a global pandemic, where some of our key end markets saw significant volatility, this is a testament to the efforts of everyone across JM. After a challenging first half, we saw a strong recovery through the second half and it's pleasing to report that this momentum has continued into the current year. More so than ever, over the last 12 months we've worked to support each other, keep everyone across JM safe and well, while continuing to deliver for our customers and driving significant changes across JM, which will enable growth going forward.

As the world moves at pace to solve urgent challenges such as addressing climate change, improving air quality, enabling the transport and energy transitions, decarbonising chemicals production and creating a more circular economy, JM has never been more relevant.

At our core is our world-class expertise in metals chemistry and we are leveraging that to develop sustainable solutions to solve these challenges. We have clear strategies for our businesses. We will capitalise on tighter legislation in the coming years to grow our Clean Air business, and Joan will also detail the levers we can pull to ensure that we will generate at least  $\pounds$ 4 billion of cash in the coming 10 years as Clean Air's markets mature.

We're also strongly positioned to win in a net zero world and are well positioned to benefit from the push for decarbonisation and increase circularity. This will drive growth in Efficient Natural Resources, as well as in Battery Materials and Hydrogen.

# A more focused and efficient business

However, to manage the transition in our end markets successfully, our business needs to be agile, to take advantage of the fast-changing world around us. That's why we're creating a more focused and efficient business and promoting a high-performance culture to set us up for success. This will save costs and drive clear accountabilities. And at the same time, we're

actively managing our portfolio to ensure that we focus on businesses where we have clear competitive advantage. Across all of JM, we're really excited to be playing our role in a transitioning to a more sustainable future, helping our customers achieve their ambitions. We've also recently announced our own new sustainability goals, as I'll explain on the next slide.

# Ambitious targets

As you'll see throughout this presentation, we have a growing number of solutions to help achieve our vision of a cleaner, healthier world, but at the same time we need to be doing our bit, by decarbonising our own operations and supply chains. We've set ourselves some ambitious targets and we've committed to being net zero by 2040. Alongside this, we've outlined science-based targets, an absolute reduction in Scope 1 and Scope 2 greenhouse gas emissions of at least 33% and Scope 3 greenhouse gas emissions of at least 20%, both by 2030.

These will be challenging, but by moving to renewable energy, improving our plant operations to minimise processed greenhouse gases, and working with our supply chain partners to reduce their emissions, we can achieve this. And furthermore, through our asset renewal programme, we'll be reducing our dependence on natural gas by switching into alternative energy sources such as hydrogen as they become available.

And it's pleasing to see that our efforts are being increasingly recognised by our stakeholders. And I'll talk more about our strategy shortly, but first let me hand over to Stephen to introduce himself and give you the financial highlights. Stephen.

# **Financial Highlights**

Stephen Oxley CFO, Johnson Matthey

Thank you, Robert and good morning, everyone.

I joined Johnson Matthey in April, which was straight after year-end, so you can imagine it's been a pretty hectic few weeks. But I do know JM well from my time at KPMG, when Johnson Matthey was previously a client. And what's great about JM, which is really why I'm here, is not only the opportunity to help transform the company but also to genuinely provide solutions that will help transition to a more sustainable, greener and healthier world.

## **Key priorities**

I'm going to start by looking at my priorities for the company. Firstly, it's ensuring that JM just executes on the basics, doing what we say we'll do, continuing to improve our controls, our systems, delivering efficiencies and improving our cash generation.

Secondly, we need to move quickly to commercialise our great science and capture value from it. That means JM being more focused, more disciplined in our investments, and being more agile and moving at pace to drive growth. And we'll do that with a strong grip on our balance sheet and a clear, disciplined allocation of our capital to prioritise investments in growth, both organic and bolt-on, and to continue to pay a sustainable dividend, after which we'll consider the return of any excess capital.

# A year of two halves

Let's begin by looking at this year's financial highlights, where we've delivered a robust performance throughout the pandemic. It's been a year of two halves. Following a challenging first half, our end markets recovered strongly, particularly for Clean Air and helped by higher precious metals prices, and our second-half operating profit was up 30%. This momentum has continued, with a strong exit rate into the current financial year, where we're performing well.

We're continuing to run our businesses better. Our efficiency initiatives are on track, delivering £66 million in the year, with more to come from our manufacturing footprint. And despite higher precious metals prices, we've delivered significant reductions in working capital and generated improved free cash flow of £305 million. We ended the year with lower net debt, at £775 million, down by over £300 million from last year. And we've proposed a final dividend of 50 pence per share, making it 70p for the year as a whole.

## Sales and underlying operating profit down 5%

Now let's into the financials in more detail. Starting with sales, which were down 5% over the full year for the group as a whole. The impact of Covid-19 was mostly felt in our first half, and particularly in Clean Air, where sales were impacted by customer shutdowns and by weaker demand. In the second half, demand recovered strongly, with total sales up 11%. And I'll go through sales for each of our sectors in detail shortly.

But first, group underlying operating profit, that was down 5% for the year. The impact of Covid-19 was partially offset by the benefit of higher metal prices. We incurred higher corporate costs, that include the impact of bonuses payable this year compared to a very low base for 2020. Again, second-half profits were significantly stronger, up 30% year-on-year, with a strong recovery in Clean Air, as well as the benefit of those metal prices.

## Clean Air business most affected by pandemic

Turning to our sectors in more detail, our Clean Air business was most affected by the pandemic. We saw demand weaken and our customers temporarily closed plants, which led to a weaker – a significantly weaker first-half performance. Whilst there's been volatility in demand, we saw a strong recovery in the second half, with sales up 16% over the previous half-year. And for the year as a whole, sales were down just 7%. In Light Duty, we outperformed global auto production, due to increased value from tight legislation – tighter legislation in Europe, in China and in India. And in Heavy Duty, the Americas and Europe performed in line with the depressed market, whereas in Asia, we outperformed, benefiting from the value uplift, driven by China 6, which is now about 25% of the way through its adoption. Looking at US Heavy Duty and the Class 8 truck cycle, where JM is the market leader, we did begin to see that market recover in Q4, with continued strength today.

The bars on the right-hand side of the chart here show the quarterly progression of Clean Air sales. You can see the full impact of the pandemic at the start of the year, with a strong recovery from Q2. The business has had a good start to the current financial year, with April showing a strong performance and with continued strength in end-market demand. However, we are seeing the auto supply chain struggling with a number of shortages, including microchips, so we do expect some volatility through the course of this year. Overall, Clean Air operating profit was down just 8% year-on-year. And the work to consolidate our

manufacturing footprint is well under way, and with volume recovery, our second-half margin of 13.6% is moving back towards pre-pandemic levels.

#### Efficient Natural Resources sales broadly flat

In Efficient Natural Resources, sales were broadly flat. The two main drivers here were a strong performance in PGM services, offset by a weaker performance in catalyst technologies. In PGM services, our refining and trading businesses benefited from higher average PGM prices that made a net contribution of around £80 million, as well as benefits from a more volatile price environment.

In CT, we saw good sales growth in our first fills business, as new hydrogen and ammonia plants came on stream. Recurring catalyst sales were lower. Here, our methanol catalyst business declined in comparison to a strong performance in the prior year, with the phasing of customer change-outs. And some of our end markets were impacted by weaker demand, affected by the pandemic, particularly in formaldehyde and additives.

In Licensing, sales were also down as we saw delays on new plant builds, also because of the pandemic. However, we have a strong pipeline of projects and we signed 10 new licenses in the year, thereby locking in future catalyst sales.

We've also started to recognise our first income from our new technologies, including catalysts used in the production of sustainable jet aviation fuel and from low-carbon blue hydrogen projects, both of which point to a really exciting future. Underlying operating profit for the sector grew by 6%, primarily as a result of the metal price benefit in the year. And our margin expanded to 25.4%.

#### Health

Moving now to Health. Despite Covid, sales grew in both our generics and innovator business. This included sales from our API product pipeline of around £60 million. In generics, sales grew 11%, primarily driven by new agreements for the supply of opioid addiction therapies. Our innovators business grew 3%, as we saw increased demand from Gilead, where we supply the active ingredient for Trodelvy, used in the treatment of triple-negative breast cancer.

#### New Markets sales down 6%

In New Markets, sales declined 6%. In fuel cells, we continue to see strong demand, with sales up 24% in the year to £41 million. Growth was driven by increased demand from our automotive customers, particularly in Asia. Sales to auto customers have now doubled since the prior year and now represent around half of all fuel cell sales. We expect further rapid growth in fuel sales and Robert will talk further about our recent wins.

We also saw sales growth in life science technologies, a business that provides advanced catalysts to the pharmaceutical and agricultural chemicals markets. New Markets sales were offset by lower sales in battery systems and medical device components, which were both impacted by the pandemic. Our sales decline includes the disposal of two small non-core businesses in the second half. And I've included a note in the results release to say that we're making some small changes to our reporting segments for FY22. These will provide you with greater transparency of our New Markets' green energy businesses and, separately, our value businesses, which are non-core as we continue to focus on our growth opportunities.

# **Operating performance**

And as we move further down the income statement, finance charges were broadly in line with the prior year. We've worked hard to reduce the amount of metal required within our business, and this is now starting to come through in lower finance costs. The underlying effective tax rate was 16.3%, slightly higher than last year and affected by the mix of profits. Underlying EPS was down 9%, reflecting the lower underlying operating profit. Our reported or GAAP operating profit was impacted by £171 million of impairment and restructuring charges, associated with the initiatives to transform JM into a more effective and efficient company. £91 million of the charge was for non-cash asset write downs. The majority of the spend relates to the restructuring of Clean Air and the rationalisation of its manufacturing footprint.

Our efficiency initiatives are on track. Our active programme delivered £37 million of benefit this year, with annualised savings of £110 million expected by the end of fiscal '24. And these are in addition to the previous programme that is now complete.

Some of you will know that I have a strong dislike of perpetual exceptional restructuring charges, so only expect these when we announce a major change to our operations.

Our balance sheet is strong with net debt to EBITDA of 1.2 times, slightly below our target range of 1.5 to 2. We've delivered this great outcome by further reducing working capital, with our refining backlogs now running at historically low levels.

Looking at precious metal in particular, our actions reduced backlogs by  $\pm 581$  million before the impact of increased volumes and higher metal prices, leaving us broadly flat for precious metal working capital overall. We've also made good progress with our non-precious metal working capital, that was down by  $\pm 196$  million, although some of this is timing and will reverse. The value of our metal leases, which are held off balance sheet, remained flat.

## Low to mid teens growth expected for underlying operating performance

So looking at FY22, assuming our end markets remain robust, we expect to deliver low to teens growth in underlying operating performance at both constant currency and assuming constant metals prices. Current exchange rates indicate a headwind of around £25 million to operating profit. And then on metal, we've indicated that should high prices remain, especially for rhodium and palladium, we would expect a significant additional benefit of up to £120 million. Of course, sustained higher metal prices will also result in higher working capital and net debt, which as Joan will describe in a minute, we are working hard to moderate and limit the impact on our cash flow.

## **CAPEX** to grow

And finally, CAPEX, where I want to give you some more colour. In the coming year, we expect CAPEX to be up to £600 million as we continue to invest in our strategic capital projects to drive future growth. These include our continued investment in Battery Materials, which is on track and in line with previous expectations, and which Robert will come to in a minute. In Efficient Natural Resources, we're investing in our PGM refineries, both our new refinery at Royston in the UK and the renewal of our asset base to improve the resilience and efficiency of this business and to increase our refining capacity. We're also investing in Hydrogen to take advantage of our leading positions in fuel cells and green hydrogen and the strong growth that we expect in these markets.

And with that, I'll hand back to Robert.

# **Growth Opportunities**

Robert MacLeod CEO, Johnson Matthey

Thank you, Stephen. So, you've seen our performance in the year. Now let's talk about the exciting opportunities that will drive our future growth.

As we said before, our vision is for a cleaner, healthier world, not just today but for future generations. Throughout our history, we have helped to address some of the world's complex challenges, and as the world builds back greener following the pandemic, our capabilities have never been more relevant. There's an urgent need for more sustainable solutions to address climate change and our technology is central to this.

Joan and Jane will shortly talk you through our plans for Clean Air and Efficient Natural Resources, strong cashflow generation in Clean Air and exciting growth in Catalyst Technologies given the move towards a net zero world. But in Health, we continue to make progress with our product pipeline, as Stephen outlined. But although you are aware that we've commenced a strategic review of our Health business, and we're doing that now, given the compelling range of other opportunities we have across the group. And we have a significant opportunity in both Battery Materials and Hydrogen, as I'll talk to you shortly.

And at the heart of all of this is science and complex metal chemistry.

So I'll now hand over to Joan and Jane, who will talk through what we're doing in Clean Air and then Efficient Natural Resources. Joan.

# **Clean Air**

Joan Braca

#### Sector CEO, Clean Air

Thank you, Robert, and good morning, everyone. It's really great to be here today. What I want to do is to give you some colour around how I think about Clean Air and its strategy. Clean Air is a really great business. It's had several decades of good growth and profitability, underpinned by a very strong social purpose.

#### Regulations to drive growth

We see further growth in the coming years, from new regulation in China, India, Europe and possibly the Americas, but our market will mature at some point as vehicles electrify and in a maturing market you need to be very smart about where you play, how you win and the skills and capabilities you need to manage the maturity curve. You need to think about the market scenarios that could develop and understand that you're – and be sure you're agile enough to deliver consistent performance in any of them.

When I joined, I spent time with our employees, customers and regulators to really get under the skin of the business, and this has helped us sharpen the strategy. It's not a wholesale change. It's rather a pivot to drive specific focus on where we play, how we win and which skills and capabilities we need to generate the most value for our stakeholders.

## Strategy along segment lines

Our strategy is differentiated depending on the segment, and you can see the rough split of our business from the chart. In diesel, we're the leader. The technology is harder and more complex than it is in gasoline and this really plays to our strengths. We have strong positions today in both Light and Heavy Duty. The Heavy-Duty market has longevity, given that the move to electrification there is harder and further away than it is in passenger cars. Light Duty Diesel will electrify more quickly. We're focused on retaining our share in both segments and we will bring specific focus to driving efficiency as they respectively mature. In Gasoline, our strategy is to be selective. It's a huge market, it's more competitive and it's also more intensive in terms of working capital. So, we're targeting the highest-return business in the parts of the market where we know we can be a technology leader or be differentiated in terms of supply or service.

It's important to note that Clean Air strategy goes beyond how we win in Clean Air. It's really about how we win across Johnson Matthey, particularly how we help build new businesses like Fuel Cells and Battery Materials. We've got decades of experience in automotive and longstanding customer relationships, so it's our job to be Johnson Matthey's ambassador to the automotive industry. We open the right doors for Fuel Cells and Battery Materials, we get everyone in the room to hold the right conversation so we can give our customers the best solution as they evolve their power trains.

# Market scenarios for power train evolution

I won't spend too long on this slide. I want to quickly show you the various market scenarios that we see for power train evolution. In the centre is our 2030 base case and to the sides you'll see scenarios for faster and slower electrification. Versus our last guidance, our base case is updated to reflect recent market developments, including faster adoption of battery electric vehicles and a decline in the Light Duty Diesel fraction in Europe. You will also note that in the fast electrification scenario, we took a very prudent view of how the market size would look and we held it at £90 million, because we really wanted to pressure test our ability to perform. We've run a model against every scenario and we're comfortable we know how to pull the right levers in each of the cases outlined so that we deliver consistent cash performance across our scenarios.

## Levers for growth

Now let's have a look at what those levers are. First off, Clean Air will continue to see good profit growth. We will continue to see the overall market size recover in the coming years. We've also got value uplift coming from China 6 in Heavy Duty, from Euro 6 D final, and this gives us top line growth – modest top line growth to the middle of the decade. Post that, we anticipate seeing combustion engines decline, but we will generate profit growth with China 7 and Euro 7.

With a changed administration in the US, there's also a good chance we'll see more legislation there. New legislation is a great thing for us, because it raises the bar. It means there are challenging technical hurdles to overcome. For example, some of the new legislation being talked about could require an 80% reduction in particulates and an 80% reduction in NOx in

the Heavy-Duty Diesel segment. Our technology leadership will enable us to capture value as we develop solutions to these new challenges. So, we will continue to invest in R&D through the course of the new legislation.

#### Stronger focus on efficiency

As market matures, we'll further increase our focus on driving efficiency and cash flow. We absolutely need to be best in class on cost and we have a number of levers that we can pull. We're delivering a number of excellent programmes and also driving very rigorous management of our overheads in line with our volumes. Our footprint offers exciting opportunities for us. Our newest plants are completely standardised and they're a step change in efficiency versus our old assets. We now have five of these world-class manufacturing plants: two in Europe, two in Asia and one in America. And this gives us a truly global, efficient yet flexible network which can absorb the growth and also offer us consolidation opportunity as our market matures. In fact, we've already started to consolidate some of the older capacity in Europe into our new plants and we're seeing the benefits.

Our final strategic investments are now substantially complete. Our big spend is behind us, which means we target CAPEX at around £50 million per annum. And to frame this number for you, we've spent around £135 million per annum over the last three years on average. We've also looked really hard at how we manage working capital to support the driving of cash flow. Our new global supply chain team is in place and they're helping us to optimise inventory. We're also resetting customer terms where needed so that we appropriately share risk. But it's not these levers in isolation that's important. It's how we manage them across the different scenarios. In the more extreme case where we see faster electrification, we can pull our efficiency levers harder and faster, for example, looking at our network of 16 plants and consolidating it faster to drive our costs more quickly. This gives us confidence that we'll deliver attractive cash generation that's more than £4 billion over the next 10 years under our range of scenarios. Assuming stable metal prices, we expect to deliver this £4 billion in broadly equal increments, so approximately £400 million per annum.

Thank you for listening and from here I'm pleased to turn it over to Jane Toogood, who's going to talk to you about the very exciting opportunities we have in Efficient Natural Resources. So Jane, over to you.

# **Efficient Natural Resources**

Jane Toogood Sector CEO, Efficient Natural Resources

Thank you. Thank you, Joan. So, good morning everyone. Today, I want to tell you why Efficient Natural Resources is strongly positioned to enable and win in a net zero world.

#### Accelerating demand for sustainable technologies

Whilst Covid-19 has been an extraordinary challenge for society as a whole, what we've seen is a step change in the desire to create a more sustainable future for our planet. As the world builds back greener, JM's technology is at the heart of this revolution. And we've seen a huge acceleration in the demand for our sustainable technologies. These are solutions that we

already have or are developing, and it's brought forward their adoption by multiple years. This growth builds on our strong foundations and leading positions across the sector. We're the world's leading refiner of platinum group metals and a leading supplier of catalyst and process technology in the chemicals space.

We've many decades of experience developing our technology and working together with customers to apply it, building those strong and trusted relationships. And we'll continue to grow from this strong base in areas like methanol and ammonia.

As the transition accelerates, tomorrow's world is going to need new solutions, which will be about decarbonisation and circularity, and we'll be applying our sustainable technologies to enable these, as this is at the heart of what we do. And I'll come on to explain our role in both of these.

#### **Decarbonisation and circularity**

Looking at decarbonisation, one of the areas where we've seen a real change in desire to decarbonise is in syngas. So to explain what syngas is, syngas is at the heart of some of the most important chemical value chains. It's a mixture of basic chemical building blocks, such as hydrogen, carbon and oxygen, so it's vital in the production of hydrogen, methanol and ammonia, which help to make many of the products we all use every single day. Around 40% of major primary chemicals production come from the syngas value chain, so this is relevant today and will remain relevant tomorrow. However, these value chains need to be decarbonised. This can be achieved by transitioning from fossil fuels towards more sustainable feed stocks such as renewable hydrogen, captured CO2, biomass and waste, or managing CO2 emissions with carbon capture and using the syngas efficiently in the downstream processes for making chemicals.

We are ideally positioned to enable this to happen, given our strong leadership positions in process technology and catalysts in segments such as hydrogen, methanol and ammonia.

Importantly, our feed stocks – our technologies are feed-stock agnostic, so we can grow in a decarbonised world. We have deep expertise in fine-tuning the process technology and the catalysts to work better with varied feed stocks. Just as importantly, we can adapt the processes in collaboration with our customers to help them decarbonise their production, for example, by improving efficiency, improving – and incorporating renewable energy into the processes, switching to hydrogen fuel, with potential pull-through for our hydrogen technologies, and integrating with carbon capture. In the future net-zero world, customers will be producing these chemicals with green feed stocks, incorporating green hydrogen and using renewable energy, so-called e-chemicals, for instance using green hydrogen to produce green ammonia and other green chemicals. With the growth of the hydrogen carriers, ways to transport green hydrogen between where it's produced and where it's used.

Not only can we help customers decarbonise their existing processes, but as they shift to these new paths, we have the technology to enable them. An example of this is the Haru Oni green methanol plant being built in Chile.

Giving the increasing desire for our customers to decarbonise and produce chemicals in a sustainable way, and that there are hundreds of plants globally in the syngas value chain

using our catalysts and process technologies, we are confidently targeting catalyst technologies to deliver high single-digit growth over the medium term.

#### Technology and customer relationships are key

So to summarise, we have the technologies the world needs and we have the long-standing and trusted customer relationships. We are a leader in these areas and it's at the heart of this transition. We're a leader in circularity. Our platinum group metal recycling business is the largest globally and it's more than twice the size of our nearest competitor. We're already playing our part in increasing the recycling of scarce critical materials and reducing carbon intensity. In fact, a gram of recycled platinum group metal contains around 50 times less embedded carbon than newly mined metal. So it makes sense to re-use and recycle where possible.

But PGM recycling is not the only technology of today. It will be critical going forward as many of the sustainable technologies such as fuel cells and electrolysers to produce green hydrogen need scarce metals such as platinum and iridium. Our technologies will enable lower carbon intensity, the security of supply of these scarce but critical materials that our customers need, and it will give them the confidence of knowing that their raw materials come from a sustainable and a reputable source.

We'll build upon our existing expertise to help our customers in designing to recycle, so that their products are more easily recycled, promoting further closed-loop circularity. We'll also apply our expertise in new settings and are ideally placed to expand into fuel cells recycling and battery materials recycling with lithium, nickel and cobalt.

#### Net zero technologies already being commercialised

So you've heard today that we are well positioned for a net-zero world, but we are already seeing our technologies beginning to be used today in this transition, and you can see here a few examples of projects already being commercialised. Our leading blue hydrogen technology already has a pipeline of around 15 projects globally, which has the potential to support our growth with licensing and engineering fees of say around £60 million for a blue hydrogen plant around twice the size of HyNet Phase 1 and roughly £5 million of catalyst refills every three to four years once the plant is running. We're involved in the recent Haru Oni project being developed in Chile with Siemens and Porschia for e-fuels, with our technology enabling the production of e-methanol in the process. And you've heard us mention before our technologies being used in the production of sustainable aviation fuel from waste. We're also actively developing further solutions and we'll see growth coming from recycling as we expand into fuel cells and battery materials recycling. And you recently saw that we entered into an agreement with Stena Recycling, a leading recycler of industrial waste, to develop lithium-ion battery recycling.

So I'm very excited about the future we have in providing sustainable solutions to the world and being one of the growth engines of Johnson Matthey.

So with that, I'd like to hand back to Robert.

# **Battery Materials and Hydrogen**

Robert MacLeod CEO, Johnson Matthey

Thank you, Jane.

So now let me talk through our exciting opportunities in Battery Materials and Hydrogen, firstly with Battery Materials.

# Significant opportunity for Battery Materials

The Battery Materials opportunity is of course significant. The market we're targeting – the automotive market for high-energy cathode materials – is expected to be around 1.8 million tonnes globally by 2030. But our initial focus is on the European market, where we expect demand to be around 400,000 tonnes by 2030. But looking nearer term, by 2025, with the expected level of growth in the market, supply of locally sourced cathode materials will be in deficit if we look at capacity announced to date. So, it's vitally important for the market that we continue to move at pace to address this opportunity. Our customers and supply chain partners tell us about the importance of creating a fully sustainable battery ecosystem, which is what the ultimate consumer is demanding. And we have made good progress here this year.

But first let me remind you of the key milestones as we build our business. Firstly, on customers, we're progressing through our customers' more advanced stages of testing and continue to anticipate being able to sign our first automotive contract in 2023, to enable us to supply our material from 2024 onwards.

Secondly, we're progressing well with our commercial plants. We're on track in Poland and expect to start commissioning in 2022. And for our second plant in Finland, commissioning should be a couple of years later, around 2024.

I'll now give you some more colour on our progress across each of these areas, starting firstly with customers.

As we said before, the testing and development timeline for our customers is quite long and we would expect to be in the full cell testing stage for up to about two years. But we're pleased with our progress as we continue to move through the development funnel as we expected. Our materials continue to meet or exceed stretching automotive customers' targets, for example, in energy, lifetime and power. And this was further validated by recent testing with a leading independent third party, Wildcat Discovery Technologies. These are positive developments, giving us further and continued confidence in our materials.

And in addition, to support more advanced testing and customisation, we recently opened our second state-of-the-art battery technology centre, which is in Oxford. These centres allow us to work with customers more closely. More advanced testing facilities and increased capacity for full cell testing will further help us to reach customer qualification.

So moving now to our commercial assets, as you can see from the picture, our plant in Poland is starting to take shape, and as I've already said, we're on track to start commissioning in 2022. Our focus is on creating a leading sustainable battery ecosystem. We recently announced our partnership with Finnish Group Metals – sorry, Finnish Minerals Group, to build

our second plant in Vaasa in Finland with nameplate capacity of 30,000 tonnes per annum, and we expect to start construction later this year. This plant, like our plant in Poland, will be powered solely by renewable energy. And to make sure we protect the local environment, it will use an innovative waste-treatment solution to treat sodium sulphate, a common by-product of cathode materials production.

And we've also secured a long-term sustainable supply of critical materials, including nickel, cobalt and lithium hydroxide, giving our customers security of supply for materials forecast to be in deficit.

Together, these developments demonstrate that we can produce materials at scale and in a sustainable way. In fact, we've committed that production of eLNO will be fully carbon neutral by 2035.

So all in all, I'm pleased with the developments this year and they further strengthen our position in the value chain.

# Huge role for Hydrogen

So now moving on to Hydrogen. Hydrogen has a huge role to play in creating a more sustainable future. In fact, the world cannot reach net zero without it. It plays a key role in the decarbonisation of many applications that are otherwise hard to decarbonise across transport and industry, so it's a significant opportunity for us. We have been a world leader in hydrogen for many years and have a strong position across both hydrogen-powered fuel cells and the production of hydrogen – green, blue and grey. And today we have around  $\pounds100$  million of sales across our Hydrogen production.

From a reporting point of view, going forward we will include the catalyst-coated membrane businesses of fuel cells and green hydrogen within New Markets. But the sales for blue and grey hydrogen will continue to be part of Efficient Natural Resources. And that's because this is the way that we're running the businesses. Fuel cells and green hydrogen have similar technologies and manufacturing processes, albeit in some cases different customers. The technology for blue and grey hydrogen however is not PGM related, but the technologies, customers and manufacturing processes for them are very closely aligned to our other syngas-related routes that Jane described. That said, like this year, going forward we will provide detail of our total sales to the hydrogen market to give you an idea of the scale of our overall hydrogen offering. And we're seeing strong momentum in these businesses, and I'll take you through each of these in turn.

Our Fuel Cell business continues to see very strong growth – 35% per annum over the last five years. We have leading technology and, to remind you, we manufacture key components within the fuel cell stack, the catalyst-coated membrane or, for some customers, the membrane electrode assembly. These components lie at the heart of a fuel cell system and drive the performance of the overall stack. It's where the clever chemistry is. The membrane in particular helps with durability, a key performance metric for OEMs. But as well as improving performance, we're also working hard on the cost-down roadmap. The market is growing really quickly and the outlook is very positive, in line with or potentially even ahead of the guidance that we gave last September in our Hydrogen seminar. Namely, a

catalyst-coated membrane market in 2030 of around £1 billion, or more than £10 billion per annum in 2040.

On the customer front, we're working with many of the leading fuel cell players, including Doosan as well as Refire and Sino Fuel Cell, the only two Chinese government-approved system integrators. And most recently, we signed a development agreement and a long-term supply agreement commencing in 2022 with a major German automotive supplier for the supply of next-generation catalyst-coated membranes into the global automotive market.

The customers that I've mentioned are all system integrators or stack manufacturers, and as such, they will be targeting more than one OEM each, giving us access to a wide number of potential downstream customers and ultimately demand. But having said that of course, we're also working with a number of OEMs directly as well. So we're seeing lots of activity in this market, and this is evident from our strong customer pipeline, which includes around 10 major truck and automotive OEM platforms due to launch from 2022 to 2025.

And to support this demand, we've doubled our manufacturing capacity in the year to around 2 gigawatts across the UK and China. And given the opportunities ahead of us, we're already planning major expansion beyond this. So we're well on track to delivering a business that will have sales of around £200 million by 2025.

Now to hydrogen production. Building on our expertise in fuel cells, things have progressed really quickly this year in our green hydrogen business. That's being the production of hydrogen by electrolysis of water using renewable energy. Our focus is on the development and manufacture of catalyst-coated membranes for PEM electrolysers. We've been testing our products with a number of the leading electrolyser manufacturers, with very good feedback on our performance. And we're seeing that paying off already with one of these players, with the recently signing of a memorandum of understanding with Plug Power for the supply of key components across the value chain for the production of green hydrogen. And we were delighted to be collaborating with Plug Power, one of the leading players in the hydrogen market globally, and look forward to working together as we accelerate the commercialisation of this technology.

And with our existing manufacturing capacity here in the UK, we can already work on worldscale projects and we can rapidly scale up to multi-gigawatt capacity as demand increases. This is exciting progress and we anticipate first commercial sales from this business in 2022. In blue hydrogen, you've already heard from Jane where we are further advanced.

And so as you can see, things are coming along well in our Hydrogen business. We have a significant opportunity over the next decade as this market comes towards us. And given our leading technology and customer traction, we're strongly positioned to benefit. So taken together across our hydrogen offerings, we would expect to grow from the £100 million of sales that we have today to at least £300 million by 2025 or up to half a billion if the market moves forward more quickly, which it well could.

# Summary

So before we move to Q&A, let me wrap up. In a world that's moving to a more sustainable future with net zero at its core, JM has never been more relevant, given our strong portfolio of sustainable solutions. And at the same time, we've set ourselves our own new ambitious sustainability targets. We have a multitude of growth opportunities in the short, medium and

long term, and we're continuing to focus our portfolio to concentrate on these exciting growth opportunities and we're investing at pace. We delivered a robust performance with good cash generation in the last year and looking forward, this year has started well, supported by strong momentum in our key markets that have continued to recover well. And as you've heard today, this means we expect to deliver low to mid-teens underlying operating performance this year before taking account of the benefit of higher current metal prices. At least £4 billion of cash from Clean Air in the coming 10 years. High single-digit growth in Catalyst Technologies in the medium term. All alongside our longer-term growth opportunities to scale up our Hydrogen and Battery Materials businesses.

So that concludes our presentation. Thank you very much for your time listening. And with that, we'll be very happy to take your questions.

# Q&A

Robert MacLeod: Tom, good morning.

**Tom Wrigglesworth (Citibank):** Good morning, Robert and team. Thank you very much for the presentation. Three questions if I may. Firstly, you've given us obviously your CAPEX assumptions for your £4 billion of cash flow generation from Clean Air, but I was wondering if you could elaborate a little bit further about the assumptions on the shape of the market over that 10-year period, just so we can kind of get some barometer of the conservatism of the assumptions made.

Second question, if I may, a little bit more near term focus: we can see that ENR lost £84 million of sales, largely due to the Covid. Does that recover rapidly into the FY21/22 and do you then grow on top of that £84 million in that timeframe?

And my third question is, you clearly state while Cat Technologies has validated your eLNO, but could you just elaborate for us as to what that means? Is their approval – does that – is that a pre-requisite for some customers? Does that give you access to a broader market, whilst there may be without having perhaps that Wildcat Technologies approval? Thank you.

**Robert MacLeod:** Thank you, Tom. So look, we'll go through those three questions and I'll hand the first one – Joan, if I may, just to get a little bit more colour around the scenarios.

**Joan Braca:** Yes. Absolutely, Tom. Great question and thank you. So look, the way I think about the £400 million, the £400 million or the £4 billion was an 'at least' number and it's a number we feel we can achieve across the range of the scenarios that we laid out on the slide. So, if I – I think about the most aggressive, which is fast electrification, we're assuming a market in Light Duty of £90 million, whereas the centre-cut view of the market at that point in time would be north of £100 million, maybe £110 million. We're assuming LDD comes down to 5% in Europe; and what that means is Light Duty Diesel passenger cars essentially are gone and that 5% really represents export from Europe to other markets where LDD is probably still relevant. Battery electric vehicles at 40% is a very aggressive assumption. The centre cut of the market is somewhere more like 20% or 25%. So, I think our 'at least £400 million' is pressure tested against that faster electrification scenario, which is prudent upon prudent. And when I think about the shape of the market, when you look at all the information that's out there, our talks with our customers, etc.,

people – the centre cut would be more the scenario that we've modelled at the base case, and you can see the numbers there on the chart. So, I hope that's the colour you were looking for, Tom. Thanks.

Tom Wrigglesworth: Thank you.

**Robert MacLeod:** Thanks, Joan. Jane, near term on Catalyst Technologies. Do you want to answer Tom's question there?

**Jane Toogood:** Thank you, Tom. So, I think the question was a little bit about ENR actually in the near term in total, and of course we don't give guidance at the sector level. I think we've covered that at the group level. But the markets have been recovering at different rates. I think if you look back at last year, of course what we saw was that the PGM Services business continued working throughout the pandemic and we actually continued our plants running and we saw good demand for those metals through the year. We expect that to continue. And with the Catalyst Technologies, of course, we did have the hit from the pandemic and we would expect to see that to come back, but it does vary of course by location and by of course the sorts of technologies that are there.

**Robert MacLeod:** So, I think we would expect it to come back quite quickly. And lastly on Wildcat Technologies, no, it's not a pre-requisite to get any – it's not approval or validation by Wildcat Technologies. It's just another independent outfit who test lots of other companies, competitors' materials, and so it's for us to benchmark our materials versus others. The testing that really matters is the testing that happens within – with our customers: the OEMs and the cell manufacturers, which is separate from Wildcat, although sometimes some OEMs do use Wildcat Technologies as well for – to do some of their testing. So, it's really further validation of our materials and how we're benchmarking versus our competitors.

Tom Wrigglesworth: Noted. Very clear, thank you. Thank you very much.

Robert MacLeod: Thanks, Tom.

**Andrew Stott (UBS):** Yes, morning everybody. Andrew Stott, UBS. So, a couple of questions. The first one's going back to the  $\pounds$ 4 billion cash flow guidance. And here, please Joan, correct me if I'm wrong on the maths, but if I'm assuming your cash flow guidance is X tax, X group interest costs, it sort of implies a run rate of high 400s for EBITDA for Clean Air for the long term. And that's about  $\pounds$ 50 million higher than you were doing pre-Covid. So, on the face of it, that looks ambitious, and I'm just interested in some of the levers you mentioned – the market share in gasoline, the value uplift, for example, from Euro 7, and of course cost savings. I'm interested in the weighting or the pecking order of those levers. What do you see as the most important factor in lifting your long-term EBITDA from pre-Covid? And again, I'm happy to be corrected on the basic maths. That's the first question.

The second question is a bit more straightforward – probably one for Stephen. So, you've released £1.7 billion through payables in the last two years, you've effectively had a cash cost of £1 billion of receivables, so it's an impressive £700 million net. How do you see that net developing over the course of the next 12 to 24 months? Thank you.

**Robert MacLeod:** Okay Andrew. Thanks very much indeed for your questions. Joan, do you want to have a go at the Clean Air question around cash flow and the levers?

**Joan Braca:** Yes, I'm happy to do it, Tom. Let me start with the levers that we have in front of us. The most lucrative lever is the footprint consolidation. We feel very good about that. We have 16 plants. Of those 16 plants, 11 of them are older, less efficient assets and five of them are very new very standard assets, and our new assets are not a order of magnitude better than our old asset, but they're multiples better. So, you know, you can do the math on that and think every time we consolidate down our smaller plants into our bigger ones, we're in a much, much better place. So, that's very attractive. Overhead supply chain, all of these things, those are all degrees of increments, but we feel very comfortable that collectively our efficiency programmes will give us a good chunk of money. We have no doubt about that. And the value uplift is – we feel very strongly it's there. The world needs another round of legislation so we feel comfortable we'll see something in Europe, China, etc. And if you look at what China 6 did for us, or what India 6 did for us, it was a multiple of the number of parts in the car – the bricks in the car – and it really did raise the overall profit in the value of the business for us.

Look, I – we may need to take the maths offline, cause I'm not sure I entirely followed, and Robert can jump in and help me here, but the way I think about the math is we're spending about £85 million less in capital per year going forward than we had the three years prior. We're working super-hard on working capital and inventory, so at stable metal prices, you know, you'd give yourself back £50 million or more there. And so, your underlying profit number, plus the £50 million, plus the £85 million, we feel very comfortably, easily gets us to £400 million. So, that's how I've thought about it and if that's not clear we're happy to follow with Martin later.

**Robert MacLeod:** Yeah, I think that was clear for me, Joan. I hope it was clear for you, Andrew, but I think rather than going through the maths now it'd probably be better to follow up with IR later, if that's all right. A straightforward question apparently, Stephen, so over to you with the one on cash flow, if you can.

**Stephen Oxley:** Thanks, Andrew. I might just add on the £400 million that's before interest and before tax. So on the working capital, thank you, yes, I think it's a really impressive performance over the last few years, and in fact we came in with a lower net debt number than we were expecting by a little way. And that of course is after absorbing a whole bunch of higher metal prices that came through, particularly in the second half of the year. So, how have we done that? We've talked about the backlog reduction in our refineries, and we've talked about precious metal working capital in Joan's business, in Clean Air, also being managed really tightly. And on the non-precious metal, you've seen that come down a little bit and we'd hope to maintain at least some of that.

So, look, I'm confident that we can maintain the current position; we're not going to let go on that discipline at all. I think we will see a tick-up a little bit as a result of the higher metals prices, but of course we'll work hard, as we've described, to mitigate as much of that as we possibly can.

**Robert MacLeod:** And I think it's clear, as well, just to build on that, is with our backlogs in our refineries now at historically low levels, we're not as exposed to the swings in metal prices as we once were maybe a couple of years ago, when we had significant backlogs. These higher metal prices would have had a really significant impact on our working capital, but of course with backlogs levels much, much, much, much lower, then we're much more robust.

#### Andrew Stott (UBS): Thank you very much.

#### Robert MacLeod: Thanks Andrew.

**Operator:** Thank you for your question. We have the next question from the line of Jarek Pominkiewicz from Jefferies. Please go ahead.

#### Robert MacLeod: Hello?

#### Jarek Pominkiewicz (Jefferies): Hello. Can you hear me?

#### Robert MacLeod: We can now, yes.

**Jarek Pominkiewicz:** Okay, perfect. Thank you for having me on the call. I've got a couple of questions. Perhaps starting with blue hydrogen. I understand that you've received your first revenues on the two projects with HyNet and the other one. May I ask what proportion of these revenues accounted for the £100 million of total hydrogen revenues you generated this year, and what contribution should we expect from these two projects specifically in 2022? Also, when these could be completed? I understand you also have 15 projects in the pipeline. When could you expect – suggest like the next set of awards?

And maybe on fuel cells, just a quick one. I understand that the bulk of your revenues are generated in China and you already have fuel – your fuel cells running in trucks and buses there. When could we see fuel cells included in vehicles outside of China, in Europe and the US? Thank you.

**Robert MacLeod:** Fine. Thank you very much for your question. I'm afraid I don't think we're going to give much help for you on blue hydrogen, but, Jane, maybe you want to give a little bit of colour? But we don't want to go into getting into much detail on every individual project.

**Jane Toogood:** No. And I apologise because I couldn't hear the very beginning of that, so if you can help me with.... I can – I got all the –

#### Robert MacLeod: Right.

**Jane Toogood:** – piece about the different projects, but perhaps let me just give you a picture about blue hydrogen. So, you know, it's a really interesting time, of course, in the hydrogen market and blue hydrogen is an essential part of the solution in terms of technology, just as green hydrogen is; we're going to need both of these technologies if we're going to decarbonise in the future. And we're seeing a real uptick in interest, as I described earlier. We have 15 projects in the pipeline. They're at early stages, and this is, you know, consistent with what you'll be reading about as you're reading IEA reports and so on, but we're working in those stages. We're at the stage where we usually work extremely closely and confidentially with customers to tailor what they need to really suit the project, and so for that reason I won't give you any further details about it. But I did mention, of course, both the HyNet and the Acorn projects, where we've seen some of those first revenues, and they are, again, at an early stage, but there's information about those available. And, you know, what we need now are these projects to move to FID so that the world can decarbonise.

**Robert MacLeod:** And I did hear the first question, the first part of the question. Look, the – we give you the fuel cells component, about £40 million of the £100 million. The lion's share of the other component is on grey hydrogen, is catalyst into the grey hydrogen market,

because as Jane just said, the blue hydrogen market is at very, very early stages. We'd expect it to grow rapidly, but it does require, as Jane said, these projects to actually get approved and there's – it's still fairly early days in the blue hydrogen market. But the grey hydrogen renewal of catalysts will remain and keep going.

On fuel cells, yes, we are selling into the Chinese market today; a significant – the majority of our sales to the automotive market are into China. We would expect to see that continue to grow over the next few years. I think, outside of China, there's a lot of activity in Europe and North America, but it's probably a few years away before you start to see meaningful sales growth here because you've got to develop the whole infrastructure; not just making a truck or making a bus, you've got to have the hydrogen fuel cell – sorry, not the – the fuelling systems as well. So little bit of time to wait, I think, before we're going to see much growth here in Europe and America, but in the meantime, I think very significant opportunities, particularly in China and other parts of Asia.

Jarek Pominkiewicz: Okay, thank you.

Robert MacLeod: Thank you.

**Operator:** Thank you for your question. We have the next question from the line of Alex Stewart from Barclays. Please go ahead.

Alex Stewart (Barclays): Hi there, good morning.

Robert MacLeod: Morning.

**Alex Stewart:** Thank you for taking my question. Can I ask one on eLNO, which we don't talk about so much anymore than we used to? But you – have always talked about cathode manufacturing being high stakes cost, operation, and plenty of other people talk about the same thing. You've also talked about wanting to get to, sort of, 70,000 to 80,000 tonnes of scale in order to get the kind of returns that you were aiming for cathodes. So with all that in mind, could you just explain the rationale for splitting the 40,000-tonne project into two different sites, which presumably come with twice the fixed-cost loading? It strikes me that a higher fixed-cost business should aggregate around a fewer number of sites rather than vice versa, so I'd be interested to hear your thoughts on that, please.

**Robert MacLeod:** I think I got your question. It was really hard to hear you, but I think your question was really around two different sites rather than one site. Look, I think there are sometimes efficiencies about having one single site, but of course there are significant risks of one single site because, of course, then you run the risk of having all your production in one site, which of course the OEMs will be slightly nervous of if something went wrong on a particular site.

So I think as you grow this business, you'd always expect to see a number of different manufacturing plants. Now, where we are at the moment is as the market has moved forward and as we're developing the market, what's very clear is having that – the sustainable battery ecosystem is absolutely vital, and access to those critical raw materials in Finland is very attractive to us and that's why we're going there for our second plant. The diseconomies of having two plants are not material in the whole grand scheme of the overall capital investment, so it's not something I would particularly worry about.

Alex Stewart: Thank you.

#### Robert MacLeod: Thank you, Alex.

**Operator:** Thank you for your question. We have the next question from the line of Nicola Tang from Exane BNP Paribas. Please go ahead.

**Nicola Tang (Exane BNP Paribas):** Hi everyone, thanks for taking the questions. Firstly, on CAPEX, thanks for the guidance for this year. Could you talk a little bit more about the direction of CAPEX for the next few years; you know, when does the spending on eLNO peak, how do we think about the investments in fuel cells from here and do you need additional CAPEX to achieve your net zero targets on the mid-term?

And then the second question was just on the Health review. Could you just provide a little bit more context about, you know, why, why now, and what kind of options you're exploring? And on those other value businesses which you're now calling non-core, are those businesses that you will proactively try to exit from here? Thanks.

**Robert MacLeod:** So I'll answer the second question first and then, Stephen, you can answer the CAPEX question. I mean, look, we're not going to really talk – going into too much detail about the Health review. It's ongoing and, as I said when I spoke, it's – why now is because we've got a tremendous number of very exciting growth opportunities and we want to make sure that we are really clear on the areas that we're going to focus on for growth, and that's why we're doing a review of the Health business. On the values businesses, we're very clear, again, they're non-core, but that's all we're going to say at this stage.

**Stephen Oxley:** Okay. And on CAPEX, beyond this coming year, I guess it's fair to say that there are a number of variables and phasing, and therefore I would expect a number that is at least  $\pounds$ 600 million for FY23. What, maybe, I'll do is give you a, sort of, feel for some of the, sort of, buckets, if you like, in that as they affect this year, and we've said this year will be, sort of,  $\pounds$ 600 million. And there's really three areas of growth that we're looking at that I mentioned. It's the investment in battery materials that Robert's talked about, and we've talked about the timing of the opening of the two plants, both in Finland and Poland, and therefore you have a feel for that.

The second area is really hydrogen, which we're really excited about, and that's both fuel cells and green hydrogen. The CAPEX in this coming year is actually reasonably small, but we'd look to accelerate that rapidly. Don't forget that's a high return on investment business and it's a modular degree of CAPEX, so we'll accelerate that over the coming years.

And then, lastly, it's the refineries, where we're looking both to put down new capacity, particularly in the UK and China, but also to spend money to build the resilience and the efficiency of those businesses that releases working capital and enables us to run those businesses harder.

So that gives you a feel. And of the 600, I'd say that about two-thirds supports future growth and a third is what I'd call the maintenance CAPEX; just, essentially, keeping the lights on. So that gives you, I think, a feel for this coming year and then you can, sort of, extrapolate some of that forward.

Robert MacLeod: Thanks Stephen.

Nicola Tang: Okay, thank you.

**Robert MacLeod:** And just to give you an answer on the net zero, I mean we can't achieve net zero without spending some CAPEX, but all the new plants that we're putting in place will obviously – and all the growth that Stephen's talked about will have net zero embedded and all the, sort of, targets embedded into those investments at the start. They'll need an element of retrofitting of things on our existing facilities, but the whole scheme of CAPEX for those is relatively modest and will be phased over the next few years.

Nicola Tang: Okay, makes sense. Thank you.

**Operator:** Thank you. Your next question came from the line of Jean-Baptiste Rolland from Bank of America. Please go ahead.

**Jean-Baptiste Rolland (Bank of America Merrill Lynch):** Hi, good morning. Thank you for taking my question. I have three questions. The first one on Clean Air. Did you see any upside to your BEV penetration base case of 30%, which you're showing on slide 23? Looking at the strategy dates from Volkswagen and Daimler, it feels like targets are moving toward 60% penetration, both in the cars and the trucks segment, so I was interested if you could elaborate on that point?

Second question around the metal prices profit uplift. The £120 million number feels a little bit high in the context of, for example, the profits that you realised in full year 2020, in fiscal year 2020. Has there been a significant change in the palladium, platinum and rhodium weight that you previously provided for your metal basket?

And, lastly, just a housekeeping question on your – in the EBIT bridge, I think you've got £73 million of cost saving left to realise over the next three years. I just wanted to make sure, should we assume that these will be broadly split evenly across over that period? Thank you.

**Robert MacLeod:** Okay. Jean-Baptiste, thank you very much for your questions. Shall we start, just go through the order, and I'm going to hand these – all three of these questions over, actually. So I'll start with you, Joan, on your EV chart and VW and Daimler.

Joan Braca: It's nice to hand them all over.

Robert MacLeod: Yes, exactly. I'm enjoying this.

**Joan Braca:** Okay. Hi Jean-Baptiste, good morning. Great question. And, you know, I watched the Daimler thing with interest over the weekend and paid attention to all the customer report out. Look, my view on it is I think everyone in the industry – no one can predict the future, right? We all have different pressure-testing scenarios, but we're all trying to make sure that we're prepared for the shift, whether it goes fast or slower, and we all have different numbers in terms of how we pressure test. When I think about our base case, our base case is very much in line with government programmes to put in infrastructure, it's very much in line with things like the European Commission mobility report, and so it does seem to be the middle of where industry thinks it's going to move. And our faster electrification was, you know, the equivalent of Daimler 60% number; it was our pressure test for our P&L of how tough it could get for us. And when you look at LDD, you know, it's 40-some-odd – 42% of our business now and we've – it's 30% as a fraction today and we've cut it to 5%, we've cut it to 5% and we've held the market at £90 million. The market today is at 84, so holding it at 90 in the timeframe that we've outlined isn't a very aggressive way to think about it.

So I think we're all doing the same thing. I don't think our approach to it is any different, it's just that people pressure test their portfolio and their P&L in the way that best suits them. So I feel very good. Our 400 is an 'at least' number; we get there even in this difficult, faster electrification scenario. And our customers' pressure test may look slightly different and that's good for them, but we feel very comfortable that our scenario is prudent upon prudent upon prudent and we're prepared to deliver in that scenario.

**Robert MacLeod:** Thanks Joan. And the next question, Stephen, on metal prices and then the EBIT bridge, the cost savings.

**Stephen Oxley:** Yeah, I'll pick up both of those. So on metal, look, we're in a volatile and high-price environment, and really that's why we've split the guidance this year to pull out the underlying and then highlight the additional metal benefit. So we've said £120 million net. That number's moving around, actually, and we've provided in the back of the deck the current prices. But to give you an illustration, I mean the rhodium price has dropped 20% in the last three weeks, so that's probably why it's slightly lower than you were expecting.

**Robert MacLeod:** But to be clear, there's been no change in our palladium/rhodium basket, that hasn't changed.

**Stephen Oxley:** The mix hasn't changed.

**Robert MacLeod:** The mix hasn't changed.

**Stephen Oxley:** No. And as we go through the course of this year, obviously we'll update you on the price impact in those underlying results.

So on the EBIT bridge, we've delivered – and this is the second programme and it's in addition to the first programme – we've delivered £37 million of efficiency benefit this year. That will reach £110 million by the end of fiscal 2024. I'd assume that that, sort of, phases evenly across that period. Worth saying, of course, that you might not necessarily just see that drop straight through, there are all sorts of other costs in the business. So we'll have, you know, cost inflation, we may have some price deflation, but it's clearly providing that overall benefit.

#### Robert MacLeod: Okay.

**Jean-Baptiste Rolland:** Understood. Can I just follow up on your last point, Stephen, in relation to – Because if I do the maths and I take the 4 – sorry, £500 of £4 million that you just printed and take – assume, for the sake of the argument, a 15% growth underlyingly, that brings me to £580 million. And if I assume that you've got £24 million of cost savings that, you know, you're going to print, then that essentially means that, excluding the cost savings, you've got an incremental profit growth organic, excluding cost savings, which is about 9%. So it feels that, in that guidance, you're essentially saying that you expect to recover roughly – exactly what you lost last year in organic profit, if I'm not wrong. And so my question then is why aren't you expecting more, given the volumes and the pricing uplift from which you're benefitting in Clean Air in that – you know, in those – in the coming year? Thank you.

**Stephen Oxley:** Yeah. So, look, you take the 504 and then add the low to mid-teens on top, that brings you about to what you said, maybe a little bit less. Then there is the benefit of

the additional amount, but I said that's offset to a certain extent by other costs that are coming through.

**Robert MacLeod:** So, look, I would say, Jean-Baptiste, these are growth costs. So we're investing more in hydrogen, in the full cell business, in the green hydrogen business, we're investing more in battery materials; those are P&L costs. And so when we're giving you the number, which we're talking about low to mid-teens, that is, not surprisingly, a number for the whole Group, which includes: strong recovery in Clean Air, because of course we're not going to have the downturn that we had in the first half of the year we just reported; recovery, a bit, in catalyst technologies, as Jane's already talked about. But we're also putting additional investment into our new growth areas, as I mentioned, particularly hydrogen and battery materials, and that's partly offsetting the cost benefits that you were getting. So it's an overall number, the cost savings are in there, but also you've got to look at the investment costs that are going in as well.

Jean-Baptiste Rolland: Okay, clear. Thank you.

Robert MacLeod: Thank you.

**Operator:** Thank you for your question. We have the next question from the line of Chetan Udeshi from JP Morgan. Please go ahead.

Robert MacLeod: Hi Chetan.

Chetan Udeshi (JP Morgan Cazenove): Yeah. Hi, hi, morning.

Robert MacLeod: Morning.

**Chetan Udeshi:** First question was just follow up on the previous question, but slightly different on guidance. If I just look at your second-half Group EBIT, you know, it was £353 million, and I appreciate there is some seasonality that second half is strictly higher than first half, but I mean just annualising that £357 million EBIT. So why is the guidance so low when I think about the low to mid-teens growth ex the PGM versus what the second half run rate implies? Is there something, you think, within second half last year which is not sustainable? That's the first question.

Second question was I'm just curious of how the – your last five, six days of rhodium price moderation of almost 20% has impacted that PGM early uplift, you know? So in other words, you know, you are talking about £120 million at yesterday's pricing. What that number would have been as of last week's prices, so we know the kind of sensitivity that we should be aware about? Thanks.

**Robert MacLeod:** Okay. I'm going to ask Stephen to answer the first question, but I'm afraid we're not going to give you the answer to the second question in micro detail, but it would be, you know, few tens of millions higher if it – But I'm not going to give you the precise number. But it's not – you know, 20% reduction in rhodium is quite a significant impact.

So going to the -

Stephen Oxley: On the first question -

**Robert MacLeod:** – first question.

**Stephen Oxley:** – Chetan, I mean you can't take the second half and double it, essentially; there are a whole bunch of moving parts in there, including some stock builds, some seasonality, so you just can't do that. I'll give you a bit of colour, though. So the business that's – I guess that's got the most clean exit rate is Clean Air, so we clearly saw a strong second half. There is seasonality in there. But I think if you took the exit rate on Clean Air and doubled that, and then knocked off a little bit, you're not going to be a million miles off. But beyond Clean Air, there are a lot of, sort of, moving parts in there.

**Chetan Udeshi:** Understood. And can I just follow up on Corporate line, how are you guys thinking about Corporate line this year? Because we saw a sharp increase last year and it would be also good to understand what actually is within the Corporate line, which is, I think, so much. Thank you.

Robert MacLeod: Do you want to take that one again, Stephen?

**Stephen Oxley:** Yeah. So, yes, I mean the number was up, as I explained, but that was up really just because of the re-inclusion, if you like, inclusion of bonuses that obviously weren't there last year. There may be a little bit of build on Corporate costs above that this year, but that isn't going to be much. And I think if I look back over time, there has been an increase in Corporate cost, but I think what that does is offset costs that are in the business as we look to take activity across the whole organisation. So, for example, we are investing, or spending money, on something like procurement at the centre that drives underlying benefit and margin improvement across the business.

Chetan Udeshi: Understood, thank you.

**Robert MacLeod:** And I think, going back to your question about the second-half doubling and all that sort of stuff, and as Stephen said, I think there's a series of moving parts. Why don't you have a separate word with IR afterwards and they can go into a bit more detail to explain it, but I do think you've got to remember that, you know, you had very high metal prices in the last quarter, you had very strong demand in the last quarter, so that's – And when we talked about the outlook for next year, or the year we're now in, we talked about 'on average' prices for the year. So, of course, the fourth quarter and particularly the second half had higher than average prices, the first half had lower than average prices, and our guidance is based on the average for the whole year. So that's one of the reasons, but I'll let the IR team go into a bit more detail with you. I have to say, I think, you know, our growth rates are, for the – going forward, do reflect the recovery in the market and the investments that we're making. So thanks, Chetan, for your question.

#### Chetan Udeshi: Thanks.

**Operator:** Thank you for your question. We have the next question from Rob Hales from Morningstar. Please go ahead.

## Robert MacLeod: Morning.

**Rob Hales (Morningstar):** Yeah, good morning. Thanks for taking my questions, I had a couple on efficient natural resources. First one, the licensing business seems to have come back to life this year, so I'm curious if you have a comment on what's changed in the environment there?

And the second one is on the strategy update. I didn't really see much on the catalyst technologies for oil and gas, so can you also comment on the strategic plan for that business?

**Robert MacLeod:** Jane, efficient natural resources, good questions for you I think. The licensing business, what's changed, and what's going on in oil and gas.

**Jane Toogood:** Thank you, thanks for your question, Rob. So the licensing business, I think as we described last year, of course, some projects were slowed, you know, during the pandemic, but what we saw was a really good pipeline of new licensing opportunities coming in, so we had 10 licenses that we signed last year. And I've talked already about the pipeline coming on blue hydrogen. So I think there's a very positive sentiment here in terms of our licensing business going forward.

For the strategy comment and the whole piece around, you know, the catalyst technologies and the oil and refining additives, well, naturally, of course, the oil and refining business – and by that I mean oil refining business, not PGM refining – of course that was an area that also saw great volatility during last year, and this wasn't excluded in our own business, so we also saw some volatility there. As those businesses recover, then, of course, we'd expect to see that come back as well and so we're watching closely the evolution of that.

**Robert MacLeod:** And I think in some ways with licensing, some of the wins come this year because people now have confidence, they've got confidence they can see light at the end of the COVID tunnel and so they're prepared to think longer term and start investing. So I think part of the reason why – what has changed is that, sort of, people are more confident to start investing in the next wave of capital investments. Thank you for your question.

Rob Hales: Great, thanks so much.

**Robert MacLeod:** Any other questions? It's a bit difficult to know on – staring into space.

**Operator:** We don't have any other questions, sir.

**Robert MacLeod:** Well, look, that's a good set of questions. Thank you very much indeed for your time and for your interest. We'll do – we're starting the roadshows soon and – well, later on today. So, thank you very much indeed for your time and look forward to, well, hopefully next time seeing you in person. Sorry it's being done virtually this time, but until the next time. Thank you very much.

Jane Toogood: Thank you.

[END OF TRANSCRIPT]