

# Presentation of Results for the Year Ended 31<sup>st</sup> March 2023

Thursday, 25th May 2023

#### Welcome

#### Martin Dunwoodie

Director of Investor Relations, Johnson Matthey

Good morning, everyone, and thank you for coming along today, and for those of you joining on the webcast. For those of you who don't know me, I'm Martin Dunwoodie, Head of Investor Relations at Johnson Matthey. And a little bit of admin before we start, could everyone turn mobile devices either to silent or off for the duration of the presentation?

So, I'm very pleased today to welcome Liam Condon, our CEO, and Stephen Oxley, our CFO. We'll have a presentation as usual, and then plenty of time for Q&A afterwards. And we'll take questions from the room and also from the webcast. I would point you to our cautionary statement ahead of the presentation.

And with that, I'll hand over to Liam.

#### Introduction

Liam Condon

Chief Executive Officer, Johnson Matthey

# Continued progress on strategic execution

So, thanks a lot, Martin, and warm welcome, everybody, from my side to everybody here in the London Stock Exchange, and of course to everybody who's joining us online. We really appreciate your interest in our full-year results presentation and of course our outlook today.

Now, I have to say one year ago when I stood here, I was really excited because it was my first time standing in front of you for Johnson Matthey. And I've been asked a lot, so how is it now after year? And I have to honestly say I'm even more excited this year, and I'm going to explain why as we go through the presentation.

Now, what you're going to hear today in different parts and the way we're going to set it up, our results are in line with expectations. This is what Stephen is going to talk about when we go through the financial year. So, Stephen's going to present the financial results in a couple of minutes. And our results in summary are in line with market expectations. We're delivering on our commitments. I'm going to show this to you in one or two slides. We're making good progress against the strategic milestones that we set out, and we're transforming JM to drive growth. And this is the part that I will come back to after Stephen has finished and explain what we're doing to drive JM forward and to catalyse the net-zero transition.

And you can see at the bottom net-zero transition driving growth. This is actually the reason why I'm so super excited about the future of JM because the world has changed significantly in the past 12 months. The net-zero transition is really ramping up due to regulation, due to incentivisation, and we have great businesses that can capitalise on that. So, we're going to talk a lot about that today.

#### We have clear milestones ...

But first, let's look at how we're doing as a company in very brief summary form based on the scorecard that we gave you last year. And I hope you remember this one, the idea behind this was to say, look, we've got certain financial targets which you know, but how do you know that we're actually making progress beyond the financial targets that we only report every half year? So, what we wanted to do was to give you some milestones, some guideposts, and this is the scorecard we set ourselves. We said we're going to try and tick these boxes, over the next couple of years, and show that we're delivering on our commitments.

Now, when we set this out, all of us, I'd say very honestly because there's a lot of transparency involved here, but it's very helpful for us internally tracking our progress. And hopefully, it's helpful for you externally as well to be able to see how we're doing as a company. And I did not know how this would look after 12 months. We're only a year in, we've still got a long way to go.

#### ... and we have made good progress this year

But what you can see after the first year is basically a lot of green. There's only one red, traffic light in here. And we are fully on track with all of the milestones that we've set out so far. And I think this is, it's hard to underestimate how much progress has actually been achieved within the space of 12 months. This is really quite phenomenal for JM, to see this amount of progress happening in only 12 months.

There is one red bar, one red traffic light on here, and it's related to our target around employee engagement. I have to say very honestly, what we're doing, the amount of change we're driving within the company, this is tough stuff. This is hard on people. We're asking people to really go the extra mile. So, it's tough. So, we haven't been able to turn that to green yet, but I've been super impressed with the positive attitude of all of our employees, and I'm a hundred percent confident that we will change this one to green as well.

Now, all of these elements, I'm going to go into them later on in my presentation after Stephen's part. We'll talk about them, but I just want to give you a snapshot upfront versus the scorecard we set ourselves. We're making good progress. We know we've got a lot more to do, but we're on track, and we're delivering on the commitments that we made to you 12 months ago.

So, with that, I'll leave that by way of a summary introduction and then hand over to Stephen to talk us through the financials, and then I'll come back to explain how we're driving each of the individual businesses forward.

Over to you, Stephen.

# **Financial Results**

Stephen Oxley

Chief Financial Officer, Johnson Matthey

#### Results in line with expectations

Delivered stronger second half

Thank you, Liam, and good morning, everyone.

I'll start this morning with the headlines. In a challenging market environment, our overall operating performance was in line with market expectations. On an underlying basis, sales were up 6%, operating profit declined 21%, and earnings per share were 179 pence compared to 213 last year. Sales growth was supported by pricing as we acted to mitigate inflation, and this was partly offset by lower metal prices. Operating profit was impacted by lower PGM prices, reduced volumes in Clean Air and PGM Services, as well as cost inflation.

The second half of the year was stronger as we recovered more cost inflation. We also started to see the benefits of our transformation programme that will build this year towards our target of at least £150 million. We've got a strong balance sheet. Net debt came in at £1 billion and our net debt to EBITDA ratio was 1.6, at the lower end of our target range of 1.5-2.0.

We are proposing a total dividend of 77 pence, in line with last year, and our commitment to at least maintain our dividend.

# **Group Sales Up 6% - strong performance in growth businesses**

Strong performance in growth businesses

Now, let's turn to our performance in more detail.

On a continuing basis, sales grew 6% at constant currency to £4.2 billion. There were strong gains in our growth businesses, both Catalyst Technologies and Hydrogen Technologies. This was partly offset by a decline in PGM Services due to lower metal prices and refining volumes. Clean Air sales drew 2% as increased pricing more than offset a decline in volumes. And our Value Businesses delivered strong sales growth. We recently announced the sale of Diagnostic Services and, together with the sale of Piezo Products last November, this supports our strategic milestone of delivering at least £300 million in net proceeds by March 2024.

#### **Profit reflects lower PGM prices and volumes**

So, turning to profit.

Group underlying profit decreased 21% to £465 million. I said the recovery of inflation would improve in the second half. And over the year, we recovered £96 million of around £150 million of cost inflation. We also delivered £45 million of transformation savings.

In addition, we experienced currency translation benefits of around £38 million. However, there was an adverse impact of £55 million from lower metal prices. And we also saw lower autorelated volumes in both Clean Air and PGMS. And I'll talk more about the individual businesses in a moment.

# **Underlying results**

But looking first at the rest of the income statement on an underlying basis.

Despite rising interest rates, our finance charge remains broadly flat at £61 million. And as a reminder, almost 70% of our debt is fixed with an average maturity of four and a half years. The underlying effective tax rate of 19% was slightly higher than the prior year, and we expect our tax rate this year to be around 20%, given the higher rate of UK corporation tax.

Underlying earnings per share decreased 16% to 179 pence.

#### Reported results

Our reported results were impacted by one-offs, totalling £59 million. We recognised a gain of £12 million on the sale of Piezo Products and Battery Materials, and we incurred a charge of £41 million, largely as a result of implementing our transformation initiatives and the consolidation of our Clean Air manufacturing footprint. We also closed a legal claim in Clean Air with a £25 million settlement of a longstanding customer dispute. Resolving this puts all of our auto legacy claims behind us.

#### Free cash flow and net debt

Turning to free cash flow.

We generated £74 million pounds. Precious metal working capital was slightly higher, reflecting a temporary increase in refinery backlogs of around £250 million, which was offset by cash generation in Clean Air. Non-precious metal working capital also increased as a result of lower VAT payables. CAPEX was £301 million, in line with previous guidance. This includes the ongoing renewal of our refining assets and increasing Hydrogen Technologies manufacturing capacity. And after dividend payments and completion of our share buyback, we entered the year with net debt of £1 billion.

#### Clean Air

Increased momentum and inflation recovery through the year

So, turning now to the individual businesses.

Clean Air sales grew 2%, as we increased prices to mitigate cost inflation. This offset a decline in volumes with supply chain disruption impacting vehicle production, particularly in China, as a result of COVID. In light duty diesel, sales were up 4%, outperforming a declining market.

So, looking at light duty diesel by region, in Europe, our growth was driven by strong platform performance. In the Americas, we slightly outperformed a growing market driven by the ramp up of a new platform and further strong platform performance. We were in line with a declining market in Asia, impacted by China with lockdowns, a weak commercial vehicle market, and increased electric vehicle penetration.

Light duty gasoline sales decreased 1%, underperforming the market. In Europe and Asia, previous platform losses resulted in lower sales, but we continue to invest in our light duty gasoline business with some early signs of success as we win new customers.

Heavy-duty diesel was up 3%, significantly outperforming the market. In Europe, we delivered sales growth ahead of the market due to higher revenue per vehicle and good performance in off-road platforms. In the Americas our heavy-duty sales mix benefited from the Class 8 truck cycle and improved mix. And in Asia, sales decreased as lockdowns in China significantly impacted vehicle production.

There was a progressive improvement in Clean Air's performance, with the majority of inflation recovery taking place in the second half. We also delivered the initial benefits from our transformation programme. However, cost inflation, product mix, lower volumes and exchange rates impacted underlying operating profit, which decreased 28% to £230 million, as well as margins, which were 8.7%. We are on track to generate at least £4 billion worth of cash by 2031. We delivered around £600 million of cash in 2022-23 or £400 million excluding the

Reduction in metal prices. This brings the total to £1.4 billion over the last two years, or £1 billion excluding metal prices.

#### **PGM Services**

Lower PGM prices and refinery volumes

In PGMS, sales decreased 8% to £570 million against a strong prior year. This was driven by lower average metal prices and reduced refinery intakes, with less auto scrap due to a buoyant second-hand car market. In a volatile market, our metals trading service performed well, and with lower metal prices and volumes, operating profit reduced from £308 million to £257 million, and higher cost inflation was offset by pricing and operational efficiencies.

# **Catalyst Technologies**

Strong sales growth

In Catalyst Technologies, sales grew 17% to £560 million, largely driven by strong growth in licensing and refills and improved pricing. We had a great year in licensing, winning 11 new licences. Growth in first fills and refills also reflected higher pricing and a positive mix. And we are unlocking new growth in our new markets in sustainable technologies. So, for example, our new licence wins this year included five in low-carbon hydrogen and sustainable fuels.

Higher pricing, greater licensing and the benefits of our transformation programme offset significant cost inflation and the profit impact of around £10 million from the loss of our business in Russia. Underlying operating profit of £51 million was in line with the prior year, and margin recovered from 7.6% in the first half to 10.5% in the second.

#### **Hydrogen Technologies**

High growth and investing to meet customer demand

In Hydrogen Technologies revenues more than doubled to £55 million with higher sales, mainly from fuel sales, as we increased manufacturing output. The business reported an operating loss of £45 million, reflecting scaled-up investment, and we expect the business to breakeven in 2025-26. And as you heard from Liam, in January, we agreed the long-term strategic partnership with Plug Power in the US. That's one of the leading players in the Hydrogen economy. And we recently secured our second strategic partnership. This being with Hystar, the leading European electrolyser company. These help underpin our 2025 target of at least £200 million in sales from Hydrogen Technologies.

#### Transforming JM and delivering efficiencies

Moving on to costs.

We've made good progress on our cost transformation programme and delivered £45 million towards our 2024-25 savings target of at least £150 million. As examples, we've generated around £20 million in procurement savings as a result of improved pricing and raw material substitution, with more to come.

We're delayering the organisation, and this generated £10 million in savings. In IT, we've created a global service hub and generated benefits from co-location and process standardisation, which has delivered savings of around £10 million to date. We've improved and automated our HR processes, with a further saving of £5 million. And in addition, we are

rationalising our real estate, we're driving benefits from our new finance shared service centre, and we're accelerating the consolidation of Clean Air's manufacturing footprint.

#### **Cost inflation**

We've also made much improved progress recovering inflation. Raw materials represent 40% of total costs, and prices here have increased 6% year-on-year. This excludes substrates in Clean Air, which are a pass-through cost. Labour, which represents 30% of our cost base, rose 3%. We've made one-off payments rather than higher salary increases. And energy cost constitutes a relatively small proportion of our cost base, but this increased by more than 80% in the year. So, in total, we incurred cost inflation of £150 million and recovered around 65% with a strong acceleration in the second half.

# Investing with discipline in key growth areas

Our investment decisions are based on a prudent, disciplined approach to capital allocation. This year, capex was £301 million, down from £422 million in the prior year, which of course included Battery Materials. Last May, I guided to total capex of £1 billion over the three years to 2024-25. We now expect cumulative capex of £1.1 billion, largely reflecting an acceleration of Hydrogen Technologies.

And as a reminder, our capital deployment is modular and dependent on achieving clear milestones, making sure that we do not over-commit to any particular project.

In Hydrogen Technologies, we're scaling up investment to meet committed customer demand. In Catalyst Technologies, we anticipate modest investment in the short term to support growth. In Clean Air, we will reduce our capex to £50 million in 2024-25 as we complete our investment in new plants. And in PGMS, our refineries need substantial replacement capex to maintain our leading position.

# Outlook for year ending 31st March 2024

So finally, turning to the outlook for 2023-24.

We expect at least mid-single-digit growth in operating performance, assuming constant precious metal prices and currency. This is underpinned by efficiency benefits of £55 million, which we expect to more than offset cost inflation.

In Clean Air, we expect strong growth in operating performance. External data suggests that limited growth in vehicle production this year. So, our margin expansion will be driven by further pricing and efficiency benefits.

PGM Services will be driven largely by precious metal prices, with recycling volumes expected to remain subdued.

In Catalyst Technologies, we also expect strong growth in operating performance with increased licencing revenue and a margin uplift from improved pricing and efficiencies.

In Hydrogen Technologies, we expect strong sales growth and an operating loss similar to last year.

Metal prices continue to be volatile, and it's difficult to predict how they may develop. Rhodium in particular has seen an unusual sell-off in a highly illiquid market, pushing prices lower despite the market being in balance, and therefore the rhodium price is significantly lower than we expected. So, to illustrate the potential impact, if prices were to remain at their current level

for the rest of the year, the adverse impact would be around £50 million. But we are, of course, working hard to mitigate this risk. You may have seen in today's announcement that we've updated our rule of thumb to help you with your modelling. And at current FX rates, underlying operating profit would be around £10 million lower.

So, in summary, our overall operating performance was in line with market expectations. We are making good progress with our transformation programme and are on track to deliver a savings of at least £150 million by 2024-25.

We've recovered the majority of cost inflation through pricing. We continue to build our commercial muscle and remain committed to delivering further efficiencies. Finally, we're investing behind growth, and we're encouraged by the progress and customer wins in our growth businesses.

And with that, I'll hand back to you, Liam.

# Strategic progress

Liam Condon

Chief Executive Officer, Johnson Matthey

# Catalysing the net-zero transition

Great, thanks a lot, Stephen.

So, just a quick reminder of our 'Play to Win' strategy. These are the four businesses that we identified last year and said these are the businesses where JM can be a global leader and drive value creation. And what's not on this slide, parts of our portfolio that we have today that are not related to these businesses, we are in the process of divesting, and we will have completed that, within the next 12 months.

Now, specifically, what we said last year is what we expected to drive growth would really be the Catalyst Technologies and Hydrogen Technologies business. These are the businesses driving the net-zero transition, and they're, of course, enabled by the Platinum Group Metals business. What we didn't know what would happen is, of course, an energy crisis, and a huge focus from multiple countries around the world, realising that energy security is national security, but also realising if you're going to ensure your national security through energy security, you can use the opportunity to drive the net-zero transition at the same time.

#### Structural growth markets accelerating

Catalyst Technologies and Hydrogen Technologies addressable markets are scaling rapidly...

And this is exactly what has happened around the world. And it's been largely driven initially by the US with the Inflation Reduction Act, which at the end of the day is the world's biggest incentivisation package for clean energy. But it goes back to the core of the US understanding that energy security is national security and if they're going to drive that, they should use the opportunity to do it in a clean manner as well. This is a fundamental game-changer in the US, and it's driving investment and demand. You've seen a reaction from Europe with REPower and other initiatives and in other geographies around the world, whether it's India, China, basically

everybody is using the opportunity to either increase incentives for a clean energy transition or to increase regulatory pressure, for example, through a carbon tax.

So, the environment has fundamentally changed in the past 12 months. Again, it's hard to underestimate how much has actually happened in the past 12 months that has a profound impact on JM and the future of JM, the future of our portfolio.

# Portfolio transitioning and growing over time

Now, I'm going to try and illustrate this, and, please, bear with me for a moment because this is an illustration. It's not going to be a new set of targets to 2030-31, but I'm going to try and explain to you what impact this new environment has on our portfolio as we move forward as JM. And what you will see here is our various businesses and the underlying profitability and how the portfolio shifts and transitions over time. And you can see some pretty fundamental pieces in here.

One thing to note, of course, are Clean Air and Platinum Group Metals, and we'll talk to this a bit later. We expect these to continue to be quite stable businesses from an overall profitability point of view, going forward. And I'll explain why that that is in the relative parts of these presentations. But the growth is really driven by Catalyst Technologies and by Hydrogen Technologies. And here Catalyst Technologies, a lot of this is related to low carbon Hydrogen and sustainable fuels. These are massive new markets that are opening up for us. And again, if you think of a chemical plant or an energy plant with the incentives and the regulatory pressure that's available now, that's existing now, today, everybody is in essence if you're a chemical plant, you are trying to decarbonise your production. You have to because of the sustainability commitments you've made, but also because of carbon taxes and because of consumer pressure, you want to produce green chemicals or green products.

And here's where JM comes in because we have the process technology to enable that to happen. And this is the magic of what JM does in the Catalyst technology space. Same thing on the sustainable fuels. Take the example of sustainable aviation fuel. A massive, massive market. There is hardly any sustainable aviation fuel available today. Regulatory requirements will mean that over time the market will need to shift towards sustainable aviation fuel. We have process technology that will use almost any feedstock. But right now, we're using, for example, waste or biomass and turning that into sustainable aviation fuel. A huge market where JM today already has a leading position. So really, really exciting stuff going on here.

And Hydrogen Technologies, this is specifically fuel cells and electrolysers for us and with our focus on catalyst coated membranes. So, I think tremendous opportunity for JM driven by the net-zero transition, and because of the fact that we are in the right markets and have identified, I believe, the right growth opportunities.

# Catalyst Technologies: strong ability to win in a net zero world

Now, I'm going to focus first on Catalyst Technologies because you will have seen that's actually, in the outlook we've just shown there, it's the biggest driver of growth. And a few data points around this. What I will highlight is this is all a very short presentation. We think there's a lot to unpack here. So, we're going to offer towards the end of June, a, a teach-in or an additional session on Catalyst Technologies to explain the full breadth of the portfolio, to explain why we're winning the contracts that we're winning, and to show how we think the market will

evolve. So, this is just a very quick synopsis, but a lot more to come towards the end of June. So just a small teaser for that.

What you can see here is, and I think it's the key thing. I mean, why are we in such a good position? Well in, in syngas, which is essential if you want to take a sustainable feedstock, and you want to produce a green chemical, or you want to produce renewable energy, we today have a leading market position. So, we have proven technology, and if you are a big chemical company or a big energy company, and you want to transform your existing plants, you want to work with somebody that you trust. We've been working with our partners for decades, typically, and our technology is proven. If you've got a multi-billion dollar or pound plant, you don't want to be taking risks with unproven technology. We have proven award-winning technology. That's why we're winning the contracts that we're winning already now. And we have outlined that in November as well. We have a fantastic pipeline, over 100 projects now in the space of sustainable technologies with a focus on low-carbon hydrogen and sustainable fuels.

Now, beyond the growth opportunities, we also see great opportunities to increase our margin of our base business, the base Catalyst business. So, we have a base catalyst business and a process technology business, which kind of go hand-in-hand, but the growth is going to be driven by the process technology business, but that drives growth also for the catalyst business. And here, we see great opportunities to improve profitability, and we will be driving the margins of this business going forward.

#### Creating a stronger platform for growth

Now, how do we drive the margin in the short term? I spoke to you last May about the need for JM to improve our commercial capabilities. We talk about building commercial and muscle. I spoke about the need to improve our manufacturing and engineering capabilities.

And you can see here the examples, that we are already starting to see some fruits in the second half of this year of some of the initiatives that we've taken, whether it's around pricing, whether it's around the manufacturing, whether it's around procurement. And based on what we've seen so far, we're very confident that we can get our margins back to mid-teens within two years. So, from where we are today, you're going to see a substantial uptick already this year and a further uptick the following year. And this is based on initiatives that we have already started implementing.

A typical example here in procurement, just to give you one example, reducing the number of suppliers, JM has 12,000-13,000 employees. We have over 20,000 suppliers. And we're not sure what exactly the right number of suppliers is, but it's not 20,000. It's a lot less. And just by consolidating the supplier base, of course we're going to get much better deals from a procurement point of view, and we're going to increase supply resilience. And the lady who's driving this in Catalyst Technologies has done such a good job on the procurement side, we've promoted her to run procurement for all of JM, and she's driving a lot of the progress for us now. But this is an example of our opportunity not only to drive growth, but also to drive margin.

# Won five projects worth c.£120 million sales

On the growth side, and I think this is pretty fundamental. The projects that we have been winning in the past 12 months, these are almost game-changing products. These are first-of-

a-kind pioneering projects in the low-carbon hydrogen space and the sustainable fuel space. Take something like Strategic Biofuels. You've got to think about this: producing carbonnegative renewable diesel. I mean, in a world that's trying to reduce emissions, this is carbon negative. This is pretty phenomenal. And again, some of our sustainable aviation fuel projects turning in essence rubbish into sustainable aviation fuel is – I mean it's pretty impressive, from a technological point of view. But if you think about it from a market opportunity and ability to reduce emissions point of view is really quite phenomenal.

These five projects have been won so far. We had announced four during the year. Another one now, just one earlier in July, so a fifth one already. Again, these are typically first-of-a-kind type projects. To give you a sense of value, this is ballpark, we'd say £120 million in sales for the five projects. And to help you model this going forward, we've put in how the income streams typically kind of played out. And typically, what we have is a licensing component, which can be, of course, this varies for every project. They're always dependent on the specific project. But ballpark, £10 million as a licensing fee. First fill catalyst, a ballpark between £10-20 million. So take £15 million, plus 10-25'ish, as an average over the first five years. And then you have the refill catalyst. Typically, after 3-4 years, you're going to be refilling. And if you are the incumbent in that business, then there's a good probability that you're going to continue to get that refill business as well.

So, this is the income stream that can be modelled. And as we said, we have over a hundred projects today. That number will grow. These are projects where we have visibility today. But as the market grows, we will, of course, grow that pipeline further. So, this is just to give you a sense of why we're so excited about the catalyst technology business. And again, this is only a teaser for end of June. There will be a lot more information on detail on that, then.

## Hydrogen Technologies: strong ability to win in a net zero world

If we move on to Hydrogen Technologies, I think here the reasons to believe that JM is going to be a winner in this space, they're really played out by our customers' demands towards us. And if I give the example of Plug Power as a leading player in the hydrogen space, why did Plug Power decide to enter a strategic partnership? A very long-term strategic partnership with JM, with a joint development agreement, a long-term supply agreement up to 2030-plus? This is a big commitment. It's not just because we have great technology. They love the technology, said it's leading technology, but that wasn't enough. What they really wanted as well was our ability to manage precious metals, our ability to ensure security of access to precious metals, our ability to recycle, and our ability to develop a closed loop model because we already have a circularity component with our platinum group metals business in effect today.

And you put all of that together, that becomes a pretty impressive mode combined with our existing manufacturing capabilities. That's a pretty impressive, competitive package, and that's why partners are choosing to work with us.

As Stephen just mentioned, we signed a second deal with Hystar. Hystar is very interesting because they have a new technology on the membrane side, a thinner membrane, which if proven at industrial scale could be very interesting for the future of electrolysers. And they're working together with Yara and Equinor, who in tandem are in essence addressing the topics of food security and energy security. So, working here with the company based in Europe, addressing these topics with our technology. This is again, I think, a good sign of progress,

and I can tell you there is much more to come here. We're not going to put out now a new target for numbers of partnerships because what we realised is when we put a deadline on it, some of the partners try and use that deadline against you. So, we're going to be very relaxed and make sure we do the right deals and not just deals because we have a certain timeline out there. But there's a lot more to come here.

#### Investing in up to 15GW of capacity to support customer demand

Really important, we're investing in scale up.

This is an industry that is crying out for industrialisation. We don't have industrialisation yet. JM is ahead of the curve here. We've already got two gigawatts of capacity. By 2024-25 or next year, we'll have another 3GW based on our Royston plant in the UK. We're currently in the process now of starting, or we will be announcing soon, our build-up of a facility in the US, co-investment with Plug, which will give us another 10GW ultimately over time. So, we're scaling pretty quickly here. And this is really important because that allows us to get down the cost curve quickly. And as we continue to advance technology, this will help ensure that we retain our competitive edge. So, really hot space, really exciting space here as well. And everything we're doing is, again, Stephen mentioned it, underpinning our current sales targets.

Our current sales targets are not limited by demand, they're limited by ability to supply. So, the faster we can ramp up production, the more we can sell. And that's the clearly the objective here.

# PGM Services is a key enabler for our growth businesses

Moving on to Platinum Group Services.

We're the number one recycler in the world, at least two times bigger than any other company. This is a pretty phenomenal position that we have in here. And the platinum group metals have been specifically now defined by Europe and the US as critical minerals critical for the energy transition. So, I think everybody has kind of woken up to the fact that you're going to need platinum group metals for the energy transition. And there will be more new use cases that have not yet come to the market, but you can expect a lot more to happen in this space than just the current reliance on automotive. So, I think really important development here.

Second important development is over time we expect the primary supply, so mined product, to reduce over time from a volume point of view. And we expect the secondary supply, so where we have a leading position, and the demand there will continue to grow. And it will continue to grow because, of course, as we move towards a world that wants a net-zero transition, wants circularity, if you're using a recycled product, it makes imminently more sense than over-relying only on mined products, if you just think of the carbon footprint, the relative cost of extraction. So, we think we've got great opportunities here.

Traditionally, this business has been run as a volume type business. So, a big part of the business or the biggest part is refining, recycling. And we take a percentage fee based on current metal pricing.

What we've seen from our customers is what they really want is for us to help them develop closed loop solutions. So, we are thinking in a very different business model going forward of not only volume-based, but really moving towards a value-based business model, where we are offering an added value to our customers because we're ensuring security of supply of

platinum group metals, we can ensure the recycling component, and then we can price accordingly. So, it's based on value as opposed to volume. So, this is something that is just starting to take off now. Also, as we increase our commercial muscle as a company, I think an exciting development for the platinum group metal business overall.

# Investing in the capacity, resilience, efficiency and long-term sustainability of our assets

We've made investments to make sure that we stay ahead of the pack with platinum group metals and maintain our leading position. Specifically, and I was very happy to see this, our fuel sales catalyst expansion is fully on track. It's important, it's on budget, it's on time. So again, that proof point that we have been able to improve our manufacturing and engineering capabilities, and this is really important for the hydrogen technology business. We need to have an adequate amount of fuel cell catalysts. So, this is an important expansion.

And in China, we have just completed our new refining capability or facility with a new smelter. And we now have end-to-end refining capabilities in China – one of the fastest growing markets as well. So if you think about fuel cells specifically, but also electrolysers going forward. So, here as well, really important that we continue to expand, continue to invest. And what I'm most happy about is that these investments are on track, on budget, no surprises, and they will serve as a very strong foundation for continued growth in the future.

## Clean Air: on track to deliver at least £4bn of cash by 2030-31

And finally, from a business point of view, Clean Air, as Stephen said, we're on track for the £4 billion cash flow by 2030-31, and we will benefit from tighter emissions legislation, whether it's Euro 7, EPA 27, others around the world. And we have been winning significant business globally. So, in the past year, I've really been impressed with the win rate. It's always important to differentiate between current sales in a market which is based on contracts that have been won or lost years ago versus what we're winning as contracts, for example, in the past 12 months, is related to future sales. And the sales, that very significant sales, that contracts that we have been winning completely underpin the £4 billion-plus cash flow target. So, that's why we're very confident in that target.

And beyond the sales contracts that we have been winning, both in light duty diesel, heavy-duty diesel, but also in gasoline, beyond that, we have significant possibility to improve margin.

### Clean Air: driving competitiveness through efficiency measures

And same as in essence, Catalyst Technologies, you see a similar emphasis on driving cost out of the business where necessary, where required. So, three examples here.

Optimising our footprint, our production footprint. We have 16 facilities around the world, where're now we've announced a closure of four, and we shift production to our highest, let's say, most efficient plants, which of course has a significant cost impact for the business. Streamlining SG&A, fixed overheads. And the same emphasis in procurement here. A lot of opportunity. Clean Air is ultimately biggest – if we're making progress from a procurement point of view, Clean Air is probably 50% of our total procurement spend in the entire company. So professionalising procurement further, driving synergies there, means that Clean Air is going to be a big beneficiary. And beyond that, of course, we will be reducing capex over time. We'll be reducing R&D over time, so there's plenty of levers in the Clean Air business to ensure that this is a very profitable business going forward.

#### **Transforming JM**

Second last piece, transforming JM. I mentioned this is heavy lifting that we're doing right now. When we talk about it internally, there's always a question like, what are we really trying to achieve beyond the numbers, beyond the financials? Like, why do you want to – what kind of a company do we want to have at JM? And what we've been talking a lot about is the need for people growth, meaning development of our people is crucial. We've had a situation that we've been, I would say, almost neglecting development of our people. We've almost defaulted to hiring externally from many higher-level positions. We need to grow the talent from internally. That means we need to be investing in people growth. And we've had some great examples of that in recent months that we've been taking bets on great people, and we have fantastic people at JM.

We're now, basically, investing in their development and making sure that they will be the future leaders of JM going forward. So, really important that we get this piece right. Customer focus is the 'A' and 'O' for a company like ours. And again, I've spoken a lot about our need and our commitment to improving commercial capability, manufacturing, engineering. We've seen many examples of that happening already now, in the last, particularly the last six months. It takes a while to start the engine moving, but when it moves then and starts gathering speed, then you really start to see the benefits. And that's why we're confident going forward that there's going to be a lot more benefits.

And simplification really important for a company. It's a big company, but it's not overly big. So, we've got to make sure that it's right sized, that it's easy to do business within JM, and it's easy for our customers to do business for us, and that we're not overburdening, for example, engineers with administrative tasks. They should be focusing on engineering. We've got to free them up from any kind of administrative burden. So, a lot of focus on getting the processes better, better streamlined, clear accountabilities, and just making sure it's easy for us to move faster, to be a more agile company and to be able to tap into all the opportunities we have.

# Sustainability is at the heart of everything we do

Final point, sustainability. For a company that is aspiring to catalyse the net-zero transition, really important that what we're doing is guided by all the principles of sustainability. So, we've got to produce in a sustainable manner, and we've got to help our customers reduce their emissions as well.

I've honestly been impressed with the progress, so far, in the past 12 months. We're on track with all of our commitments. And we had ambitious commitments, but based on the progress we've made so far, we've actually raised the bar again. So specifically, for the Scope 1, 2, and now the Scope 3 emissions, we have increased the ambition to 42% reduction in emissions by 2030. And this means we're fully in line with the 1.5-degree target. So, this is the Science-Based Targets initiative. This is an audited process, but it puts us among the relatively few, there's not that many companies that have these ambitious targets. And again, good to see that we're so far on track and that's recognised externally, whether it's MSCI or EcoVadis with a platinum rating. So, I think good external recognition.

# Net zero transition driving growth

So, in essence, to summarise again, back to where we started, the results were in line with expectations, as Stephen outlined. I hope you got a sense both from the scorecard and the

short presentation that we are delivering on our commitments and that we're transforming JM to drive growth. And I hope you got a sense that we are truly excited about the future for JM, and we're also a bit excited to have a nice Q&A with you here today.

So, thank you very much and looking forward to the Q&A. Thank you.

# Q&A

**Martin Dunwoodie:** Thank you very much, Liam, Stephen for the presentation. We'll move to the Q&A, and we'll have questions from the room and also on the webcast. And as a reminder, if you can give your name and institution when asking the question. And we have a first one, Charlie Bentley. Sorry, I've already given your name.

Charles Bentley (Jefferies): Charlie Bentley, Jefferies, just a couple. So if I think about the guide for next year, on underlying, you've got something like maybe £30 million, expectations of something like £30 million of higher incremental operating profit, and then there's kind of £55 million of cost savings. You're doing better on the pricing versus cost recovery. On the cost side, I mean, energy was maybe 50% of the overall inflation this year. So maybe it could be, I don't know how that will trend, but I guess there's a lot of tailwinds there, and I'm just not sure what the kind of offsetting headwind is.

And the second point is just on the kind of cash generation from Clean Air, £600 million this year. And then if I look at obviously free cash flow being something like £75 million, capex is part of that, there's a lot of working capital outflow. But like how does that – how do we kind of see the proper realisation of that coming through, and how should we think about that over the next few years? Thanks.

**Stephen Oxley:** Yeah. Brilliant. Thank you, Charlie. So, let me talk about the overall progression of the operating profit and the £55 million that you talked about. So, look, inflation's still high, you know, hopefully it will come off. But we're still in a high inflation environment, and we're not recovering 100%. I think we've done a really, really good job. And hopefully, you've seen that in the second half, but we're going to get some leakage. Okay? We're also assuming that volumes are going to remain soft, and that's both on the Clean Air side, but also in PGMS, because of the refining auto scrap volumes. So, look, if they come back faster, there's some upside there.

But what we're really doing is relying on the cost savings and the transformation programmes. In other words, things that are within our control, to drive the margin of the business on an underlying basis. Okay?

So, just going to Clean Air. So, look, yeah, it's really good. We've said at least £4 billion to 2031, That's at least. And then the business is going to carry on a long, long way after that. So, I think we've made a good start against our commitment. So, it's £1.4 billion, thus far. That's a lot of cash, you know, so where's that gone? We've spent – I'm sorry – we've returned £0.5 billion to shareholders in two years. And don't forget, we've had capex of about £700 million. So, you can kind of see the puts and takes.

What we've said is that on average, it will be £400 million. It's going to be lumpy. So, good start. Look, if we get some volumes back and some growth into the business, it's not going to be another £600 million next year. So, let's see.

**Geoff Haire (UBS):** Hi, Geoff Haire from UBS. Just two quick questions. Stephen, you mentioned when you talked about metal price, particularly rhodium, that there was some stuff you could do to offset the impact. Could you just sort of give a bit of an explanation of what you can actually do, on that?

And then secondly, on the Clean Air target to increase the margins, you had three buckets of sort of actions you're taking. Could you sort of breakdown which of those are the biggest, or is it all equal across each of the three buckets?

**Stephen Oxley:** Let me pick up metal price, Geoff. So look, metal prices are all over the place. They're hugely volatile. We had platinum weak last week, and you know that was obviously the discussion. Rhodium, particularly, has moved massively. Now the market is in sort of balance as I said. What's happened is that there are one or two Chinese customers that have offloaded an awful lot of rhodium. It's a highly, highly illiquid market, so it's kind of taken the price down. We don't, and we won't predict price forecasts, but it is certainly lower than we were expecting. Let me sort of say that.

So, look, what are we doing? Well, don't forget volatility helps our business. So, prices could be low volatile, that benefits our trading business, which is good news. And then look, if the price is low, we're going to work really hard to mitigate that. So, we'll push harder on volumes, we'll push harder on pricing, we'll push even harder on the cost take-out. So, look, we'll work even harder to offset that risk. But, you know, who knows, prices may go back up.

**Liam Condon:** Yeah, and briefly add on the three components, so primarily pricing, overall cost - particularly fixed overheads and SG&A - and procurement, ballpark they're roughly equal. And it's based on the progress that we've seen, particularly in the second half of the year because, of course, a lot of our initiatives really only started kicking in in the second half. But that's what kind of gives us confidence that these are, are all achievable.

Martin Dunwoodie: Let's see, Charlie?

**Charlie Webb (Morgan Stanley):** Thank you. Yeah, Charlie Webb from Morgan Stanley, maybe just a couple from my side.

So, first on CT, and I don't want to jump the gun because obviously, you've got something coming up in the not too distant in future. But in terms of your wins to date, can you give us any sense on success rate? Because obviously, as you say, you're a very leading player in syngas. And particularly, thinking on the hydrogen side, you know, what are the win rates? Because we are hearing a lot of blue hydrogen projects in North America, so I'd be keen to kind of understand that.

And then second on that piece, engineering capacity. You kind of alluded to it, you know, get engineers out there doing their jobs. You know, when you look at the North American and the IRA opportunity, both in terms of your capacity but also potentially your customer's capacity, how do you see the engineering given a tight labour market in the US? So, just you know, you have 100 projects, but in reality, how many of them can actually happen? Or you talk about growth in that, you know, is that realistic?

And then just lastly on the Value Businesses. Liam, you kind of alluded to the fact that it might not be part of the business in 12 months' time. So, just any thoughts and updates on those businesses where they stand today, you know, where you are in that process as you're streamlining the portfolio?

**Liam Condon:** Sure, thanks a lot. So, I'm actually going to ask Jane for, for the first two on, on win rates and engineers. We were just actually discussing this yesterday, and these are two topics that Jane is very passionate about, as she can explain much more articulately than me. So, Jane, the Head of our Catalyst Technology business, she'll address the first two and, and I'll briefly address the third, and maybe you chime in, Stephen, on the third one as well.

Jane?

Jane Toogood: Hi. So, can you hear me, okay? Yeah. So, first one about the win rate. Let's explain a little bit about what's going on with the market here. These are early days, okay, in this whole path to net-zero. And what you've got at the moment are these massive incentives, as you know, in the US, hence what you're hearing about the blue hydrogen projects, etc. And what's very important is to actually deliver these first of a kind projects, which is why these wins are very significant. Because what you're doing is proving that that technology works. You're taking away risk for the investors, so you make the projects more bankable, okay? So, these are very significant wins that we're making and that gives security about future wins and gives, our customers, our clients more security about using our technologies in what's at the end of the day, as Liam explained, are extremely large investments that they're needing to make. So very important.

If you look at our pipeline of over 100 projects, we're seeing, you know, all the projects that are out there. And if you look at the future, what you're also going to see are many more projects coming on as the various regulatory pressures come onto companies to actually provide sustainable fuels, or use sustainable fuels, or to decarbonise using hydrogen. And so, I think what you're going to see is a growing pipeline, and you're also going to see many more projects over the next, well, 20, 30 years.

So, if we come onto then the whole piece about engineers and skills, which is a topic I spend a lot of time on, of course. Skills shortage across that whole decarbonisation space is a very big topic, and engineers, of course, are very important for us. We've been working very hard to make sure we increase our engineering capacity. Over the last year, we actually increased our number of engineers by 20%. We're using different recruiting methods. We're trying to target much more diverse, employees, potential employees. So, really trying to make sure they're aware of the flexible working practices that we offer, etc.

Equally, we are not going to be able to scale unless we change some of the ways we do things. So, we're looking at digitising as much as we can, and make sure that none of those administrative tasks that Liam referred to are left in that, but that we really swift up the process by which we are doing the engineering.

And lastly, I think, and technically, what you're going to see is a modularisation over time of what's offered for technology solutions. It's not there yet because it's very early days in the way that these things are evolving, but I think over time things will become more modular. Last week in the US, there was a presentation by McDermott, which actually demonstrated a

modularisation of low-carbon Hydrogen technology using JM technology. And this is the sort of developments that you'll see over time. Okay.

**Liam Condon:** Thanks a lot, Jane. And on the Value Businesses, the biggest one that we have by far that's still to be sold is Medical Device Components. I can tell you there a queue a mile long of companies who are interested in purchasing that. Stephen and Louise Melikian, who's here today, are driving that process. So, maybe, Stephen, you can talk a little bit about the process?

**Stephen Oxley:** Yeah. So, just to remind you, we've said a target of at least £300 million in net proceeds by the end of March 2024. We've made really good progress. So, we're off, we've sold two. And look, these are great businesses. Look at the results and the contribution they've made this year. But we are not the best owner of those. So, two have gone. We're in a process on the other two. And I can tell you on the Medical Device business, pretty much most weeks I get an email. We've got more than 100 companies expressing real interest in that business. So, look, we're not in a rush to sell. But I'm confident by the end of 2024, we'll have delivered, and hopefully exceeded that commitment.

Charlie Webb: Thank you very much.

Martin Dunwoodie: Go to Tristan and then Riya after.

**Tristan Lamotte (Deutsche Bank):** Hi, morning, Tristan here from Deutsche Bank. Three questions, please.

The first is on Catalyst Technologies. So, in terms of the Catalyst Technologies contracts, I was just wondering who the main players are that you're competing with on those and what technologies Johnson Matthey has that others don't have there?

And then the second question is just on the risks around the hydrogen scale up and the main pushbacks that you're getting from potential end users in terms of your involvement in the supply chain. Are there pushbacks around the dangerousness of the technologies still? Are those still ongoing?

And then the third is on the trajectory for Clean Air. So, you provided a while back a kind of shape of the Clean Air volumes trajectory in terms of auto production. Are you still expecting it to have the same shape? Are you expecting diesel to decline faster than the rest of the market?

**Liam Condon:** Okay, great, thanks a lot Tristan. So, the first one, on CT, the competitors, again, I'll ask Jane to answer that one. On hydrogen scale-up, I'll take that one. And you want to – Stephen will take the Clean Air, the trajectory and the update on that.

Jane?

**Jane Toogood:** Right. So, just to talk for a moment then about competitors and about what we've got that's different. So, first thing to understand about this kind of market; I was talking earlier about the sorts of investments that you're making when you are investing in sustainable fuels and sustainable chemicals. And track record is really important. Okay. So, being a reliable technology and catalyst provider is essential. And so, there aren't lots of competitors in this space. Typically, it's a space where you are looking at, you know, maybe two or three

competitors generally. And that's quite important in terms of the sureness that the customer has as they're investing.

In terms of what's different about what we've got and where we have a differentiation, with regard to hydrogen, we have technology that allows a 99% CO<sub>2</sub> capture. So, when you think about the definition of low carbon Hydrogen, you are pretty close to 100% carbon capture. This is pretty important. We have the ability, of course, to combine that with other technology, should customers wish. With regard to sustainable fuels, we have scalability. We have the ability to take multiple feedstocks, be it waste, biomass, etc., and to meet the sorts of requirements that customers need in order to access the tax credits that they need, for example, in the US or in Europe, whatever is required for their local funding or mandatory requirements. And this is quite important, so we have a detailed understanding of that. And this comes from combining technology and catalysis know-how.

So, it means that we know not only how to build it, but also how to run it cost effectively, so you get a really efficient and economic plant. So, it's right at the heart of what, you know, JM does, catalysing the net-zero transition. So, I think those are two major things I think where we differentiate. Much more at the end of June, of course, to talk about there.

Oh, just, can I add one thing?

Liam Condon: Sure, sure.

**Jane Toogood:** So, we don't talk about it so much, but there was an article in the paper, just the other day about, you know, sustainable aviation fuel. And one of the things that we've got, it's a little bit further back in terms of where it's coming, but it's another technology that allows you to use 100% sustainable aviation fuel in a flight. In other words, that sort of aromatics piece, which we co-developed with a company called Virent. And this, there's been a couple of planes that have flown with that already, 100% sustainable aviation fuel, and that's also going to help solve some other problems that there are around adopting this net-zero transition. So, all sorts of things to talk about later.

**Liam Condon:** Thank you, Jane. As Jane mentioned it, I'll just make one more connection. We're trying not to deviate too much, but with the example that Jane just mentioned, you actually require palladium as a catalyst. So, a new use for palladium. And sustainable aviation fuel is of course something that could be of great interest going forward. So, just to make one more connection.

So, on hydrogen scale-up, I think there's unanimous agreement, both in scientific and regulatory circles, that there's not going to be a net-zero transition without an acceleration of the hydrogen economy. So, we need to make sure that it's done in the safest possible manner. I think the biggest discussion practically is rather around, PFAS, the use of PFAs in ionomers membranes is a big discussion. I think the identification of, at the end of the day, what we do as critical to the energy transition has been really important.

If we think about PFAS, what we have been discussing with regulatory authorities is, we can have a closed loop solution so that the product never actually enters the environment. And this plays into the strength, again, of Johnson Matthey as a company with a circular business model. And we also, and Maurits can speak to this as well, we also do research and development on PFAS-free alternative ionomers, but that's a long way away.

So, industry is going to need this. And as you know, PFAS is in many products, so it's important that they're classified as essential use products in the current regulatory discussions. And from what we're getting as feedback, that seems to be on track.

So, I think by and large, we believe the bigger challenge will rather be the pace of scale-up, simply because it's a very early-stage nascent industry and there's a lot of industrialisation that still needs to happen. I think that's rather the bigger bottleneck as opposed to any other concerns from a regulatory point of view.

Clean Air?

**Stephen Oxley:** Yeah. Tristan, so let me pick up Clean Air. So yes, the trajectory is broadly as we expected. There are sort of puts and takes. So, battery electric vehicle penetration in China is probably faster than we thought. But then on the other side, our customers are talking about things like hydrogen ICE in heavy duty. So look, there, there will be pluses and minuses. But we very deliberately, when we took you through the seminar last year, we talked through a range of scenarios, and that's why we said at least £4 billion. So, in our conservative case, for example, we said in Europe that there'd be no light duty ICE vehicles at all by 2030. Now, that's not just cars that includes a six-tonne truck, and nobody is saying that. But also, really importantly, we're talking about cash, and we have the various levers that we can pull – site closures, R&D coming down. So, look, that's why we're confident that it'll be at least £4 billion by 2031.

**Liam Condon:** And I think important to add, you might have seen in the news in recent weeks, big OEM manufacturer CEOs in Europe pushing back their electrification targets because they just – they can't scale up at what they originally thought would be possible. So, I think we feel very comfortable with our forecast trajectory.

Martin Dunwoodie: We go to Riya next, then we'll have Gunther, and Ranulf.

**Riya Kotecha (Bank of America Merrill Lynch):** Hi, it's Riya from Bank of America. I have four questions, please.

My first one is a follow-up on the Clean Air scenarios that you presented last year. The China EV penetration seems to be impacting your FY23 results in light duty and is expected the penetration rate to grow to 35% this year compared to your target in 2030 of 50%. Do you think you'll have to raise that number and, if so, rationalise the fixed cost base at a faster than expected pace post 2025?

And my second question is with regards to the Clean Air margin and the targets that you laid out last year as well. So, the margin was about 9% compared to your target of mid-double-digit near-term and low-double-digit longer term. So, how should I think about that trajectory and the return to historical levels, especially with ICE production forecasted to peak in 2024-25, which is another headwind that you'll likely need to deal with?

My third question is on CT and the 100-project pipeline that you mentioned. Can you give a sense of what the backlog might be for next year and the year after that, and the delivery of the pipeline timing wise?

And my fourth question is on capex that you've raised slightly. Can you speak about where this is going in within hydrogen? Is it existing investments costing more, or are you incrementally investing to grow capacity? Thanks.

**Liam Condon:** Thanks, Riya. So, Stephen will take one, two, and four, and I'll take the third one.

**Stephen Oxley:** I got a bad deal there. Right. So, Clean Air, China. I think 2023 is more about volumes in China through COVID, rather than EV penetration. So, that really is the shift. And we'll see how that develops, but that's the answer for that year.

The margin, the Clean Air margin 8.7% for 2023, driven by a number of factors, lower volumes for sure, but also the leakage on inflation. So, that's really why that's pushed down. And when we've talked about strong growth in performance for 2024, so pushing back up, that will take us back into double-digit margin. And that's really as we are capturing more inflation, but particularly when we are getting the benefits of transformation.

Let me pick – I'll do the CAPEX question on HT. So, remember, last year we said about £1 billion, about 25% was HT. We've added another £100 million to that. That is entirely due to the opportunity that we have with Plug Power in the US. That links to – obviously - to the Inflation Reduction Act. So, we're spending more there. We're actually accelerating revenue from what we thought before. There is no incremental capex for the second strategic partnership, the Hystar one that we talked about. That will be within the existing UK capacity.

**Liam Condon:** And the third one, so on the CT projects, we have a target out there. One of our milestones is 10 large-scale projects, that's across CT and HT. Practically, that's the way we broke that down internally to be very transparent, is eight plus two. So, eight CT projects, of which we've delivered five already. And I'm pretty sure that Jane is going to be working hard to deliver more than that, but I think it's that kind of a pace for last year, at least for this year. And going forward, I think that's the kind of pace that you can expect on this.

Martin Dunwoodie: Gunther, if you can. Thank you.

**Gunther Zechmann (Bernstein):** Hi, Gunther Zechmann from Bernstein. I've only got two questions. I hope you're not too disappointed.

The first one is on price versus cost. So, you've got a £50 million shortfall this year just reported. Do you expect to fully recover that in the upcoming year? What's the timeframe? How committed are you today on the contracts, and how big could that leakage be that you've been talking about?

And the second one. Liam, you spoke about the PGM Services business moving from a volume approach to a value approach with a closed loop. Could you just give some specific examples what you've been doing in that business for that shift to happen, please?

**Stephen Oxley:** Gunther, let me start with inflation. So look, we were really honest with you through the year that we started off with a pretty weak commercial muscle. And that's pricing, that's inflation recovery, that's you know, across the board. And we really suffered in the first half. And what you've seen is that we've actually done much better in the second half, so 80% recovery in the second. But look, that still obviously leaves some leakage.

I think if you look at benchmarks, 80% is pretty good. It may not be right at the top, but it is actually pretty good. And we're never going to get 100%, that's just the reality of life. So, there is some leakage. There will be some leakage next year. There will be a little bit of a lag from 2023 into 2024, but we've actually got better at doing this week by week. So, the leakage compared to the half-year will actually be pretty small.

What I would say is contractually as well, it's not just the negotiations where we are writing new contracts with our customers. We are much better at writing inflation clauses into those. So, it's easier and faster to get that recovery. So, the net position will be smaller in 2024.

**Liam Condon:** Yeah. And PGM's business model evolving, I think probably the best example is Plug, and the idea behind a strategic partnership. In essence, what we're doing is moving away from transactional type of business. Where in the past we would've sold a catalyst, maybe would've managed metals for somebody and got a fee on that. But it's bits and pieces of sales to a complete offering, where we're saying we will take on everything for you, we'll deliver the catalyst coated membrane, we'll manage the metals, we'll do the recycling, we'll ensure a closed loop, and we will have a complete offering for that. That's all priced in. So, you get away from the pricing, the bits and the pieces, and you can have a much more compelling complete offering. That's the way we see the business evolving.

This is early days. And of course, when you shift any business model, it typically takes some time. But what we have seen as well in parallel is an increase in demand for recycled product. And for the first time, we're having discussions around premium pricing for recycled product. But the real kicker, I think, is in offering closed loop solutions to our customers. And whether it's a Plug Power for electrolysers and fuel cells or an automotive supplier who wants fuel cells, being able to offer the complete solution to them is much more compelling from a value point of view. And that's the direction that we're nudging the business now. We've multiple pilots ongoing, but the biggest example that I could quote to you right now is the Plug Power example.

Gunther Zechmann: Thank you.

Ranulf Orr (Citigroup): Hi, morning, Ranulf Orr from Citi. Just three, please.

So, firstly, following on with recycling and the evolution of the business model, could you please maybe talk a little bit about the merits of doing? So, you go from a perhaps quite opaque but through cycle very high return business to maybe a slightly more transparent one. So, you know, you're trading returns and margin maybe for stability there.

Secondly, just on recycling as well, the new China facility, could you talk a little bit about the contribution this year and maybe how that will evolve from a volume perspective over time?

And thirdly, on Clean Air, we had a slightly disappointing Euro 7 update. I mean, has that affected your thinking on China 7 value uplifts as well? Thank you.

**Liam Condon:** Yeah, thanks. So, I'll take the first one, on the merits of moving towards a more value-based business model, PGM, maybe ask Alastair, who's with us, the Head of PGMS, to talk about China volumes on the refinery side and Clean Air, yeah, Anish, I will ask Anish, who's the Head of the Clean Air business to talk about that.

So, the merits, and again, if I go back to the example of Plug Power, allowing us to enter into a strategic partnership, because of the complete offering is hugely beneficial. And if you think

of the Plug Power example, it's a joint development agreement. It's a long-term supply agreement. So, that gives us security of volumes for the future that allows us to invest, that allows us to get down the cost curve, and we can basically price in then the complete package.

What you can assume is as we move towards a value-based model, that this, of course, will be attractive from a margin point of view. We do have attractive margins, as you know, in our PGM business today. But this is clearly, the more we go in this direction, will help the overall margin of the Group. That's clearly the intent and I think is the inevitable consequence if you move from a more of a volume-oriented approach towards a value-based approach.

And China volumes, Alastair, and in case you want to add anything to the previous comment, please do as well. Alastair runs our PGM business. So, – and maybe you can briefly explain the three core components of the PGM business as well.

**Alastair Judge:** So, just the China one, just tell me again, Ranulf, just make sure I answer it. Just what exactly is the question?

**Ranulf Orr:** You have a new facility in China ramping up. So, what kind of earnings contribution do you think, and does it affect the return on capital of the business over time?

**Alastair Judge:** That's good. So, we've always had the ability to produce pure metals from the refinery in China. And what we've added is the ability to do smelting and a second step called TBRC, which is a technical step. So, what we can now do is offer customers the whole refining cycle rather than just the end refining, and that makes us obviously a lot more attractive because we can do the whole job for them. And we can take metal right the way through from sort of impurity to pure metal. So, that is a new service we're offering and that means we can offer a much more integrated refining loop for them.

Just on what Liam said, I think, you know, Liam's explained it very well. We've always had brilliant science in our fabrication of PGMs. We still have that. What we're seeing, not with just with Plug, but we're seeing it a lot with our pharma customers and our agribusiness customers, is they're finding new uses for PGMs, and as they find it, they're having to try and understand what PGMs do. And so, we are saying to them, you don't have to worry about all of that. We can explain to you how to do the whole cycle for PGMs from the sourcing through the fabrication, through the recycling. And it makes it much easier for them to actually use the metals because it is quite complicated. And some of our customers in automotive have been very good at this for a long time, but some of our new customers doing new uses are looking at going, that is a really valuable thing for us because we don't want to become experts. So, if you can do the whole loop for us, that will make a difference and that will add a lot of value. Yeah.

Liam Condon: Thanks, Alastair. And Clean Air, Anish? our Head of Clean Air business

**Anish Taneja:** Thank you. Good morning also from my side. Thank you for the question. And I share the slight disappointment on the Euro 7 discussion that is happening because it's absolutely clear we need a strong Euro 7 legislation at the end of the day to have clean air and to save lives. So, everything that is going to help to put Euro 7 in place sooner is great for everyone on this planet.

So, on the effect on China, I do not see any negative effects on any legislation around the world because as Liam has stated before, most of the OEMs are stating clearly that they cannot meet the electrification targets that they had outlined. And additionally, they're saying in some parts

of the world, electrification will never get to where it was initially planned a few years ago. So, the legislation on catalysts is going to be important to really drive the transformation, and we are part of the solution of that, obviously.

**Ranulf Orr:** Okay, but for China 7 specifically, do you think a similar magnitude of kind of value uplift to Euro 7, or?

**Anish Taneja:** China 7 is not as advanced as Euro 7 on how the legislation's going to look like. So, it would be kind of guessing what I would tell you. So, I'm not going to do that. I just know that in China, electrification is indeed a little bit faster, but if you focus on the rest of the world, electrification is much slower than anticipated. And as I said before, even big OEMs are saying that in some parts of the world it will never get there as anticipated. So, we are focusing on that opportunity.

Liam Condon: Thanks, Anish.

**Martin Dunwoodie:** We have nothing on the webcast. So, final call for questions in the room. No. In that case, thank you very much everybody for attending today, and we will speak to you at the end of June.

**Liam Condon:** Thanks a lot, everybody.

Martin Dunwoodie: Thank you.

[END OF TRANSCRIPT]