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Clean Air roundtable

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Stephen Oxley

Chief Financial Officer, Johnson Matthey plc

Introduction

Good morning / afternoon everyone. Thanks all for joining and welcome to our Clean Air roundtable. Our focus for today is to give you greater insight into our Clean Air business and how it may evolve over the coming decades with the transition to electric vehicles.

We talked previously about our cash generation target of at least £4 billion over the next decade under our range of scenarios – we'll explain why we're confident we can deliver on this, and that the business has durability with significant profit and cash generation beyond fiscal year 2031.

So when you think about the £4 billion, what I'd like you to takeaway is our confidence in that number…and it being at least that amount. It could of course be higher depending on the scenario and remember we're only talking about the next 10 years. We have a business that is likely to continue for many years after that, particularly in Heavy Duty Diesel where we are the market leader, generating further profits and cash.

Before I introduce the Clean Air team, let me first say a few words on how I see the group to put this session in context. JM's technologies and solutions are completely aligned with our challenge and responsibility as a planet to reach net zero. We're not a business that just talks ESG or sustainability, sustainability is our business. We're targeting high growth, high return opportunities in hydrogen, in circularity and the decarbonisation of chemicals. And we're well positioned given our leading technologies, strong market positions and customer relationships.

The foundations of Johnson Matthey are strong. Our metals expertise and position as the world's leader in platinum group metals is at the core of what we do – it's been developed over many years and, this, combined with our catalysis expertise in Catalyst Technologies has been fundamental to our success in Clean Air, and will be to our future. This core expertise underpins our competitive advantage and is critical to developing the new technologies that are needed to tackle climate change.

I've been at JM coming up a year now. These last 10 months have been tough, and disappointing for our shareholders and our employees. But we have faced into some difficult and necessary decisions. We have clear requirements and opportunities to improve our execution, drive greater efficiency across the group, be disciplined in our allocation of capital and aggressively commercialise our growth opportunities.

As the world accelerates its transition to net zero, our opportunities are coming towards us more quickly and I'm genuinely excited about JM's future. Over recent weeks, we've been working closely with Liam – he's already heavily engaged and as we mentioned before, you'll hear more from him in May.

Today's presenters

I'm very pleased to introduce our Clean Air leadership team who have been instrumental in driving the recent transformation in this business.

Alastair Judge – our Clean Air CFO and Interim CEO. Alastair has been with JM for over 3 years and led the strategy refresh with Joan Braca in 2020.

Peter Hill is our Chief Commercial Officer and Transformation Director. Peter joined JM in early 2020, after spending most of his career at Honeywell in a variety of commercial and operations roles.

And Millissa Flanagan is our Clean Air Operations Officer. Millissa joined us 14 months ago and brings over 35 years' experience built in a variety of operations, supply chain and business roles across the Automotive, Chemicals, Plastics and Refining industries

Alastair, Peter and Millissa don't walk alone, they are supported by a great team, including an operations leadership with over 130 years' experience blending a depth of knowledge of JM, Automotive, Chemical, Private Equity and other global businesses.

So with that, I'm delighted to hand over to Alastair and the team. We've got about 40 minutes or so for the presentation, followed by Q&A. This session will be recorded for our purposes but the Q&A discussion will not be published.

Clean Air overview

Alastair Judge

Clean Air Chief Financial Officer and Interim Chief Executive, Johnson Matthey plc

Introduction

Thank you Stephen. I'll start by briefly setting the scene. Peter will then share our view of the market. Millissa will explain the changes we're making in our operations to drive out costs. And I will wrap up by showing how the business will deliver at least £4 billion in cash by fiscal year 2031. We'll present for about 40 minutes and then open up for questions.

Clean Air overview: delivering on our strategy

As you know, Clean Air is the engine room of Johnson Matthey. It plays a vital role in reducing harmful vehicle emissions as regulation continues to tighten globally.

It's founded on our expertise in catalytic convertor technology. Clean Air generated sales of £2.4 billion in fiscal year 20/21 – sales that were well diversified across Light Duty Diesel, Heavy Duty Diesel and Light Duty Gasoline.

In May last year we committed to delivering at least £4 billion of cash by fiscal year 2031 using four key levers.

First, we will deliver strong sales in a durable market that still has growth opportunities

We have long standing relationships with the key global OEMs, underpinned by strong technology positions. We will maintain our leading market positions in both light and heavy duty diesel and we will selectively target platforms in light duty gasoline to ensure a robust market share. On Light Duty Gasoline this means we will focus our internal resource on winning

the opportunities that match our ambitions, and not dissipate our energy on smaller non-core platforms in a very fragmented market.

Overall, we expect to retain a 1/3 share of the global market over the next decade, with our position supported by our global share of about 60% in HDD.

We are continuing to develop world leading catalysts to support our customers with the tighter regulations coming into force from 2026 and we are already winning critical business linked to Euro 7 and new regulation from the US Environmental Protection Agency.

The second priority is driving cost efficiencies. 25% of our costs are fixed at around £550 million per annum. We plan to reduce this by a minimum of £100 million by fiscal year 30/31, and this could be as high as £200 million depending on the rate of electrification. The biggest driver here is the consolidation and optimisation of our manufacturing footprint.

We have 16 sites globally. Within this portfolio our five newest plants are highly efficient. This gives us the option to consolidate volumes as the market matures. We started moving production out of our most expensive facility in Royston in the UK in fiscal year 21 and this will deliver cumulative savings of £29 million by the end of fiscal year 22 and run rate savings of about £50 million by the end of fiscal year 23.

We have also established a new global operating model to enable us to respond to market scenarios as they evolve with agility and flexibility. As part of this change, we now manage our business by the segments you see on the left rather than by region, and it's important to note that the new model is leaner and lower cost that the old regional model. This sets us up well to deliver further overhead cost reductions over time.

Third we are on track to reduce capital expenditure from an average of £135 million over the past 3 years, to c.£50 million in 2024/25 now that our major strategic investment in new plants is complete.

Lastly working capital will unwind in line with sales as the business matures from around £2 billion last April to c.£800 million at the end of fiscal year 31 in our base case.

Clean Air remains a cash generative business of scale in 2030/31 and beyond

Our business will still have material value after 2031. It will be smaller than today and in our base case scenario it will have sales in the region of £2 billion of which around half will be Heavy Duty Diesel. It will be lean and generate low double-digit margins. And we will have significant working capital to release from fiscal year 2031 onwards.

I'll talk more about this at the end of the presentation. Now I'd like to hand over to Peter Hill, our Chief Commercial Officer, to talk about the market.

Market

Peter Hill

Clean Air Chief Commercial Officer and Transformation Director, Johnson Matthey plc

Thanks Alastair and good morning/afternoon everyone.

Clean Air is serving a durable, global market

In the coming decade, global demand for automotive catalysts will be driven by four main trends – two acting to increase demand, and two to bring it down.

Over the next 24 months, we expect shortages of semiconductors and other critical components to be gradually resolved. This will enable an increase in vehicle production to meet pent up consumer and business demand.

Later in the decade, new regulations to limit tailpipe emissions will require OEMs to integrate additional emission control stages. This will increase the value of catalyst per vehicle.

On the downside, battery electric vehicles will take a larger share of vehicle sales, which will gradually reduce our addressable market.

Finally, the share of European light duty vehicles fitted with diesel powertrains will decline further in favour of gasoline hybrids. While these still require aftertreatment, the value of catalyst coating excluding precious metal will be lower.

The exact timing and impact of each trend is uncertain. This chart shows our forecast of market value for two core scenarios. I will share more details of our assumptions for each scenario over the next few slides.

Nonetheless, you can see that in both cases we expect total catalyst demand to remain stable for the first half of the decade, before entering a period of decline as battery electric vehicle production replaces internal combustion engines.

We have two key scenarios for powertrain evolution for 2030/31

This shows you the key assumptions behind our two scenarios.

In the base case, which we believe is the most likely, we expect global light duty production to grow from 75 million this year to 100 million by 2031. This is in line with the current baseline scenario from IHS Markit. The timing of this growth will depend on availability of semiconductors and other key commodities. New emissions legislation will come into force in Europe in 2026, and shortly after in the US and China. Battery Electric Vehicles will account for 30% of global light duty vehicle sales in 2031, up from 6% today. In Europe, only 10% of the remaining vehicles powered by internal combustion engines will use diesel, and these will all be commercial vehicles.

The faster electrification case assumes that more aggressive government action accelerates the transition to zero carbon transportation. In this scenario, light duty vehicle sales increase to around 90 million, constrained by taxation and traffic restrictions. In light of announcements at COP26, we have updated this scenario to show 50% of light duty sales as battery electric, compared to 40% in the scenario we shared last year. We still expect new emissions regulations

to be enforced for the remaining 50% of light duty vehicles, as well as heavy duty, but they will be delayed by another year so that OEMs can invest more into electrification.

Vehicle Sizes

Before going deeper into these assumptions, it is worth clarifying how vehicles are classified by size. Like IHS and other commentators, we classify all vehicles up to 6 tonnes as 'Light Duty', including pickup trucks and vans. Regulations for commercial vehicles in this class are often different than for cars, and fleet owners are more sensitive to the purchase cost of their vehicles.

Light Duty (0-6T): shift to BEV will be fastest in Europe by 2030/31

With this in mind, this chart shows how the pace of change will be different by region. For Light Duty Vehicles, electric vehicle penetration will increase fastest in Europe, driven by fleet average CO_2 targets and vehicle subsidies.

In our 'fast electrification' scenario, we assume that all vehicles up to 6 tonnes sold in Europe will be battery electric, including pickup trucks and vans. However, this would require more stringent legislation than is currently planned or forecast, as well as major investments in recharging infrastructure.

Fuel economy regulations are likely to remain less onerous in North America and China, leading to a slower shift towards battery electric vehicles there.

Heavy Duty (6T+): electrification constrained by infrastructure build

Our scenarios also assume a shift towards Zero Emissions Vehicles for Heavy Duty. This will entail a combination of battery electric powertrains and hydrogen fuel cells, neither of which require an automotive catalyst of the type produced by Clean Air.

The extent of this shift will be determined by the availability of charging infrastructure, and the speed that the Total Cost of Ownership of these technologies falls to reach parity with diesel. Long distance freight in North America is likely to be the hardest segment to electrify, given the challenge of installing sufficient charging stations across the vast road network. So, we expect heavy duty trucks to require advanced exhaust catalyst systems through the 2030s and beyond.

We are engaging closely with our customers to support their drive to Heavy Duty electrification with JM's Fuel Cells technology.

In these scenarios, we are not assuming any sales of Hydrogen Internal Combustion Engines, although we believe this technology could play a significant role in bridging the transition to new powertrains. JM is already developing catalyst solutions to eliminate Nitrogen Oxides from Hydrogen exhaust.

Our scenarios are well placed within the range of market scenarios

This shows how our scenarios compare to those from other industry commentators with light duty electrification on the left-hand side and heavy duty on the right. You can see that our baseline and faster electrification cases fall within the range of forecasts, with only Bloomberg predicting higher electric penetration for light vehicles.

With the exception of that Bloomberg forecast, all other commentators expect the majority of new light duty vehicles sold in 2031 to be equipped with internal combustion engines, in either

a hybrid or traditional powertrain. Each of these will continue to require a catalyst aftertreatment system.

Significant tightening of legislation globally

Given the continued prevalence of Internal Combustion Engine vehicles, we expect no let-up in the pressure to reduce harmful emissions. Regulators in all regions are preparing a new wave of legislation to further tighten emissions of Nitrogen Oxides, known as NOx, and particulate matter. They will also introduce new limits on Nitrous Oxide, or N_2O, which is a powerful greenhouse gas and scavenger of stratospheric ozone.

The severity of these regulations is yet to be determined. However, as an example, the Consortium for ultra Low Vehicle Emissions, has recommended for Euro VII a further reduction for Heavy Duty Vehicles of 80% in NOx and Particulate Matter compared to Euro VI.

Legislation will drive more advanced technology and support pricing

To comply with this new wave of regulations, car and truck makers will need to integrate more sophisticated aftertreatment systems. This chart shows possible architectures for each industry segment. Every coloured block in the exhaust line diagram represents a specialised 'brick' of catalytic chemistry to eliminate harmful emissions.

You can see that these architectures will include more 'bricks', and more dual-function bricks.

Technology performance will continue to be the primary criteria for OEMs when selecting catalyst suppliers, balanced with system cost. Johnson Matthey is well positioned to compete with its market leading chemistry and strong long-term customer collaborations.

Our latest samples are already performing well in trials with key OEMs in every market. On this basis, we are confident of maintaining our leading position in both heavy and light duty diesel. Our share of light duty gasoline will decline in the short term due to platform losses we reported before. However, we expect to recover this share by exploiting our proven technologies for NOx and particle control from diesel. This will compensate for the structural decline of diesel in cars.

So, to conclude –

The timing of market evolution is uncertain but in all scenarios it's clear that the market for catalytic convertors will continue well after 2031 especially in North America and China.

Tightening regulations will require more advanced technology, which plays to our advantage given our market leading chemistry and proven expertise.

We are also well prepared to manage the transition as you'll hear from our Operations Officer, Millissa Flanagan.

Operations

Millissa Flanagan

Clean Air Chief Operations Officer, Johnson Matthey plc

Operational programmes deliver cash

Thanks Peter and good morning/afternoon everyone.

Let's shift focus to cash – the clean air operating strategy and efficiency engine.

I joined Johnson Matthey 14 months ago. My observation after spending time with our employees, teams and across our entire value chain, is that Clean Air is a business previously operated as a high growth model. Great at the time, but operational efficiency was not a focus. It is now. I see opportunities everywhere. Today, we are banking cash from those quick wins and developing a roadmap full of initiatives to deliver more cash and accelerate savings.

Our 4 key focus areas are:

1 – Productivity Powerhouse – New way to work that delivers year on year efficiency

2 – Agile supply chain – Enabler for our working capital reduction

3 – Footprint optimisation – Leveraging our new highly efficient plants across our global landscape

4 – Capital project programme – Right sizing our spend to £50 million, or less, in 2024/25

Let's take a closer look.

Driving efficiency through four key focus areas

1st – Our Productivity Powerhouse – This is our efficiency engine. Our new way to work. It includes initiatives in Manufacturing, Procurement, Maintenance and Supply Chain focused to deliver value. It is active today and has already delivered over £20 million to the bottom line this full year.

An example: Over the last 12 months, we reduced scrap production, 10% YOY, in many of our production lines delivering over £2 million, and this is structural.

Another example: Management of our precious metals. We continue to increase our precision in how we dose material, where every milligram counts and cash savings range from £1 – £2 million.

2nd – Our Agile Supply Chain. Over the last 12 months, we have transformed from a regional to a global supply chain supporting our 3 product lines. We have increased our ability to drive efficiencies and optimised how we deploy working capital.

One example: Our global planning process has freed up £60 million of inventory as well as reduced our freight costs by over £4 million that includes £1 million in logistics and £3 million in tariff savings again, this is structural.

I will talk about our manufacturing footprint and capital project programme shortly.

Our success is underpinned by our global operating model. We have transformed, we are now global, we are standard and we are gaining the capability to share best practices, at pace, across the world. Our new manufacturing platform complements this, it is now deployed at 7 of our sites, with more to come. This platform ensures everyone across the business, comes to work every day, knowing how they directly contribute to our strategy and business goals.

It is also underpinned by an experienced operations leadership team with over 100 + years' experience and over 30 companies in their portfolio, they are global (UK, Germany, Belgium, US, Netherlands, South Africa, China … are a few examples.) and they are transformational. They know what good looks like and they are delivering our strategic plan.

Let's move on to our Global footprint.

Leveraging new and highly efficient plants

This is our landscape. We have 16 sites around the world, of which 5 are large and highly efficient. We have 3 new plants – Poland, China and India, they all work in the same way and are designed to specifically support our Heavy-Duty Diesel product lines. They run 4x faster than our legacy lines. Poland and China are almost fully ramped up. India produced its first parts this month. These three new plants complement two other plants in North Macedonia and the US, which are also relatively new and similar.

We are gaining the capability to flex capacity around the world and are already using this to optimise our footprint. We have announced the shutdown of our most expensive and less efficient site at Royston, UK. As a result, we have transferred over 38 different parts from Royston to Poland and North Macedonia with efficiency gains greater than 50% less scrap and 60% less downtime. Run rate benefits are north of £29 million, again, this is structural.

Also, we restructured our Redwitz site in Germany and have already delivered north of 1 million Euro savings and again, this is structural. An example of keeping our older assets competitive and right sized.

In addition, over the last 12 months, we updated lines in Mexico and South Africa that are set to deliver efficiency savings. With our new sites, upgraded lines and our agile supply chain, we are beginning the journey to not only drive cost down but also gain flexibility to dual source around the world.

Moving on to our Capital project programme.

Capex reducing to c.£50 million by 2024/25

You can see here that investment peaked in 2019/20, driven by our 3 new sites. Now that they are complete, we intend to move towards a spend of around £50 million or less, per year.

Optimising our footprint will naturally reduce our capital requirements but we have also changed our approach to capital allocation. We have a clear project portfolio and governance programme. We use a prioritisation matrix to ensure our spend supports the health of our people and assets, delivers efficiency and enables organic growth.

A clear example is the completion of our 3 new plants, in 3 regions, in 2 years within the COVID crisis. The sites are the same and we were able to leverage learnings and share experience virtually, for safe construction and start up.

Another example is our recent line expansion in Mexico, yielding £4 – 5 million tariff savings per year, again, structural.

We also have a strong maintenance programme with 20% of our capital spend on maintenance and we are exploring our spare part programme for future optimisation opportunities.

Leverage operations across JM

We are sharing our new way to work and operating model with other business segments in JM. Let me give you a few examples.

Our procurement programme – We are leveraging a combination of JM processes with Clean Air expertise to launch a chess board of quick wins focused to deliver cash.

One example is optimisation of our raw material packaging, which allowed freight utilisation, delivering over £1 million, year over year, again, structural

Our New Product Introduction Programme – We are integrated from pure science ideas developed in our Sonning R&D centre through production, and we can ensure our new products are made on time and are right the 1st time.

We are growing careers – Our teams are developing across a landscape that is transforming, and is offering a multitude of career opportunities.

An example – We have opened capacity in Clean Air to support the Fuel Cells business and ensure a successful ramp up, at pace.

So, to wrap up, we are building Operational maturity. We have started the journey but just scratched the surface to deliver on our strategic plan and cash delivery of more than £4 billion in 10 years. In 10 years, we will have a strong cash machine that continues to deliver for many years to come.

I'll hand over now to Alastair to conclude.

Cash generation

Alastair Judge

Clean Air Chief Financial Officer and Interim Chief Executive, Johnson Matthey plc

Cash generation

Thank you Millissa.

So how does all this translate into our commitment to generate at least £4 billion of cash by fiscal year 2031

Long-term cash drivers

Peter has talked about the market dynamics. We operate in a durable market where growth from Euro 7 and equivalent legislation globally partly offsets the erosion by electrification. We are confident we have the right technology and customer relationships to continue to win in this market.

Millissa has explained how we will drive operational efficiency, and how capital expenditure will fall to £50 million and below over time. This year it will be about £75 million.

I will now touch on 2 other areas:

Fixed Costs – we are confident that we can manage all costs as variable in the mid-term right sizing our cost base within the scenarios we have presented as the market evolves.

Working Capital – where we will unwind working capital from its current peak levels by about £1.2 billion over the next decade.

Fixed costs reduced by c.£100-£200 million depending on the rate of electrification

So let me start with costs. As I said in my introduction, we will remove a minimum of £100 million of fixed costs over the next 10 years, with the potential for this to go up to £200 million depending on the development of the market. The faster the market electrifies the faster we will bring down our cost base. In principle, we are thinking about our fixed cost base of c.£550 million as variable over time which means we can continue to deliver low-mid teen margins for a long period.

We are already reducing fixed costs by withdrawing from our Royston plant as Millissa has mentioned. We will continue to reduce our network capacity and take costs out of our overheads as the business evolves.

We have included expected cash restructuring costs in our forecast, recognising the journey to take out fixed costs will not be free.

The faster we go, the sooner we can redeploy our talent pool to support the development of newer, high growth business for Johnson Matthey.

For example, we are already redeploying top talent to support the development of Fuel Cells.

Working capital will reduce by c.£1.2 billion in our base case

We expect working capital to drop by c.£1.2 billion over the next decade. Millissa's team will deliver significant inventory efficiencies through the levers set out on the right. In addition, we will be smart in agreeing terms in Light Duty Gasoline to avoid carrying tens of millions of pounds of working capital.

As volumes decline, and platinum group metal prices drop, working capital will automatically unwind at an accelerating rate. For information at current balances every 10% reduction in pgm prices releases £150 million of the current balance of working capital, and we do expect pgm prices to drop over the next 10-years.

The flow of £4 billion will be relatively constant over the period, subject to metal prices which will affect the exact timings of cash release.

Delivering cash from operational efficiencies, lower working capital and reduced capex

The mix of contribution from working capital unwind and underlying profit delivery will vary depending on how the market evolves. But in either scenario that Peter described we will deliver at least £4 billion of cash over 10 years. The absolute amount delivered, and the terminal value of the business, will be materially higher in a market that declines at the lower end of our projections.

Clean Air remains a cash generative business of scale in 2030/31 and beyond

Of course, as I said in my opening, our business will still have material value after fiscal year 2031. It will still have sales in the region of £2.0 billion in our base case, of which around half will be Heavy Duty Diesel. It will be lean, and generate low double-digit margins, while retaining the capability to drive ongoing value for our customers.

We will continue to manage fixed costs as variable in the long term, and we will have significant working capital to release, so as our market shrinks further we will still generate cash in the 2030s.

Even in our more aggressive electrification scenario, fiscal year 2031 will not mark the end of the cash we deliver. We still expect to be a c.£1.5 billion business, generating low double-digit margins, with c.£0.5 billion of working capital to unwind.

Conclusion

So to wrap up I hope you can see that Clean Air has a positive future in a durable market. We remain a technology leader and trusted partner for our customers in a market that will see continuing regulation driven by the need to reduce emissions. We are proud that we will continue to remove pollutants and make life healthier for billions of people while contributing cash, talent, skills, and customer relationships back to Johnson Matthey and its new businesses.

We are delivering our commitments through a simple and effective organisation, run by a strong team with a great blend of Johnson Matthey, automotive, and transformation experience.

We are hitting our commercial and operational milestones and will continue to contribute to Johnson Matthey and its shareholders for many years to come.

Q&A

Thanks very much – we'd like to throw it open for questions.