Half year results for the six months ended 30th September 2021

24th November 2021

Resilient performance in the first half

Underlying performance[1,2]

- Sales of £1.9 billion, up 21%, driven by a strong recovery in Clean Air and Efficient Natural Resources
- Underlying operating profit of £293 million, up 102% and ahead of pre-pandemic levels, driven by strong sales growth and higher average precious metal prices
- Underlying EPS of 114.8 pence, up materially reflecting higher underlying operating profit and lower net finance costs
- Free cash flow of £189 million, benefiting from continued strong management of working capital (1H 2020/21: £256 million)
- Strong balance sheet with net debt of c.£700 million as lower auto demand benefited working capital; net debt to EBITDA of 0.9 times
- Return on invested capital (ROIC) of 17.7%, up from 10.4% in the prior year driven by higher underlying operating profit

Reported results

- Revenue increased 23% primarily driven by higher average precious metal prices
- Following the announcement of our intention to exit Battery Materials, the assets have been impaired by £314 million
- Operating profit of £20 million, reflecting the one-off impairment in Battery Materials
- Loss before tax of £9 million, driven by lower operating profit
- Reported loss per share of 14.8 pence
- Cash inflow from operating activities of £412 million (1H 2020/21: £482 million)
- Interim dividend of 22.0 pence per share, up 10%
- Share buyback of £200 million, beginning in the New Year

		Reported results			Underlying results[1]			
		Half year ended 30th September 2021	2020	% change	Half year ended 30th September 2021	2020	% change	% change, constant rates
Revenue	£ million	8,586	6,979	+23				
Sales excluding precious metals[3]	£ million				1,938	1,679	+15	+21
Operating profit	£ million	20	68	-71	293	151	+94	+102
(Loss) / profit before tax	£ million	(9)	26	n/a	264	109	+142	
(Loss) / earnings per share	pence	(14.8)	12.3	n/a	114.8	47.7	+141	
Interim dividend per share	pence	22.0	20.0	+10				

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Key developments

- A resilient trading performance, with strong sales growth driven by a recovery in Clean Air and Efficient Natural Resources
- Portfolio changes – agreed the sale of Advanced Glass Technologies for £178 million, and in discussions about a potential sale of Health
- Announced intention to exit Battery Materials
- Good momentum across our hydrogen businesses of Fuel Cells and Green Hydrogen
    - New five-year framework contract with EKPO (ElringKlinger Plastic Omnium JV) to supply fuel cell components into commercial vehicle applications
    - Following the completion of our hydrogen technologies capacity expansion in the UK and China, planning further expansion across these regions
- Increasing pipeline of opportunities in blue hydrogen – now over 20 projects – including HyNet which continues to move towards commercialisation in 2025
- In Clean Air, on track for strong cash generation in 2021/22
- Delivered £42 million of cost savings, from our total programme of £110 million per annum by 2023/24

Robert MacLeod, Chief Executive, commented:

We delivered a resilient trading performance in what has been a challenging environment, given the supply chain volatility which has affected a number of our end markets.

Looking forward, the changing world around us means that Johnson Matthey has never been more relevant. Our metal expertise and process technologies are critical to many new markets focused on climate change solutions and give us a strong competitive advantage. We have strong foundations in Clean Air and in Efficient Natural Resources and exciting opportunities to drive our future growth in circularity, hydrogen and decarbonisation.

To ensure we are focusing our resources on these core growth opportunities we have taken some strategic decisions around our portfolio. In particular, we announced our intention to exit Battery Materials as we concluded that this business would not generate adequate returns for us. In addition, today we are announcing that we have agreed the sale of Advanced Glass Technologies and are in discussions about the potential sale of our Health business.

After eight years in the role, I will be stepping down as Chief Executive, with Liam Condon joining as my successor from 1st March 2022 and I wish him well in leading Johnson Matthey through the next stage of its evolution.

Outlook for the year ending 31st March 2022

Our expectations on guidance for the year ending 31st March 2022 are unchanged from our trading update on 11th November.

Demand remains strong in many of our end markets. However, supply chain volatility especially the shortage of semi-conductors is affecting production for a number of our auto and truck customers. Global auto production is now forecast to decline 5% for our fiscal year which is a 14% reduction since our trading update in July[4]. Consequently, precious metal prices have also declined, largely because of the lower demand from the automotive industry. We are also experiencing acute temporary labour shortages in the US that are adversely impacting our Health business.

For 2021/22 we expect growth in underlying operating performance to be low single digit at constant precious metals prices[5] and constant currency.

If precious metals prices remain at their current level[6] for the rest of this year, we would expect a full year net benefit of c.£45 million.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

At current foreign exchange rates[7], translational foreign exchange movements for the year ending 31st March 2022 are expected to adversely impact underlying operating profit by c.£15 million.

Our capital expenditure is now expected to be c.£450 million for the year[8] given our intended exit from Battery Materials.

Dividend and share buyback

The board approved an interim dividend of 22.0 pence per share, an increase of 10% against the prior year (1H 2020/21: 20.0 pence per share). The interim dividend will be paid on 1st February 2022 to shareholders on the register at 3rd December 2021.

The board has also approved a share buyback of £200 million that will commence in the New Year.

Chief Executive Announcement

As previously announced, Robert MacLeod will step down as Chief Executive and from the board on 28th February 2022. Robert will stay on to support the transition process until the Company's Annual General Meeting on 21st July 2022, when he will then retire from JM. Liam Condon will succeed Robert MacLeod, joining as Chief Executive on 1st March 2022.

Group Management Committee Change

Joan Braca, Chief Executive Clean Air, has decided to leave Johnson Matthey. Joan's last day will be on 31st December 2021.

Enquiries:

Investor Relations

Martin Dunwoodie	Director of Investor Relations	+44 20 7269 8241
Louise Curran	Senior Investor Relations Manager	+44 20 7269 8235
Jane Crosby	Investor Relations Manager	+44 20 7269 8242

Media

Barney Wyld	Group Corporate Affairs Director	+44 20 7269 8001
Harry Cameron	Tulchan Communications	+44 7799 152148

Notes:

1. Underlying is before profit or loss on disposal of businesses, gain or loss on significant legal proceedings together with associated legal costs, amortisation of acquired intangibles, major impairment and restructuring charges and, where relevant, related tax effects. For definitions and reconciliations of other non-GAAP measures, see pages 46 to 50.
2. Unless otherwise stated, sales and operating profit commentary refers to performance at constant exchange rates. Growth at constant rates excludes the translation impact of foreign exchange movements, with 2020/21 results converted at 2021/22 average rates. In 1H 2021/22, the translational impact of exchange rates on group sales and underlying operating profit was negative c.£71 million and c.£6 million respectively.
3. Revenue excluding sales of precious metals to customers and the precious metal content of products sold to customers.
4. As forecast by external consultants – IHS (October 2021).
5. Based on actual precious metal prices in 2020/21.
6. Based on current precious metal prices as at 22nd November 2021.
7. Based on foreign exchange rates as at 22nd November 2021.
8. Our previous guidance was for capital expenditure of up to £600 million for the year, which included our investment in Battery Materials.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Sustainable solutions as we create a cleaner, healthier world

Our vision is for a cleaner, healthier world, and we have an exciting opportunity to apply our deep expertise in complex metal chemistry to develop technologies which enable the four essential transitions the world needs for a sustainable future: transport, energy, decarbonisation of industry and the creation of a circular economy.

We have set out our own sustainability goals (see page 7) but the real difference we make to society is in the products and technology we supply to our customers – not just today but in the new technologies of tomorrow.

In Clean Air, we continue to play a vital role in reducing harmful emissions generated by internal combustion engines, and in Efficient Natural Resources our technology and leading segment positions give us a strong base from which to pivot into new areas – helping our customers decarbonise their chemical value chains and create a circular economy through recycling scarce critical materials. These businesses provide the group with a strong foundation, underpinned by our core science.

Focusing capital on climate change solutions

At our heart is complex metal chemistry, particularly pgm and nickel metal expertise, which is used across the group. It has been developed over decades, is hard to replicate and critical to many of the new technologies which address climate change. We are focusing capital allocation on high growth, high return opportunities that leverage our core competencies.

1. PGM Services (circularity solutions) – in Efficient Natural Resources
2. Hydrogen Technologies (fuel cells and green hydrogen) – in New Markets
3. Catalyst Technologies (decarbonisation of chemicals) – in Efficient Natural Resources

These opportunities are underpinned by our strong balance sheet and sustained cash generation from Clean Air.

Clean Air on track to deliver at least £4 billion of cash over the coming ten years

Clean Air continues to play a vital role in reducing harmful emissions generated by internal combustion engines. As the powertrain evolves, Clean Air is undergoing a major transformation programme to drive greater efficiency and reduce costs. Our new simplified operating model is now in place and performing well, and we continue to execute footprint changes with the transfer of production away from less efficient sites into our newer plants. This includes the closure of our plant in the UK over the next two years. We remain confident that our strategy will deliver cash generation of at least £4 billion over the coming ten years[1].

1. PGM Services: creating a circular economy and underpinning the group

Platinum group metals (pgms) and other scarce metals are critical to many low carbon technologies such as hydrogen powered fuel cell vehicles and green hydrogen electrolysers. Recycling these metals will be crucial in providing low carbon routes to manufacture. The carbon intensity of recycled platinum group metals is c.2%[2] that of mined metals. It is also a competitive advantage to be able to offer our customers recycling solutions in conjunction with our fuel cell and green hydrogen offerings as well as security of supply for these scarce metals. We are already the world leader in pgm recycling, twice the size of the next nearest player. This position and skillset gives us a strong foundation to capture more value over time from our existing recycling capabilities and expand our offering to develop new technologies which will enable the circular economy and help our customers meet their sustainability goals.

Notes:
1. At least £4 billion over the coming ten years from 1st April 2021.
2. Source: IPA.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

2. Hydrogen Technologies: a new business to accelerate growth

Hydrogen – as a fuel source and energy carrier – has a huge role to play in reaching net zero, and the move to hydrogen is accelerating, with the number of large-scale hydrogen projects announced almost doubling since January 2021[3].

We already have an established hydrogen business. We are well positioned to enable both the decarbonisation of transport through our hydrogen fuel cell technology and also energy through our hydrogen production technologies.

Our competitive advantage is founded on our core capabilities in pgm catalysis, electrochemistry and surface chemistry. This enables us to produce high performance components for fuel cells and green hydrogen electrolysers. We are positioned across the value chain, which includes manufacture of catalysts, membranes, catalyst coated membranes (CCM) and membrane electrode assemblies (MEA), enabling us to optimise to our customers' needs. Our customers also value the security of supply and the potential to offer recycling solutions and reduce their carbon footprint.

We created a new business – Hydrogen Technologies – which combines our Fuel Cells and Green Hydrogen businesses, accelerating our growth and scale-up in both markets. We are expanding our Hydrogen Technologies manufacturing capacity and, following the completion of our expansion last year, we now have 2GW capacity in the UK and China. We are planning further expansion in these regions to ensure we are able to meet growing demand.

Fuel Cells

We have been a leader in fuel cells and active for well over two decades, with our technology used as far back as the US Apollo moon landings. Our success is based on our pgm expertise, with these metals critical to producing efficient, high performance fuel cell components.

We have a track record of success, supplying components (CCMs and MEAs) which sit at the heart of the fuel cell stack. We have good relationships with many leading fuel cell system integrators and OEMs, and already supply Doosan, SFC Energy, REFIRE/Unilia and SinoHytech/Sino Fuel Cell. In addition, we signed a development and long-term supply agreement commencing in 2022 with a major German automotive supplier for the supply of next generation catalyst coated membranes into the global automotive market.

We continue to make good progress with customers. We recently signed a new five-year framework contract with EKPO Fuel Cell Technologies (a joint venture between ElringKlinger AG and Compagnie Plastic Omnium SE) – a tier one stack manufacturer – to supply CCMs into the global commercial vehicle market. Our customer pipeline includes more than 10 major truck and auto OEM platforms, for which we will supply fuel cell components, due to launch between c.2022 to 2025.

Green Hydrogen

Our Green Hydrogen business is based on the same CCM technology, pgm expertise and recycling capability as Fuel Cells. Given the commonality of technology, Fuel Cells and Green Hydrogen use the same manufacturing capacity and share expertise in developing key components, such as catalysts and CCMs. The strength of our existing position in Fuel Cells has enabled us to create this business in 18 months.

We are making good progress and expect our first commercial sales in 2022. We are testing with leading electrolyser manufacturers and in May 2021 we signed a memorandum of understanding (MoU) with Plug Power and more recently, with Hystar to develop key components for electrolysers. Hystar is a newly established Norwegian company, a high-tech spin-out from SINTEF, one of Europe's largest independent research institutions.

Notes:

3. Large-scale projects defined as projects larger than 1MW or equivalent. Hydrogen Council, McKinsey & Company

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

3. Catalyst Technologies: decarbonising chemicals and fuels

In Catalyst Technologies we are focused on the decarbonisation of chemical value chains. We are a well-established and leading provider of process technology and catalysts to the chemicals and energy sectors, notably within syngas which today is at the heart of many chemical value chains and used to manufacture a range of consumer products. Our process technology enables customers to decarbonise by re-engineering their processes to use sustainable feedstocks such as surplus carbon dioxide, biomass and renewable energy to create sustainable fuels and chemicals. This is an opportunity that offers structural growth as our customers focus on how they will decarbonise. Over the medium term we expect high single digit growth in this business which reflects growth in our existing markets, together with new technologies that will help the world decarbonise and move towards net zero. Our growth areas include:

- **Blue hydrogen**: We are seeing increasing interest from customers around the world. Our technology has been selected as part of the UK's HyNet project, one of the world's most progressed blue hydrogen projects, which continues to move towards commercialisation. HyNet was recently named as a Track 1 cluster by the UK government, which means that this project will begin decarbonising industry from 2025. We are working on a global pipeline of opportunities which is growing and now totals over 20 projects.

- **Sustainable fuels and chemicals**: This comprises a range of technologies which enable the production of fuels and chemicals from sustainable sources of hydrogen and carbon, replacing fossil fuel feedstocks. This plays to our strengths in syngas technology where we are one of the world's leading players.

  We are making progress in this nascent market and recently supplied and supported the loading of the first catalyst for Fulcrum, for the production of sustainable aviation fuels. Also in this space, we recently signed an engineering agreement with Repsol and Aramco to enable the conversion of renewable energy to liquid fuels. In addition, our methanol technology was selected for the Haru Oni project in Chile, where we will also supply the catalyst, engineering and equipment. The JM designed unit will take atmospheric carbon dioxide as a feedstock for conversion to e-methanol to power gasoline vehicles. In the sustainable fuels and chemicals area, we are working on a pipeline of c.20 projects.

- **Low carbon solutions:** We have a strong position at the heart of many chemical value chains and our customers need to decarbonise their existing processes. There is a large installed base that utilises our existing technology that needs to be decarbonised, and for which we can offer low carbon solutions.

Capital allocation

We have a disciplined capital allocation framework. Our approach is designed to invest capital with a balance of appropriate shareholder return and risk, whilst maintaining a strong balance sheet given the working capital requirements of our metal refining businesses. We will target investment opportunities that will deliver superior returns. Where we have excess cash beyond our investment requirements, we will return that to shareholders.

Our forecast year end net debt position shows gearing returning towards our target level of net debt to EBITDA of 1.5-2.0 times, excluding the benefit of the proceeds from the sale of Advanced Glass Technologies (AGT). Consequently we will return excess capital (including proceeds from the sale of AGT) to shareholders in the form of a share buyback of £200 million beginning in the New Year.

Intention to exit Battery Materials

As announced on 11th November, following a detailed review and ahead of reaching a number of critical investment milestones, we have concluded that the potential returns from our Battery Materials business will not be adequate to justify further investment. The board has therefore decided to pursue the sale of all or parts of this business with the ultimate intention

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

of exiting. We will move swiftly to determine the best outcome for all of our stakeholders and intend to make a further announcement as soon as possible.

Given the uncertainty of the outcome of this sales process, we have taken a prudent position and fully impaired the carrying value of our Battery Materials assets as at 30th September 2021, resulting in a charge of £314 million.

In the month of October, we reduced expenditure but still incurred an additional c.£26 million capex. Following the announcement of our intention to exit on 11th November, we took action to reduce further expenditure.

Portfolio changes

As we focus the group towards our core growth areas, we take an active approach to capital allocation and will continue to review our portfolio to focus on the areas of greatest opportunity with returns that are attractive to shareholders.

1. Strategic review of Health
   We are in discussions about a potential sale and we will provide an update on its conclusion in due course.

2. Sale of Advanced Glass Technologies
   We have agreed the disposal of Advanced Glass Technologies – reported in Other Markets (Value Businesses) – to Fenzi S.p.A for £178 million, with completion expected in the second half. AGT sales were £66 million in the year ended 31st March 2021.

Sustainability of our own operations

We have developed a sustainability framework and targets which focus on current and future technologies fundamental to addressing climate change.

We recently announced our goal to be net zero by 2040 as well as new, ambitious sustainability targets for 2030. Details of our goals and targets which are set out under three key pillars – Products and services, Operations, People – can be found in our 2021 annual report. We are signed up to the UN Global Compact's Business Ambition for 1.5°C and introduced science-based targets which have recently been independently verified by the Science Based Targets initiative (SBTi):

- Absolute reduction in Scope 1 and Scope 2 greenhouse gas emissions of at least 33% by 2030 (baseline 2019/20)[4]
- Absolute reduction of Scope 3 greenhouse gas emissions of at least 20% by 2030 (baseline 2019/20)[4]

We are increasingly being recognised by stakeholders for our efforts on sustainability. Recently, we were awarded a Platinum rating by EcoVadis – a leading provider of business sustainability ratings – which puts us in the top 1% of companies they assess.

To oversee our sustainability goals and process, we established a new board committee – the Societal Value Committee – which met for the first time in May 2021 and established a Sustainability Council within the company to manage the implementation of our strategy.

Notes:

4. Scope 1 covers direct greenhouse emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes purchased goods and services.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Summary of underlying operating results

Unless otherwise stated, commentary refers to performance at constant rates. Percentage changes in the tables are calculated on rounded numbers

Sales (£ million)	**Half year ended 30th September 2021**	**2020[1]**	**% change**	**% change, constant rates**
Clean Air	1,196	1,003	+19	+24
Efficient Natural Resources	523	411	+27	+33
Health	83	119	-30	-26
Other Markets	191	191	-	+5
Eliminations	(55)	(45)		
Sales	**1,938**	**1,679**	**+15**	**+21**

Underlying operating profit (£ million)	**Half year ended 30th September 2021**	**2020[1]**	**% change**	**% change, constant rates**
Clean Air	150	77	+95	+103
Efficient Natural Resources	197	88	+124	+129
Health	(4)	15	n/a	n/a
Other Markets	(11)	(2)	n/a	n/a
Corporate	(39)	(27)		
Underlying operating profit	**293**	**151**	**+94**	**+102**

Reconciliation of underlying operating profit to operating profit (£ million)	**Half year ended 30th September 2021**	**2020**
Underlying operating profit	293	151
Amortisation of acquired intangibles	(3)	(5)
Major impairment and restructuring charges[2]	(314)	(78)
Gain on significant legal proceedings[2]	44	-
Operating profit	**20**	**68**

[1] Restated following change to reporting segments and removal of inter-segment Copper Zeolites sales

[2] For further detail on these items please see page 18.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Operating results by sector

Clean Air

Clean Air recovered strongly

- Global sales were up 24% as we saw a strong performance across all regions, despite the impact of OEM supply chain disruption caused principally by shortages of semi-conductor chips
- Underlying operating profit increased 103%. Whilst margins increased materially, driven by operational leverage and benefits from our transformation programme, they were held back by the impact of chip shortages
- ROIC increased to 19.9% reflecting higher operating profit and the continued good management of working capital
- On track for strong cash generation in 2021/22

	Half year ended 30th September 2021 £ million	2020 £ million	% change	% change, constant rates
Sales				
Light duty diesel	498	420	+19	+22
Light duty gasoline	270	260	+4	+8
Heavy duty diesel	428	323	+33	+40
Total sales	**1,196**	**1,003**	**+19**	**+24**
Underlying operating profit	**150**	**77**	**+95**	**+103**
Margin	**12.5%**	**7.7%**		
Return on invested capital (ROIC)	**19.9%**	**11.4%**		
Reported operating profit	**149**	**42**		

A strong recovery in demand, but seeing impact from supply chain disruption

Clean Air provides catalysts for emission control after-treatment systems used in light and heavy duty vehicles powered by internal combustion engines. Global sales increased 24%, reflecting a strong recovery in demand in Europe and the Americas, against a prior period that was materially impacted by temporary customer shutdowns due to the pandemic.

Market demand remains strong across all regions. However, there was supply chain disruption across the industry principally due to the shortage of semi-conductor chips. This affected our volumes in our first half, with a more pronounced impact in our second quarter. Due to these shortages, we expect continued volume constraints on production levels through the second half. We are actively mitigating the impact through a combination of adjusting shift patterns, optimising production across our manufacturing footprint and working closely with customers to reduce the impact on our operations. To support our long-term performance and cash generation, we have already secured some Euro 7 business and are actively bidding on further platforms to meet this legislation.

Light duty catalysts – diesel and gasoline

Our light duty business provides catalysts for emission control after-treatment systems used in cars and other light duty vehicles powered by diesel and gasoline engines. Diesel accounts for c.65% of our light duty business, which is mostly in Europe.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Light duty diesel
In light duty diesel, global sales were up 22%. In Europe, where we hold a significant share of the light duty diesel market, sales growth was well ahead of market production due to a favourable platform mix. In Asia, sales grew in line with market production, and in the Americas, we saw strong sales growth and outperformed the market due to a beneficial platform mix.

Light duty gasoline
Sales in light duty gasoline were up 8%, above global vehicle production in aggregate due to a favourable platform mix. This outperformance was partially offset by the loss of two platforms in the Americas and in Europe, in line with our selective strategy.

Heavy duty diesel catalysts
In heavy duty diesel catalysts, we provide catalysts for emission control after-treatment systems for trucks, buses and non-road equipment. Sales recovered strongly, up 40% in the half, with growth in all regions.

In our Americas heavy duty business, where we hold a significant share of the market, we saw strong sales growth in line with market production which is benefiting from a cyclical recovery in the US Class 8 truck cycle. In Europe, heavy duty sales growth outperformed market production and was driven by a favourable platform mix. Heavy duty Asia sales grew very strongly in a market that declined, as we benefited from increased market share and increased value from tighter legislation in China.

Underlying operating profit
Underlying operating profit increased 103% and margin increased to 12.5%. Whilst margins increased materially, driven by operational leverage and benefits from our transformation programme, they were held back by the impact of chip shortages.

Return on invested capital (ROIC)
ROIC increased by 8.5 percentage points to 19.9%, reflecting higher operating profit and continued good management of working capital.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Efficient Natural Resources

Strong performance driven by PGM Services and a recovery in Catalyst Technologies

- Sales grew 33% reflecting a strong performance in PGM Services benefiting from volatile and higher average precious metal prices, and increased refinery volumes. Catalyst Technologies grew well driven by higher refill catalysts, principally ammonia and methanol
- Underlying operating profit up 129% and margin expanded 16.3 percentage points. This reflected strong growth in PGM Services (higher average pgm prices and increased volumes), strong performance in Catalyst Technologies, and efficiency benefits
- ROIC grew 34.2 percentage points to 53.9% reflecting higher operating profit and continued good management of working capital

	Half year ended 30th September 2021 £ million	2020[1] £ million	% change	% change, constant rates
Sales				
PGM Services	300	215	+40	+46
Catalyst Technologies	223	196	+14	+19
Total sales	**523**	**411**	**+27**	**+33**
Underlying operating profit	**197**	**88**	**+124**	**+129**
Margin	**37.7%**	**21.4%**		
Return on invested capital (ROIC)	**53.9%**	**19.7%**		
Reported operating profit	**239**	**67**		

[1] Restated following change to reporting segments and removal of inter-segment Copper Zeolites sales.

PGM Services

PGM Services is the world's leading secondary recycler of platinum group metals (pgms). This business has an important role in enabling the energy transition through providing circular solutions as demand for scarce critical materials increases. These circular solutions are set to become increasingly important for customers as they seek metals with a lower carbon footprint. PGM Services also provides a strategic service to the group, supporting Clean Air and Hydrogen Technologies with security of metal supply in a volatile market.

PGM Services grew strongly, benefiting from higher average pgm prices

Sales in PGM Services increased 46% as we benefited from volatile and higher average precious metal prices and we saw increased volumes as we managed our refinery intakes in the prior period to optimise working capital.

Our other businesses in PGM Services also saw good performance. Sales grew in chemical products, primarily driven by Clean Air which uses pgm materials in its catalyst products. Industrial products containing pgms also grew well. In addition, following a recent change to our reporting structure Life Science Technologies (formerly part of New Markets) is now part of PGM Services. Life Science Technologies provides advanced pgm based catalysts to the pharmaceutical and agricultural chemicals markets. Sales were up strongly in this business due to phasing of orders.

Refinery backlogs remain at low levels

Refinery backlogs remain at low levels, which reflects our continued strong operational focus and efficient management of precious metal working capital. This supports the group's balance sheet efficiency.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Catalyst Technologies

Catalyst Technologies is focused on enabling the decarbonisation of chemical value chains. This business licenses key, proven and efficient process technology solutions and manufactures high value speciality catalysts and additives principally for the chemical and energy industries. We have leading positions in key end segments including syngas, methanol, ammonia, hydrogen and formaldehyde. Given our strong position in these important value chains, our technology can help customers decarbonise their operations by re-engineering their processes and using sustainable feedstocks.

Our main revenue streams in this business comprise refill catalysts (recurring business which makes up the majority of sales), first fill catalysts and licensing income. Overall, sales were up 19% primarily driven by higher demand for refill catalysts whilst additives were flat as demand for some fuels remained subdued. First fill catalysts also grew well, benefiting from catalyst sales for new technology. Our licensing business was marginally up and our project pipeline remains strong.

Refill catalysts grew double digit, with higher demand across key segments

Sales of refill catalysts grew double digit, with higher demand across our key segments. We saw continued good performance in ammonia whilst sales of methanol refills recovered as we benefited from orders which had been delayed due to the pandemic. Performance was also good in segments more impacted by COVID-19 in the prior year, such as formaldehyde which is largely used in construction.

First fills grew well, with the supply of the first catalyst for sustainable aviation fuel

Sales of first fill catalysts are driven by the start-up of new plants. They are a lead indicator of future refill catalyst demand. In the period, sales grew well. Although small in value at this stage, we supplied the first catalyst used by our Fischer Tropsch (FT) CANS™ technology to Fulcrum for one of the world's first plants for the production of sustainable fuel from municipal solid waste.

Licensing marginally up in the period and a strong pipeline

Our licensing business is dependent on new plant builds and revenue is recognised over the period of construction. In the period, sales were marginally up reflecting income from recent licence wins, particularly oxoalcohol and methanol projects based in China.

Licensing activity remains good and we signed two new licences in the period (1H 20/21: 2 licences). We have a strong pipeline of projects and are working with customers on a number of future opportunities focused on our decarbonisation technology, including sustainable aviation fuel and low carbon blue hydrogen solutions. See more detail on our future growth in our strategy section (page 6).

During the period, we recognised a non-underlying gain of £44 million in relation to damages and interest from a company found to have unlawfully copied one of our technology designs. We received the cash for this in the half and the related profit was taken outside of underlying operating profit.

Underlying operating profit

Underlying operating profit up 129% and margin expanded 16.3 percentage points. This reflected strong growth in PGM Services (higher average pgm prices (+c.£60 million) and increased volumes), strong performance in Catalyst Technologies and efficiency benefits.

ROIC

ROIC grew 34.2 percentage points to 53.9% reflecting higher operating profit and continued good management of working capital.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Health

Weak performance – labour shortage in the US and supply chain constraints

- Performance across both Generics and Innovators is being impacted by acute temporary labour shortages in the US pharma market and global supply chain constraints
- Lower sales of speciality opiates in our Generics business (-43%) due mainly to pricing pressure and COVID-19 related delays to elective medical procedures affecting demand
- We continue to make progress with the development of our pipeline of new products, but we are no longer of the view that the business will achieve £100 million of additional operating profit by 2026
- We are in discussions about a potential sale and we will provide an update on its conclusion in due course

	Half year ended 30th September 2021 £ million	2020 £ million	% change	% change, constant rates
Sales				
Generics	40	70	-43	-40
Innovators	43	49	-12	-4
Total sales	**83**	**119**	**-30**	**-26**
Underlying operating (loss) / profit	**(4)**	**15**	**n/a**	**n/a**
Margin	**-4.8%**	**12.6%**		
Return on invested capital (ROIC)	**2.6%**	**4.6%**		
Reported operating (loss) / profit	**(4)**	**4**		

Generics

Our Generics business develops and manufactures generic active pharmaceutical ingredients (APIs) for a variety of treatments. The majority of our business is controlled APIs.

In the period, sales declined 40% primarily driven by speciality opiates. In speciality opiates, sales of opioid addiction therapies were lower reflecting pricing pressure in the US as the market genericises and opioid analgesics decreased due to the delay of elective medical procedures. In addition, we also saw increased demand in the prior year for some products due to COVID-19. We also saw weaker performance across a number of other products due to new competitors entering the market and timing of orders.

Innovators

Our Innovators business provides customised development and manufacturing services for active ingredients of new drugs during their lifecycle, including for initial clinical evaluation and subsequently for commercial supply post regulatory approval.

Innovators slightly declined in the period, with sales down 4%. We continue to benefit from our multi-year contracts with Gilead and Sarepta, and commercial demand remains strong. Sales in the half were lower because of key raw material shortages due to global supply chain disruption and temporary US labour shortages which meant that we had a shortage of skilled operators. For Gilead, we supply an immuno-oncology drug linker used in a treatment for triple negative breast cancer, and remain excited by our future prospects given Gilead's approval from the FDA (Food and Drug Administration) for a further indication of the drug for the treatment of bladder cancer.

These sales declines were partly offset by a modest increase in clinical development work, where we undertake customised development and manufacturing services. We were also impacted in the prior period due to COVID-19 related shutdowns.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Strategic review update

We are in discussions about a potential sale and we will provide an update on its conclusion in due course.

Underlying operating loss

Underlying operating loss reflecting weaker sales in Generics and manufacturing challenges in both businesses due to temporary US labour market shortages and supply chain disruption.

ROIC

ROIC declined 2 percentage points to 2.6% due to an operating loss in the half. ROIC remains positive in the first half due to being measured over a rolling 12-month period.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Other Markets

Announced intention to exit Battery Materials, commercialising opportunities in Hydrogen at pace and driving value from non-core businesses

- Sales grew 5% driven by a strong recovery in Value Businesses. We saw lower sales in Fuel Cells primarily due to temporary manufacturing issues as we ramped up our new facilities, and we used a proportion of our capacity for new customer testing
- We continue to invest in the commercialisation of our new growth businesses, resulting in an underlying operating loss of £11 million
- On 11th November, we announced the intention to exit our Battery Materials business
- Sale of our glass coatings business Advanced Glass Technologies announced for a total consideration of £178 million

	Half year ended 30th September 2021 £ million	2020[1] £ million	% change	% change, constant rates
Sales				
New Markets	16	25	-36	-36
Value Businesses	175	166	+5	+11
Total sales	**191**	**191**	**-**	**+5**
Underlying operating loss	**(11)**	**(2)**	**n/a**	**n/a**
Margin	**-5.8%**	**-1.0%**		
Return on invested capital (ROIC)	**-1.4%**	**3.0%**		
Reported operating loss	**(325)**	**(15)**		

[1] Restated following change to reporting segments

New Markets

New Markets comprises Hydrogen Technologies (Fuel Cells and Green Hydrogen) and Battery Materials.

In Fuel Cells, we continue to see increased interest for automotive and truck applications from customers principally in Asia and Europe. In Green Hydrogen, we are working at pace to commercialise key components used in green hydrogen electrolysers and expect our first commercial sales in 2022.

Our Battery Materials business includes our lithium iron phosphate materials, and high nickel eLNO cathode materials. We announced on 11th November our intention to exit Battery Materials. Whilst testing with customers is progressing well, this market is developing into a high volume, commoditised market and it has become clear that our capital intensity is too high compared with more established large scale, low cost producers. We have concluded that the potential returns from battery materials will not be adequate to justify further investment and have therefore announced our intention to exit this business.

New Markets sales declined 36% in the period, largely due to lower sales in Fuel Cells. We were impacted by temporary manufacturing issues as we ramped up our new facilities, which have now been resolved. We also used a proportion of our capacity for new customer testing.

Value Businesses

Value Businesses is managed to drive shareholder value from activities considered to be non-core to JM, and currently comprises Battery Systems, Medical Device Components, Diagnostic Services and Advanced Glass Technologies (AGT). Sales were up 11% in the half, trending back towards pre-pandemic levels. As we actively manage to drive value, we saw an improved performance in these businesses.

AGT mainly provides black obscuration enamels and silver paste for automotive glass applications. Sales were higher as we saw a strong rebound in automotive markets following pandemic disruption in the prior period. On 24th November 2021, we announced the disposal of this business to Fenzi S.p.A for £178 million and it is now classified as held for sale.

Our Battery Systems business saw a partial recovery in sales following a weak prior period that was impacted by disruption caused by the pandemic. In the half, we saw an impact from shortages of semi-conductor chips.

Medical Device Components performed well and saw good sales growth following the postponement of some elective medical procedures in 2020 due to the pandemic.

Diagnostic Services saw a good recovery in the half although performance remains impacted by the pandemic.

Underlying operating loss

We reported an underlying operating loss of £11 million. This was due to increased investment into our New Markets growth businesses such as Hydrogen Technologies and lower sales in Fuel Cells.

ROIC

ROIC declined by 4.4 percentage points to -1.4% due to higher assets as we invest for growth, and an operating loss.

Corporate

Corporate costs were £39 million, an increase of £12 million from the prior period, primarily due to building capability across our group functions and upgrading our core IT systems.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Financial review

Research and development (R&D)

R&D spend was £109 million in the half, including £20 million of capitalised R&D. This was up from £96 million in the prior period and represents c.5% of sales excluding precious metals. R&D spend was higher in the period, primarily driven by increased investment in Hydrogen Technologies as we commercialise our fuel cell and green hydrogen offerings, as well as Battery Materials which will now cease.

Foreign exchange

The calculation of growth at constant rates excludes the impact of foreign exchange movements arising from the translation of overseas subsidiaries' profit into sterling. The group does not hedge the impact of translation effects on the income statement.

The principal overseas currencies, which represented 75% of the non-sterling denominated underlying operating profit in the half year ended 30th September 2021, were:

	Share of 1H 2021/22 non-sterling denominated underlying operating profit	Average exchange rate Half year ended 30th September 2021	2020	% change
US dollar	27%	1.39	1.27	+9
Euro	30%	1.16	1.12	+4
Chinese renminbi	18%	8.95	8.86	+1

For the half, the impact of exchange rates decreased sales by £71 million and underlying operating profit by £6 million.

If current exchange rates (£:$ 1.34, £:€ 1.19, £:RMB 8.57) are maintained throughout the year ending 31st March 2022, foreign currency translation will have a negative impact of approximately £15 million on underlying operating profit. A one cent change in the average US dollar and euro exchange rates and a ten fen change in the average rate of the Chinese renminbi each have an impact of approximately £1 million on full year underlying operating profit.

Efficiency savings

We are transforming our organisation to create a more simple and efficient group, allowing us to act with greater agility and pace in a dynamic external environment. This includes the consolidation of our Clean Air manufacturing footprint and the implementation of a new group operating model, which will deliver savings of £110 million per annum by 2023/24.

Initiative £ million	Delivered to 2020/21	Delivered in half	Total delivered to date	Annualised benefits by 2023/24
Total active efficiency programmes	**37**	**42**	**79**	**110**

Items outside of underlying operating profit

Major impairment and restructuring costs

Following the announcement of our intention to exit our Battery Materials business, the associated Battery Materials' assets were impaired by £314 million. The impairment comprises property, plant and equipment (£216 million), right-of-use assets (£5 million), other intangible assets (£78 million) and trade and other receivables (£15 million).

Related to our efficiency savings which will deliver savings of £110 million per annum by 2023/24, we incurred £230 million of one-off costs in total recognised outside of underlying operating profit in prior periods. Of these costs, £78 million were incurred in the first half of the prior year.

Gain on significant legal proceedings

During the period, the group recognised a gain of £44 million in relation to damages and interest from a company found to have unlawfully copied one of JM's technology designs.

Finance charges

Net finance charges in the period amounted to £29 million, down from £41 million in the first half of 2020/21. Due to the focus across the group on maintaining efficient levels of precious metal working capital and sustained lower borrowings, we have seen finance costs gradually decrease.

Taxation

The tax charge on underlying profit before tax for the half year ended 30th September 2021 was £42 million, an effective underlying tax rate of 16.0%, slightly up from 15.6% in the first half of 2020/21. The tax rate on underlying profit for the year ending 31st March 2022 is estimated to be c.16-17%.

The effective tax rate on reported profit for the half was 189.6%, up from 7.8% in the prior period. This represents a tax charge of £19 million, up from £2 million in the prior year. The increased effective rate is due to a major impairment arising in the first half, the majority of which arises in a jurisdiction where no tax relief is available.

Post-employment benefits

IFRS – accounting basis

At 30th September 2021, the group's net post-employment benefit position was a surplus of £203 million.

The cost of providing post-employment benefits in the period was £25 million, up from £21 million in the same period last year.

Actuarial – funding basis

The UK pension scheme has a legacy defined benefit career average section which was closed to new entrants on 1st October 2012, when a new defined benefit cash balance section was opened.

The last triennial actuarial valuation of the career average section as at 1st April 2018 revealed a deficit of £34 million, or a surplus of £9 million after taking account of the future additional deficit funding contributions from the special purpose vehicle set up in January 2013. The valuation results as at 1st April 2018 allowed for the equalisation of Guaranteed Minimum Pension. The triennial actuarial valuation of the scheme as at 1st April 2021 is currently underway and the results are expected by the end of the year.

The last triennial actuarial valuation of the cash balance section as at 1st April 2018 revealed a surplus of £0.2 million.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

The latest actuarial valuations of our two US pension schemes showed a surplus of £9 million as at 1st July 2021, an improvement from a £7 million surplus as at 1st July 2020.

Capital expenditure

Capital expenditure was £228 million in the half, 2.4 times depreciation and amortisation (excluding amortisation of acquired intangibles). In the period, projects included:

- In Efficient Natural Resources, investing to increase the resilience and capacity of our pgm refining assets
- Development and commercialisation of eLNO, our portfolio of high nickel cathode materials within Battery Materials
- Upgrading our core IT business systems

Strong balance sheet

Net debt at 30th September 2021 was £699 million, a decrease of £76 million from 31st March 2021 and £179 million from 30th September 2020. Net debt is £39 million higher at £738 million when post tax pension deficits are included. The group's net debt (including post tax pension deficits) to EBITDA was 0.9 times (30th September 2020: 1.6 times), below our target range of 1.5 to 2.0 times.

As part of our continued focus on working capital management, we have maintained an efficient balance sheet and low levels of working capital. In the half, supply chain disruption across automotive and truck production resulted in a precious metal working capital volume benefit of c.£300 million, which will unwind as production recovers.

We use short term metal leases as part of our mix of funding for working capital, which are outside the scope of IFRS 16 as they qualify as short term leases. These amounted to £223 million at 30th September 2021 (31st March 2021: £437 million, 30th September 2020: £367 million).

Free cash flow and working capital

Free cash flow was £189 million in the half, compared to £256 million in the prior period, largely reflecting higher non-precious metal working capital.

Excluding precious metal, average working capital days to 30th September 2021 decreased to 40 days compared to 70 days to 30th September 2020. The prior period was higher due to the lower average sales volume through the period. Our target range for average non-precious metal working capital days is between 50 and 60 days over the medium term.

Going concern

The group maintains a strong balance sheet with around £1.7 billion of available cash and undrawn committed facilities. Cash generation was strong during the period with free cash flow of around £189 million lowering net debt by £76 million since year end. As set out on page 28, the directors have reviewed the base case scenario forecasts for the group and have reasonable expectation that there are no material uncertainties that cast doubt about the group's ability to continue operating for at least twelve months from the date of approving these half-yearly accounts. In arriving at this view, the base case scenario was stress tested to a severe but plausible downside case which assumed a lower demand profile and slower recovery in end user market growth. Additionally, the group considered scenarios including the impact from metal price volatility, a short-term refinery shutdown and increases in the amount of metal that we would have to hold.

Under all scenarios, the group has sufficient headroom against committed facilities and key financial covenants are not in breach during the going concern period. The directors are therefore of the opinion that the group has adequate resources to fund its operations for the period of twelve months following the date of this announcement and so determine that it is appropriate to prepare the accounts on a going concern basis.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Risks and uncertainties

The principal risks and uncertainties, together with the group's strategies to manage them, are set out on pages 88 to 96 of the 2021 annual report. Updated risks are:

Existing market outlook – Changing assumptions in our key markets could have an unplanned or unforeseen impact that we are not agile enough to respond to. Since the publication of the 2021 annual report, this risk has been revised to reflect the impact of climate change and our transition to a low carbon economy. As we transition to a low carbon economy, there is a risk JM is unable to make and or sell products demanded by customers.

This risk includes the potential impact of legislative changes, including carbon pricing or taxation legislation, other market movements outside of our predictions, the extended impact of global pandemics, and emerging trends such as tariffs, as well as regional and global slowdowns to which our business may be sensitive.

Future growth – Ineffective execution of our strategic initiatives and investments could lead to failure to deliver planned growth and create value. Our intention to exit Battery Materials changes this risk profile in that we will have less exposure to a highly capital intensive and potentially low margin segment, but removes one of our strategic growth initiatives.

Competitive advantage – Failure to maintain our competitive advantage in existing markets and, as a result, not meeting customers' evolving needs as effectively and profitably as our competitors, particularly around increasing customer demand for net zero products.

Environment, health and safety (EHS) – Like other high hazard manufacturing companies, our business operations are subject to a wide range of challenging health, safety and environmental laws, standards and regulations set by government and non-governmental bodies around the world. If we fail to operate safely, we could injure our people or breach applicable laws, which could have a negative impact on our employees. This could result in lost production time and potentially attract negative interest from the media and regulators.

Supply failure – The nature of JM's operations means there are limited suppliers from which to source certain strategic raw materials including precious metals. Any significant breakdown in the supply of these materials would lead to an inability to manufacture our products and satisfy customer demand. Through our work on climate change impacts, we acknowledge that increased frequency of extreme weather events and natural disasters (drought, floods, storms, cyclones, heavy rain, sea level rise, heatwaves) may lead to disruption to supply chains across JM's value chain (upstream and downstream) resulting in disrupted delivery of raw materials and products and increased costs.

People – To successfully execute our strategy and deliver growth, we need an appropriate culture and a breadth and depth of leadership skills to drive a motivated, inclusive and engaged workforce, underpinned by adequate people data. This is especially important as we pivot away from more traditional areas of the business to ones that are higher growth and by implication higher risk.

Security of metal / highly regulated substances – We store and transport significant quantities of high value precious metals or highly regulated substances. Loss or theft due to a failure of our associated security management systems may result in financial loss and / or a failure to satisfy our customers, which could reduce customer confidence or result in legal action.

Intellectual property management – Failure to adequately manage our own, and third party, intellectual property, knowledge and information could lead to a loss in business advantage, loss of freedom to operate and reputational damage associated with litigation.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Asset failure – We may experience critical asset failures resulting in a material impact on the supply, performance, share value and reputation of JM. In addition, we recognise that increased frequency of extreme weather events and natural disasters (drought, floods, storms, cyclones, heavy rain, sea level rise, heatwaves) may lead to disruption of JM operations resulting in increased costs and detrimental effects on employee wellbeing.

Ethics and compliance – Failure to comply with ethical and regulatory standards could lead to reputational damage, and leave the company or individuals open to potential criminal or legal action.

Business transition – Failure to manage and deliver change in a controlled manner to achieve expected business benefits.

Product quality – Customers use our products in a wide range of their own end products, processes and systems. It is crucial, therefore, that our products work properly and meet the established quality criteria. Performance failure or quality defects could cause harm to consumers or leave us exposed to liability claims. This could lead to loss of future business, licence to operate and reputational damage.

Information, technology and cyber security – Failure to adapt our IT systems to changing business requirements, significant disruption to those systems or a major cyber security incident could adversely affect our financial position, harm our reputation and lead to regulatory penalties, or non-compliance with laws.

Customer contract liability – Unfavourable customer contract terms could lead to significant loss or damage and expose us to high or unlimited liability, as well as other broader negative consequences.

Responsibility statement of the Directors in respect of the half yearly report

The half yearly report is the responsibility of the directors. Each of the directors as at the date of this responsibility statement, whose names and functions are set out below, confirms that to the best of their knowledge:

- the condensed consolidated accounts have been prepared in accordance with UK adopted International Accounting Standard (IAS) 34 – '*Interim Financial Reporting*'; and
- the interim management report included in the Half-Yearly Report includes a fair review of the information required by:
  - a) DTR 4.2.7R of the Financial Conduct Authority's Disclosure Guidance and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed consolidated accounts; and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
  - b) DTR 4.2.8R of the Financial Conduct Authority's Disclosure Guidance and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the company during that period; and any changes in the related party transactions described in the last annual report that could do so.

The names and functions of the directors of Johnson Matthey Plc are as follows:

Patrick Thomas	Chair of the Board and of the Nomination Committee
Robert MacLeod	Chief Executive
Stephen Oxley	Chief Financial Officer
John O'Higgins	Senior Independent Non-Executive Director
Rita Forst	Non-Executive Director
Jane Griffiths	Non-Executive Director and Chair of Societal Value Committee
Xiaozhi Liu	Non-Executive Director
Chris Mottershead	Non-Executive Director and Chair of the Remuneration Committee
Doug Webb	Non-Executive Director and Chair of the Audit Committee

The responsibility statement was approved by the Board of Directors on 23rd November 2021 and is signed on its behalf by:

Patrick Thomas
Chairman

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Independent Review Report
to Johnson Matthey Plc

Report on the condensed consolidated accounts

Our conclusion
We have reviewed Johnson Matthey Plc's condensed consolidated accounts (the "interim financial statements") in the half year results of Johnson Matthey Plc for the 6 month period ended 30th September 2021 (the "period").

Based on our review, nothing has come to our attention that causes us to believe that the interim financial statements are not prepared, in all material respects, in accordance with UK adopted International Accounting Standard 34, 'Interim Financial Reporting' and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

What we have reviewed
The interim financial statements comprise:

- the Condensed Consolidated Balance Sheet as at 30th September 2021;
- the Condensed Consolidated Income Statement and Condensed Consolidated Statement of Total Comprehensive Income for the period then ended;
- the Condensed Consolidated Cash Flow Statement for the period then ended;
- the Condensed Consolidated Statement of Changes in Equity for the period then ended; and
- the explanatory notes to the interim financial statements.

The interim financial statements included in the half year results of Johnson Matthey Plc have been prepared in accordance with UK adopted International Accounting Standard 34, '*Interim Financial Reporting*' and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

Responsibilities for the interim financial statements and the review

Our responsibilities and those of the directors
The half year results, including the interim financial statements, is the responsibility of, and has been approved by the directors. The directors are responsible for preparing the half year results in accordance with the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

Our responsibility is to express a conclusion on the interim financial statements in the half year results based on our review. This report, including the conclusion, has been prepared for and only for the company for the purpose of complying with the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority and for no other purpose. We do not, in giving this conclusion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What a review of interim financial statements involves
We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410, 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

We have read the other information contained in the half year results and considered whether it contains any apparent misstatements or material inconsistencies with the information in the interim financial statements.

PricewaterhouseCoopers LLP
Chartered Accountants
London
23rd November 2021

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Condensed Consolidated Income Statement

for the six months ended 30th September 2021

	Notes	Six months ended 30.9.21 £ million	30.9.20 £ million
Revenue	2, 3	**8,586**	6,979
Cost of sales		**(8,038)**	(6,587)
Gross profit		**548**	392
Distribution costs		**(57)**	(54)
Administrative expenses		**(198)**	(187)
Amortisation of acquired intangibles	4	**(3)**	(5)
Gain on significant legal proceedings	4	**44**	-
Major impairment and restructuring charges	4	**(314)**	(78)
Operating profit		**20**	68
Finance costs		**(38)**	(77)
Finance income		**9**	36
Share of losses of joint ventures and associates		**-**	(1)
(Loss) / profit before tax		**(9)**	26
Tax expense	5	**(19)**	(2)
(Loss) / profit for the period		**(28)**	24
		pence	pence
(Loss) / earnings per ordinary share			
Basic	6	**(14.8)**	12.3
Diluted	6	**(14.8)**	12.3

Condensed Consolidated Statement of Total Comprehensive Income

for the six months ended 30th September 2021

	Notes	Six months ended 30.9.21 £ million	30.9.20 £ million
(Loss) / profit for the period		**(28)**	24
Other comprehensive income			
Items that will not be reclassified to the income statement			
Remeasurements of post-employment benefit assets and liabilities	13	**59**	(103)
Fair value gains on equity investments at fair value through other comprehensive income		**1**	6
Tax on items that will not be reclassified to the income statement		**(5)**	21
		55	(76)
Items that may be reclassified to the income statement:			
Exchange differences on translation of foreign operations		**40**	(11)
Amounts credited / (charged) to hedging reserve		**13**	(6)
Fair value losses on net investment hedges		**(2)**	-
Tax on items that may be reclassified to the income statement		**(3)**	1
		48	(16)
Other comprehensive income / (expense) for the period		**103**	(92)
Total comprehensive income / (expense) for the period		**75**	(68)

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Condensed Consolidated Balance Sheet

as at 30th September 2021

	Notes	30.9.21 £ million	31.3.21 £ million
Assets			
Non-current assets			
Property, plant and equipment	8	**1,326**	1,424
Right-of-use assets		**65**	74
Goodwill		**557**	554
Other intangible assets	9	**307**	359
Investments in joint ventures and associates		**2**	2
Investments at fair value through other comprehensive income		**54**	53
Other receivables	10	**30**	50
Interest rate swaps	19	**17**	20
Deferred tax assets		**113**	140
Post-employment benefit net assets	13	**249**	194
Total non-current assets		**2,720**	2,870
Current assets			
Inventories		**2,004**	1,814
Current tax assets		**9**	13
Trade and other receivables	10	**1,916**	2,422
Cash and cash equivalents	19	**746**	581
Interest rate swaps	19	**3**	-
Other financial assets		**61**	44
Assets classified as held for sale	12	**52**	-
Total current assets		**4,791**	4,874
Total assets		**7,511**	7,744
Liabilities			
Current liabilities			
Trade and other payables	11	**(3,050)**	(3,325)
Lease liabilities	19	**(11)**	(11)
Current tax liabilities		**(95)**	(147)
Cash and cash equivalents – bank overdrafts	19	**(42)**	(36)
Borrowings and related swaps	19	**(309)**	(26)
Other financial liabilities		**(28)**	(18)
Provisions		**(29)**	(35)
Liabilities classified as held for sale	12	**(13)**	-
Total current liabilities		**(3,577)**	(3,598)
Non-current liabilities			
Borrowings and related swaps	19	**(1,054)**	(1,252)
Lease liabilities	19	**(48)**	(51)
Deferred tax liabilities		**(28)**	(28)
Employee benefit obligations	13	**(100)**	(98)
Provisions		**(26)**	(27)
Other payables	11	**(5)**	(5)
Total non-current liabilities		**(1,261)**	(1,461)
Total liabilities		**(4,838)**	(5,059)
Net assets		**2,673**	2,685
Equity			
Share capital		**221**	221
Share premium		**148**	148
Shares held in employee share ownership trust (ESOT)		**(24)**	(29)
Other reserves		**49**	-
Retained earnings		**2,279**	2,345
Total equity		**2,673**	2,685

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Condensed Consolidated Cash Flow Statement

for the six months ended 30th September 2021

	Notes	Six months ended 30.9.21 £ million	30.9.20 £ million
Cash flows from operating activities			
(Loss) / profit before tax		**(9)**	26
Adjustments for:			
Share of losses of joint ventures and associates		**-**	1
Depreciation		**77**	76
Amortisation		**22**	13
Impairment losses		**314**	16
Loss on sale of non-current assets		**-**	1
Share-based payments		**9**	5
Increase in inventories		**(179)**	(177)
Decrease / (increase) in receivables		**532**	(347)
(Decrease) / increase in payables		**(339)**	840
(Decrease) / increase in provisions		**(8)**	49
Contributions less than / (in excess of) employee benefit obligations charge		**5**	(5)
Changes in fair value of financial instruments		**8**	(37)
Net finance costs		**29**	41
Income tax paid		**(49)**	(20)
Net cash inflow from operating activities		**412**	482
Cash flows from investing activities			
Interest received		**6**	33
Purchases of property, plant and equipment		**(141)**	(139)
Purchases of intangible assets		**(43)**	(36)
Proceeds from sale of non-current assets		**2**	-
Net cash outflow from investing activities		**(176)**	(142)
Cash flows from financing activities			
Proceeds from borrowings		**63**	288
Repayment of borrowings		**-**	(4)
Dividends paid to equity shareholders	7	**(96)**	(60)
Interest paid		**(40)**	(77)
Principal element of lease payments		**(7)**	(7)
Net cash (outflow) / inflow from financing activities		**(80)**	140
Net increase in cash and cash equivalents		**156**	480
Exchange differences on cash and cash equivalents		**3**	(1)
Cash and cash equivalents at beginning of year		**545**	273
Cash and cash equivalents at end of period	19	**704**	752
Cash and deposits		**223**	197
Money market funds		**523**	573
Bank overdrafts		**(42)**	(32)
Cash and deposits transferred to assets classified as held for sale		**-**	14
Cash and cash equivalents	19	**704**	752

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

JM

Condensed Consolidated Statement of Changes in Equity

for the six months ended 30th September 2021

	Share capital £ million	Share premium account £ million	Shares held in ESOT £ million	Other reserves £ million	Retained earnings £ million	Total equity £ million
At 1st April 2020	221	148	(32)	142	2,345	2,824
Total comprehensive expense for the period	-	-	-	(10)	(58)	(68)
Dividends paid (note 7)	-	-	-	-	(60)	(60)
Share-based payments	-	-	-	-	9	9
Cost of shares transferred to employees	-	-	3	-	(7)	(4)
At 30th September 2020	221	148	(29)	132	2,229	2,701
Total comprehensive (expense) / income for the period	-	-	-	(132)	150	18
Dividends paid (note 7)	-	-	-	-	(39)	(39)
Share-based payments	-	-	-	-	7	7
Cost of shares transferred to employees	-	-	-	-	(3)	(3)
Tax on share-based payments	-	-	-	-	1	1
At 31st March 2021	221	148	(29)	-	2,345	2,685
Total comprehensive income for the period	-	-	-	49	26	75
Dividends paid (note 7)	-	-	-	-	(96)	(96)
Share-based payments	-	-	-	-	12	12
Cost of shares transferred to employees	-	-	5	-	(8)	(3)
At 30th September 2021	**221**	**148**	**(24)**	**49**	**2,279**	**2,673**

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

Notes to the Accounts

for the six months ended 30th September 2021

1 Basis of preparation and statement of compliance

On 31st December 2020, IFRS as adopted by the European Union at that date was brought into UK law and became UK-adopted International Accounting Standards, with future changes being subject to endorsement by the UK Endorsement Board. The group transitioned to UK-adopted International Accounting Standards in its consolidated financial statements on 1st April 2021. This change constitutes a change in accounting framework. However, there is no impact on recognition, measurement or disclosure in the period reported as a result of the change in framework. This condensed consolidated interim financial report for the half-year reporting period ended 30th September 2021 has been prepared in accordance with the UK-adopted International Accounting Standard 34, *'Interim Financial Reporting'* and the Disclosure Guidance and Transparency Rules sourcebook of the UK's Financial Conduct Authority. The accounting policies applied are consistent with the accounting policies applied by the group in its consolidated accounts as at, and for the year ended, 31st March 2021, with the exception of the adoption of amended accounting policies and standards as explained below.

These condensed consolidated accounts do not constitute statutory accounts within the meaning of Section 435 of the Companies Act 2006. The interim report does not include all of the notes of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the annual report for the year ended 31st March 2021, which has been prepared in accordance with both International Accounting Standards (IAS) in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), adopted pursuant to Regulation (EC) No 1606/2002 as it applies to the European Union, including the interpretations issued by the IFRS Interpretations Committee.

Information in respect of the year ended 31st March 2021 is derived from the company's statutory accounts for that year which have been delivered to the Registrar of Companies. The auditor's report on those statutory accounts was unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its report and did not contain any statement under Section 498 (2) or Section 498 (3) of the Companies Act 2006.

The half-yearly accounts are unaudited, but have been reviewed by the auditors. They were approved by the board of directors on 23rd November 2021.

Going concern

The directors have reviewed the base case scenario, and the severe but plausible case scenario and have reasonable expectation that there are no material uncertainties that cast doubt about the group's ability to continue operating for at least twelve months from the date of approving these half-yearly accounts.

As at 30th September 2021, the group maintains a strong balance sheet with around £1.7 billion of available cash and undrawn committed facilities. Cash generation was strong during the period with free cash flow of around £189 million lowering net debt by £76 million since 31st March 2021 to £699 million. Net debt (including post tax pension deficits) to EBITDA, was below our target range at 0.9 times.

Overall, the group's performance during the period was resilient, both in terms of underlying operating profit and cash flow. For the purposes of assessing going concern, we have revisited our financial projections using the latest forecasts for our base case scenario. The base case scenario was stress tested to a severe but plausible downside case which assumed a lower demand profile and slower recovery in end user market growth.

Additionally, the group considered scenarios including the impact from metal price volatility, a short-term refinery shutdown and increases in the amount of metal that we would have to hold. Whilst the combined impact would reduce profitability and EBITDA against our latest forecast, our balance sheet remains strong.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

1 Basis of preparation and statement of compliance (continued)

Going concern (continued)

The group has a robust funding position comprising a range of long-term debt and a £1 billion five year committed revolving credit facility maturing in March 2026 which was entirely undrawn at 30th September 2021. There was £555 million of cash held in money market and bank deposits. Of the existing loans, around £255 million of term debt matures in the period to December 2023 which has been included in our going concern modelling. As a long time, highly rated issuer in the US private placement market, the group expects to be able to access additional funding in its existing markets should it need to. The group also has a number of additional sources of funding available including uncommitted lease facilities that support precious metal funding. Whilst we would fully expect to be able to utilise the metal lease facilities, they are excluded from our going concern modelling.

Under all scenarios above, the group has sufficient headroom against committed facilities and key financial covenants are not in breach during the going concern period. There remain risks to the group including more extreme economic outcomes. Against these, the group has a range of levers which it could utilise to protect headroom including reducing capital expenditure, reducing PMM liquidity and future dividend distributions.

The directors are therefore of the opinion that the group has adequate resources to fund its operations for the period of twelve months following the date of this announcement and so determine that it is appropriate to prepare the accounts on a going concern basis.

Non-GAAP measures

The group uses various measures to manage its business which are not defined by generally accepted accounting principles (GAAP). The group's management believes these measures provide valuable additional information to users of the accounts in understanding the group's performance. The group's non-GAAP measures are defined and reconciled to GAAP measures in note 19.

Amended standards adopted by the group

The IASB ratified the IFRIC update on Configuration and Customisation ('CC') costs in a Cloud Computing Arrangement (IAS 38, *Intangible Assets*) in April 2021. The group reports 'CC' in cloud computing arrangements according to these updates.

The IASB has issued other amendments resulting from improvements to IFRS that the group considers do not have any impact on the accounting policies, financial position or performance of the group. The group has not early adopted any standard, interpretation or amendment that was issued but is not yet effective.

The group has elected not to apply the exemption granted in the 'COVID-19 related rent concessions' amendment to IFRS 16, *Leases*, as the group has not received material COVID-19 related rent concessions as a lessee.

Interest Rate Benchmark Reform Phase 2 – Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16

The IBOR reform, Phase 2 amendments were effective for annual periods beginning on or after the 1st January 2021. The Phase 2 amendments address issues that arise from implementation of the reforms, including the replacement of one benchmark with an alternative one. A practical expedient is provided such that the change to contractual cash flows for financial assets and liabilities (including lease liabilities) is accounted for prospectively by revising the effective interest rate. In addition, hedge accounting will not be discontinued solely because of the IBOR reform. The amendments are not expected to have a material impact on the results or financial position of the group.

The group has one IFRS 9 designated hedge relationship: the 3.26% $150 million Bonds 2022 which have been swapped into floating rate US dollars. This swap references six-month US dollar LIBOR, however the swap matures in 2022, before the amendments are effective for the group. The group does have access to a revolving credit facility which remains undrawn, the contract has been amended so that USD and GBP drawings will be subject to the new Secured Overnight Financing Rate (SOFR) and Sterling Overnight Index Average (SONIA) respectively from 30th November 2021. The implications on the wider business of IBOR reform have been assessed and there are no other arrangements that are materially impacted.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

2 Segmental information

Revenue, sales and underlying operating profit by sector

As part of the 31st March 2021 results press release, we announced small changes to our reporting segments to reflect how we are managing the business and increase visibility of our new growth businesses. Efficient Natural Resources now includes Life Science Technologies (formerly part of New Markets) and excludes Diagnostic Services and Advanced Glass Technologies (now part of Other Markets). Excluding Corporate costs, the group has four reporting segments, aligned to the needs of our customers and the global challenges we are tackling.

Clean Air – provides catalysts for emission control after-treatment systems to remove harmful emissions from vehicles and non-road equipment powered by diesel and gasoline.

Efficient Natural Resources – provides products and processing services for the efficient use and transformation of critical natural resources including oil, gas, biomass and platinum group metals to enable the decarbonisation of chemical value chains and provide circular economy solutions.

Health – develops and manufactures active pharmaceutical ingredients (APIs) for a variety of treatments and new drugs during their lifecycle, including for initial clinical evaluation and subsequently for commercial supply post regulatory approval.

Other Markets – a portfolio of businesses with particular focus on potential growth and value realisation opportunities. This includes Battery Systems, Fuel Cells, Diagnostic Services, Battery Materials and Green Hydrogen.

The Group Management Committee (the chief operating decision maker as defined by IFRS 8, *Operating Segments*) monitors the results of these operating sectors to assess performance and make decisions about the allocation of resources. Each operating sector is represented by a member of the Group Management Committee. These operating sectors represent the group's reportable segments and their principal activities are described on pages 42 to 57 of the 2021 Annual Report. The performance of the group's operating sectors is assessed on sales and underlying operating profit (see note 19). Sales between segments are made at market prices, taking into account the volumes involved.

Six months ended 30th September 2021

	Clean Air £ million	Efficient Natural Resources £ million	Health £ million	Other Markets £ million	Corporate £ million	Eliminations £ million	Total £ million
Revenue from external customers	**3,748**	**4,514**	**83**	**241**	**-**	**-**	**8,586**
Inter-segment revenue	**1**	**2,617**	**1**	**-**	**-**	**(2,619)**	**-**
Revenue	**3,749**	**7,131**	**84**	**241**	**-**	**(2,619)**	**8,586**
External sales[1]	**1,195**	**470**	**82**	**191**	**-**	**-**	**1,938**
Inter-segment sales	**1**	**53**	**1**	**-**	**-**	**(55)**	**-**
Sales[1]	**1,196**	**523**	**83**	**191**	**-**	**(55)**	**1,938**
Underlying operating profit[1]	**150**	**197**	**(4)**	**(11)**	**(39)**	**-**	**293**

Six months ended 30th September 2020

	Clean Air £ million	Efficient Natural Resources (restated) £ million	Health £ million	Other Markets (restated) £ million	Corporate £ million	Eliminations (restated) £ million	Total £ million
Revenue from external customers	2,888	3,743	122	226	-	-	6,979
Inter-segment revenue	2	1,965	-	-	-	(1,967)	-
Revenue	2,890	5,708	122	226	-	(1,967)	6,979
External sales[1]	1,002	367	119	191	-	-	1,679
Inter-segment sales	1	44	-	-	-	(45)	-
Sales[1]	1,003	411	119	191	-	(45)	1,679
Underlying operating profit[1]	77	88	15	(2)	(27)	-	151

[1] Sales and underlying operating profit are non-GAAP measures (see note 19 for reconciliation to GAAP measures). Sales excludes the sale of precious metals. Underlying operating profit excludes profit or loss on disposal of businesses, gain or loss on significant legal proceedings, together with associated legal costs, amortisation of acquired intangibles and major impairment and restructuring charges.

The comparative period is restated to reflect the group's updated reporting segments and revised inter-segment revenue and sales for Efficient Natural Resources and eliminations for copper zeolite sales. The overall group total is as previously reported.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

2 Segmental information (continued)

Net assets by sector

At 30th September 2021

	Clean Air £ million	Efficient Natural Resources £ million	Health £ million	Other Markets £ million	Corporate £ million	Total £ million
Segmental net assets	**1,481**	**542**	**494**	**197**	**482**	**3,196**
Net debt (see note 19)						**(699)**
Post-employment benefit net assets and liabilities						**149**
Deferred tax net assets						**85**
Provisions and non-current other payables						**(60)**
Investments in joint ventures and associates						**2**
Net assets						**2,673**

At 31st March 2021

	Clean Air £ million	Efficient Natural Resources (restated) £ million	Health £ million	Other Markets (restated) £ million	Corporate £ million	Total £ million
Segmental net assets	1,480	603	469	412	353	3,317
Net debt (see note 19)						(775)
Post-employment benefit net assets and liabilities						96
Deferred tax net assets						112
Provisions and non-current other payables						(67)
Investments in joint ventures and associates						2
Net assets						2,685

The comparative period is restated to reflect the group's updated reporting segments. The overall group total is as previously reported.

2 Segmental information (continued)

Impact of exchange rate movements on sales and underlying operating profit by sector

The main impact of exchange rate movements on sales and underlying operating profit is from the translation of the results of foreign operations into sterling.

Average exchange rates	Six months ended 30.9.21	Six months ended 30.9.20
US dollar / £	**1.39**	1.27
Euro / £	**1.16**	1.12
Chinese renminbi / £	**8.95**	8.86

	Six months ended 30.9.21 £ million	Six months ended 30.9.20 At last year's rates (restated) £ million	Six months ended 30.9.20 At this year's rates (restated) £ million	Change at this year's rates %
Clean Air	**1,196**	1,003	964	24%
Efficient Natural Resources	**523**	411	393	33%
Health	**83**	119	112	-26%
Other Markets	**191**	191	182	5%
Elimination of inter-segment sales	**(55)**	(45)	(43)	
Sales[1]	**1,938**	1,679	1,608	21%
Clean Air	**150**	77	74	103%
Efficient Natural Resources	**197**	88	86	129%
Health	**(4)**	15	14	n/a
Other Markets	**(11)**	(2)	(2)	n/a
Unallocated corporate expenses	**(39)**	(27)	(27)	
Underlying operating profit[1]	**293**	151	145	102%

[1] Sales and underlying operating profit are non-GAAP measures (see note 19 for reconciliation to GAAP measures). Sales excludes the sale of precious metals. Underlying operating profit excludes profit or loss on disposal of businesses, gain or loss on significant legal proceedings, together with associated legal costs, amortisation of acquired intangibles and major impairment and restructuring charges.

The comparative period is restated to reflect the group's updated reporting segments and revised inter-segment revenue and sales for Efficient Natural Resources and eliminations for copper zeolite sales. The overall group total is as previously reported.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

3 Revenue

Products and services

The group's principal products and services by operating sector and sub-sector are disclosed in the table below, together with information regarding performance obligations and revenue recognition. Revenue is recognised by the group as contractual performance obligations to customers are completed.

Sub-sector	Primary industry	Principal products and services	Performance obligations	Revenue recognition
Clean Air				
Light Duty Catalysts	Automotive	Catalysts for cars and other light duty vehicles	Point in time	On despatch or delivery
Heavy Duty Catalysts	Automotive	Catalysts for trucks, buses and non-road equipment	Point in time	On despatch or delivery
Efficient Natural Resources				
Catalyst Technologies	Chemicals / oil and gas	Speciality catalysts and additives	Point in time	On despatch or delivery
		Process technology licences	Over time	Based on costs incurred or straight-line over the licence term[1]
		Engineering design services	Over time	Based on costs incurred
Platinum Group Metal Services	Various	Platinum Group Metal refining and recycling services	Over time	Based on output
		Other precious metal products	Point in time	On despatch or delivery
		Platinum Group Metal chemical and industrial products	Point in time	On despatch or delivery
		Advanced catalysts	Point in time	On despatch or delivery
Health				
Generics	Pharmaceuticals	Manufacture of active pharmaceutical ingredients	Point in time	On despatch or delivery
Innovators	Pharmaceuticals	Development and manufacture of active pharmaceutical ingredients	Over time	Based on costs incurred
Other Markets				
Advanced Glass Technologies	Automotive	Precious metal pastes and enamels	Point in time	On despatch or delivery
Battery Materials	Automotive	Battery materials	Point in time	On despatch or delivery
Fuel Cells	Automotive	Fuel cell technologies	Point in time	On despatch or delivery
Battery Systems	Consumer goods	Battery systems for a range of applications	Point in time	On despatch or delivery
Medical Device Components	Pharmaceuticals	Products found in devices used in medical procedures	Point in time	On despatch or delivery
Diagnostic Services	Oil and gas	Detection, diagnostic and measurement solutions	Over time	Based on costs incurred

[1] Revenue recognition depends on whether the licence is distinct in the context of the contract.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

3 Revenue (continued)

Revenue from external customers by principal products and services

Six months ended 30th September 2021

	Clean Air £ million	Efficient Natural Resources £ million	Health £ million	Other Markets £ million	Total £ million
Metal	**2,553**	**4,044**	**1**	**50**	**6,648**
Heavy Duty Catalysts	**413**	**-**	**-**	**-**	**413**
Light Duty Catalysts	**768**	**-**	**-**	**-**	**768**
Catalyst Technologies	**-**	**219**	**-**	**-**	**219**
Platinum Group Metal Services	**-**	**251**	**-**	**-**	**251**
Generics	**-**	**-**	**40**	**-**	**40**
Innovators	**-**	**-**	**42**	**-**	**42**
Fuel Cells	**-**	**-**	**-**	**10**	**10**
Battery Materials	**-**	**-**	**-**	**6**	**6**
Battery Systems	**-**	**-**	**-**	**77**	**77**
Advanced Glass Technologies	**-**	**-**	**-**	**36**	**36**
Diagnostic Services	**-**	**-**	**-**	**26**	**26**
Medical Device Components	**-**	**-**	**-**	**36**	**36**
Other	**14**	**-**	**-**	**-**	**14**
Revenue	**3,748**	**4,514**	**83**	**241**	**8,586**

Six months ended 30th September 2020

	Clean Air £ million	Efficient Natural Resources (restated) £ million	Health £ million	Other Markets (restated) £ million	Total £ million
Metal	1,885	3,377	3	34	5,299
Heavy Duty Catalysts	310	-	-	-	310
Light Duty Catalysts	680	-	-	-	680
Catalyst Technologies	-	194	-	-	194
Platinum Group Metal Services	-	172	-	-	172
Generics	-	-	70	-	70
Innovators	-	-	49	-	49
Fuel Cells	-	-	-	19	19
Battery Materials	-	-	-	6	6
Battery Systems	-	-	-	76	76
Advanced Glass Technologies	-	-	-	27	27
Diagnostic Services	-	-	-	21	21
Medical Device Components	-	-	-	29	29
Other	13	-	-	14	27
Revenue	2,888	3,743	122	226	6,979

The comparative period is restated to reflect the group's updated reporting segments. The overall group total is as previously reported.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

4 Operating profit

	Six months ended 30.9.21 £ million	30.9.20 £ million
Operating profit is arrived at after charging / (crediting):		
Total research and development expenditure	109	96
Less: Development expenditure capitalised	(20)	(9)
Research and development expenditure charged to the income statement	**89**	**87**
Less: External funding received from governments	(6)	(5)
Net research and development expenditure charged to the income statement	**83**	**82**
Depreciation of:		
Property, plant and equipment	70	69
Right-of-use assets	7	7
Depreciation	**77**	**76**
Amortisation of:		
Internally generated intangible assets	1	2
Acquired intangibles	3	5
Other intangible assets	18	6
Amortisation	**22**	**13**
Gain on significant legal proceedings	**(44)**	**-**
Major impairment and restructuring charges:		
Property, plant and equipment	216	12
Right-of-use assets	5	1
Other intangible assets	78	4
Inventories	-	1
Trade and other receivables	15	1
Trade and other payables	-	(3)
Impairment losses	**314**	16
Restructuring charges	-	62
Major impairment and restructuring charges	**314**	**78**

Gain on significant legal proceedings

During the period, the group recognised a gain of £44 million in relation to damages and interest from a company found to have unlawfully copied one of our technology designs. The gain is reported as non-underlying, see note 19.

Major impairment and restructuring charges

Following a detailed review of our Battery Materials business the group has concluded that the potential future returns from the business would not be adequate to justify further investment. Accordingly, on 11th November 2021, the group announced its decision to pursue the sale of all or parts of Battery Materials. We have determined an impairment charge of £314m based on our estimate of the recoverable amount of the assets at 30th September 2021. The impairment charge comprises property, plant and equipment (£216 million), right-of-use assets (£5 million), other intangible assets (£78 million) and trade and other receivables (£15 million).

In the prior period, the group incurred non-underlying major impairment and restructuring charges of £78 million. The charges were in relation to efficiency initiatives that are transforming our organisation to create a more simple and efficient group allowing us to act with greater agility and pace in a dynamic external environment. There have been no further charges in relation to these initiatives in the current period.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

5 Tax expense

The charge for taxation at the half year ended 30th September 2021 was £19 million (1H 2020/21: £2 million), this is after a major impairment charge of £314 million with an associated tax credit of £27 million. The tax charge on underlying profit before tax was £42 million (1H 2020/21: £17 million), an effective tax rate of 16.0% (1H 2020/21: 15.6%). Included in the first half tax charge is a tax credit of £6 million in relation to the UK rate change from 19% to 25%, which was enacted on 24th May 2021. In addition, there is a tax credit to other comprehensive income of £9 million in respect of the impact of the rate change on post-employment assets. The tax rate on underlying profit for the year ending 31st March 2022 is estimated to be between 16-17%.

6 (Loss) / earnings per ordinary share

	Six months ended	
	30.9.21	30.9.20
	pence	pence
Basic	**(14.8)**	12.3
Diluted	**(14.8)**	12.3

(Loss) / earnings per ordinary share have been calculated by dividing (loss) / profit for the period by the weighted average number of shares in issue during the period.

	Six months ended	
Weighted average number of shares in issue	**30.9.21**	30.9.20
Basic	**192,829,279**	192,650,843
Dilution for long term incentive plans	**687,371**	211,074
Diluted	**193,516,650**	192,861,917

7 Dividends

An interim dividend of 22.00 pence (1H 2020/21 20.00 pence) per ordinary share has been proposed by the board which will be paid on 1st February 2022 to shareholders on the register at the close of business on 3rd December 2021. The estimated amount to be paid is £42 million (1H 2020/21 £39 million) and has not been recognised in these accounts.

	Six months ended	
	30.9.21	30.9.20
	£ million	£ million
2019/20 final ordinary dividend paid — 31.125 pence per share	**-**	60
2020/21 final ordinary dividend paid — 50.00 pence per share	**96**	-
Total dividends	**96**	60

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

8 Property, plant and equipment

	Land and buildings £ million	Leasehold improvements £ million	Plant and machinery £ million	Assets in the course of construction £ million	Total £ million
Cost					
At 1st April 2021	667	31	2,310	377	3,385
Additions	1	-	9	172	182
Transferred to assets classified as held for sale (note 12)	(15)	(2)	(47)	(1)	(65)
Reclassification	-	1	47	(48)	-
Disposals	(1)	-	(20)	-	(21)
Exchange adjustments	10	-	31	4	45
At 30th September 2021	662	30	2,330	504	3,526
Accumulated depreciation and impairment					
At 1st April 2021	321	17	1,606	17	1,961
Charge for the period	10	1	59	-	70
Impairment losses	9	-	25	182	216
Transferred to assets classified as held for sale (note 12)	(12)	(2)	(38)	-	(52)
Disposals	(1)	-	(19)	-	(20)
Exchange adjustments	4	-	20	1	25
At 30th September 2021	331	16	1,653	200	2,200
Carrying amount at 30th September 2021	**331**	**14**	**677**	**304**	**1,326**
Carrying amount at 1st April 2021	346	14	704	360	1,424

Following a review of the business the group concluded the potential future returns from the Battery Materials business did not support the carrying value of the business (see note 4). The carrying value of the assets of the Battery Materials business of £216 million have consequently been fully impaired during the period and included within major impairment charges.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

9 Other intangible assets

	Customer contracts and relationships £ million	Computer software £ million	Patents, trademarks and licences £ million	Acquired research and technology £ million	Development expenditure £ million	Total £ million
Cost						
At 1st April 2021	133	367	65	42	226	833
Additions	-	25	1	-	20	46
Exchange adjustments	2	1	-	1	2	6
At 30th September 2021	135	393	66	43	248	885
Accumulated amortisation and impairment						
At 1st April 2021	108	144	46	41	135	474
Charge for the period	2	18	-	1	1	22
Impairments	-	9	15	-	54	78
Exchange adjustments	3	-	-	1	-	4
At 30th September 2021	113	171	61	43	190	578
Carrying amount at 30th September 2021	**22**	**222**	**5**	**-**	**58**	**307**
Carrying amount at 1st April 2021	25	223	19	1	91	359

Following a review of the business the group concluded the potential future returns from the Battery Materials business did not support the carrying value of the business (see note 4). The carrying value of the assets of the Battery Materials business of £78 million have consequently been fully impaired during the period and included within major impairment charges.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

10 Trade and other receivables

	30.9.21 £ million	31.3.21 £ million
Current		
Trade receivables	1,394	1,571
Contract receivables	132	181
Prepayments	108	88
Value added tax and other sales tax receivable	69	119
Advance payments to customers	10	11
Amounts receivable under precious metal sale and repurchase agreements[1]	162	308
Other receivables	41	144
Trade and other receivables	**1,916**	2,422
Non-current		
Value added tax and other sales tax receivable	2	2
Prepayments	-	3
Advance payments to customers	28	45
Other receivables	**30**	50

[1] The fair value of the precious metal contracted to be sold by the group under sale and repurchase agreements is £139 million (31st March 2021: £407 million).

11 Trade and other payables

	30.9.21 £ million	31.3.21 £ million
Current		
Trade payables	716	996
Contract liabilities	292	184
Accruals	347	369
Amounts payable under precious metal sale and repurchase agreements[1]	1,448	1,442
Other payables	247	334
Trade and other payables	**3,050**	3,325
Non-current		
Other payables	5	5
Other payables	**5**	5

[1] The fair value of the precious metal contracted to be repurchased by the group under sale and repurchase agreements is £1,228 million (31st March 2021: £1,766 million).

12 Assets and liabilities classified as held for sale

During the half year the group decided to sell its Advanced Glass Technologies business. As at 30th September 2021, the proceeds less costs to sell for the Advanced Glass Technologies business are estimated to be greater than book value and so no impairment is required. The business is classified as a disposal group held for sale and presented separately on the balance sheet.

The sale of the Advanced Glass Technologies business was agreed on 23rd November 2021, with proceeds of £178 million.

The major classes of assets or liabilities comprising the businesses classified as held for sale are:

At 30th September 2021	**Advanced Glass Technologies £ million**
Non-current assets	
Property, plant and equipment	13
Right-of-use-assets	1
Goodwill	2
Current assets	
Inventories	20
Trade and other receivables	16
Assets classified as held for sale	**52**
Current liabilities	
Trade and other payables	(11)
Non-current liabilities	
Lease liabilities	(1)
Employee benefit obligations	(1)
Liabilities classified as held for sale	**(13)**
Net assets of disposal group	**39**

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

13 Post-employment benefits

Background

The group operates a number of post-employment benefit plans around the world, the forms and benefits of which vary with conditions and practices in the countries concerned. The major defined benefit plans are pension plans and post-retirement medical plans in the UK and the US.

Financial assumptions

The financial assumptions for the major plans are as follows:

	30.9.21		31.3.21	
	UK plan	**US plans**	UK plan	US plans
	%	**%**	%	%
First year's rate of increase in salaries	**3.50**	**3.00**	3.40	3.00
Ultimate rate of increase in salaries	**3.50**	**3.00**	3.40	3.00
Rate of increase in pensions in payment	**3.15**	**-**	3.05	-
Discount rate	**2.00**	**2.70**	2.10	3.00
Inflation	**-**	**2.20**	-	2.20
– UK Retail Prices Index (RPI)	**3.30**	**-**	3.20	-
– UK Consumer Prices Index (CPI)	**2.75**	**-**	2.65	-
Current medical benefits cost trend rate	**5.40**	**2.20**	5.40	2.20
Ultimate medical benefits cost trend rate	**5.40**	**2.20**	5.40	2.20

The financial assumptions for the other plans are reviewed and updated annually.

Financial information

Movements in the net post-employment benefit assets and liabilities, including reimbursement rights, were:

	UK pension - legacy section £ million	UK pension - cash balance section £ million	UK post-retirement medical benefits £ million	US pensions £ million	US post-retirement medical benefits £ million	Other £ million	Total £ million
At 1st April 2021	186	(6)	(8)	(20)	(25)	(27)	100
Current service cost - in operating profit	(4)	(13)	-	(4)	-	(1)	(22)
Administrative expenses - in operating profit	(2)	-	-	-	-	-	(2)
Interest	3	(1)	-	-	-	(1)	1
Remeasurements	55	1	-	4	(1)	-	59
Company contributions	3	11	-	4	1	1	20
Benefits paid	-	-	-	-	-	-	-
Exchange	-	-	-	(2)	(1)	1	(2)
At 30th September 2021	**241**	**(8)**	**(8)**	**(18)**	**(26)**	**(27)**	**154**

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

13 Post-employment benefits (continued)

Financial information (continued)
The post-employment benefit assets and liabilities are included in the balance sheet as follows:

	30.9.21 Post-employment benefit net assets £ million	**30.9.21 Employee benefit net obligations £ million**	31.3.21 Post-employment benefit net assets £ million	31.3.21 Employee benefit net obligations £ million
UK pension - legacy section	**241**	**-**	186	-
UK pension - cash balance section	**-**	**(8)**	-	(6)
UK post-retirement medical benefits	**-**	**(8)**	-	(8)
US pensions	**-**	**(18)**	-	(20)
US post-retirement medical benefits	**6**	**(32)**	6	(31)
Other	**2**	**(29)**	2	(29)
Total post-employment plans	**249**	**(95)**	194	(94)
Other long-term employee benefits		**(5)**		(4)
Total long-term employee benefit obligations		**(100)**		(98)

Other long-term employee benefits includes £1 million of liabilities transferred to liabilities classified as held for sale (note 12).

14 Fair values

Fair value hierarchy
Fair values are measured using a hierarchy where the inputs are:

- Level 1 — quoted prices in active markets for identical assets or liabilities.
- Level 2 — not level 1 but are observable for that asset or liability either directly or indirectly.
- Level 3 — not based on observable market data (unobservable).

Fair value of financial instruments
Certain of the group’s financial instruments are held at fair value. The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the balance sheet date.

The fair value of forward foreign exchange contracts, interest rate swaps, forward precious metal price contracts and currency swaps is estimated by discounting the future contractual cash flows using forward exchange rates, interest rates and prices at the balance sheet date.

The fair value of trade and other receivables measured at fair value is the face value of the receivable less the estimated costs of converting the receivable into cash.

The fair value of money market funds is calculated by multiplying the net asset value per share by the investment held at the balance sheet date.

There were no transfers of any financial instrument between the levels of the fair value hierarchy during the current or prior periods.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

14 Fair values (continued)

	30.9.21 £ million	31.3.21 £ million	Fair value hierarchy level
Financial instruments measured at fair value			
Non-current			
Investments at fair value through other comprehensive income	**54**	53	1
Interest rate swaps	**17**	20	2
Borrowings and related swaps	**(3)**	(3)	2
Current			
Trade receivables[1]	**260**	423	2
Other receivables[2]	**25**	58	2
Cash and cash equivalents - money market funds	**523**	462	2
Interest rate swaps	**3**	-	2
Other financial assets[3]	**61**	44	2
Other financial liabilities[3]	**(28)**	(18)	2

	30.9.21 £ million	31.3.21 £ million	Fair value hierarchy level
Financial instruments not measured at fair value			
Non-current			
Borrowings and related swaps	**(1,051)**	(1,249)	-
Lease liabilities	**(48)**	(51)	-
Current			
Amounts receivable under precious metal sale and repurchase agreements	**162**	308	-
Amounts payable under precious metal sale and repurchase agreements	**(1,448)**	(1,442)	-
Cash and cash equivalents - cash and deposits	**223**	119	-
Cash and cash equivalents - bank overdrafts	**(42)**	(36)	-
Borrowings and related swaps	**(309)**	(26)	-
Lease liabilities	**(11)**	(11)	-
Lease liabilities classified as held for sale	**(1)**	-	-

[1] Trade receivables held in a part of the group with a business model to hold trade receivables for collection or sale. The remainder of the group operates a hold to collect business model and receives the face value, plus relevant interest, of its trade receivables from the counterparty without otherwise exchanging or disposing of such instruments.

[2] Other receivables with cash flows that do not represent solely the payment of principal and interest.

[3] Includes forward foreign exchange contracts, forward precious metal price contracts and currency swaps.

14 Fair values (continued)

The fair value of financial instruments, excluding accrued interest, is approximately equal to book value except for:

	30.9.21 Carrying amount £ million	30.9.21 Fair value £ million	31.3.21 Carrying amount £ million	31.3.21 Fair value £ million
US Dollar Bonds 2022, 2023, 2025, 2027, 2028 and 2030	**(675)**	**(692)**	(662)	(689)
Euro Bonds 2023, 2025, 2028 and 2030	**(187)**	**(191)**	(186)	(193)
Sterling Bonds 2024 and 2025	**(110)**	**(112)**	(110)	(116)
KfW US dollar loan 2024	**(37)**	**(39)**	(36)	(39)

The fair values are calculated using level 2 inputs by discounting future cash flows to net present values using appropriate market interest rates prevailing at the period end.

15 Precious metal leases

The group leases precious metals to fund temporary peaks in metal requirements provided market conditions allow. These leases are from banks for specified periods (less than 12 months) and the group pays a fee which is expensed on a straight-line basis over the lease term in finance costs. The group holds sufficient precious metal inventories to meet all the obligations under these lease arrangements as they fall due. At 30th September 2021, precious metal leases were £223 million at closing prices (31st March 2021: £437 million). Precious metal leases are not accounted for under IFRS 16 as they qualify as short term leases.

16 Contingent liabilities

The group is involved in various disputes and claims which arise from time to time in the course of its business including, for example, in relation to commercial matters, product quality or liability, employee matters and tax audits. The group is also involved from time to time in the course of its business in legal proceedings and actions, engagement with regulatory authorities and in dispute resolution processes. These are reviewed on a regular basis and, where possible, an estimate is made of the potential financial impact on the group. In appropriate cases a provision is recognised based on advice, best estimates and management judgement. Where it is too early to determine the likely outcome of these matters, no provision is made. Whilst the group cannot predict the outcome of any current or future such matters with any certainty, it currently believes the likelihood of any material liabilities to be low, and that such liabilities, if any, will not have a material adverse effect on its consolidated income, financial position or cash flows.

On a specific matter, the group previously disclosed that it had been informed by two customers of failures in certain engine systems for which the group supplied a particular coated substrate as a component for their customers' emissions after-treatment systems. The particular coated substrate was sold to only these two customers. The group has not been contacted by any regulatory authority about these engine system failures. The reported failures have not been demonstrated to be due to the coated substrate supplied by the group. As previously disclosed, we settled with one of these customers on mutually acceptable terms with no admission of fault.

Having reviewed its contractual obligations and the information currently available to it, the group believes it has defensible warranty positions in respect of its supplies of coated substrate for the after-treatment systems in the affected engines remaining at issue. If required, it will vigorously assert its available contractual protections and defences. The outcome of any discussions relating to the matters raised is not certain, nor is the group able to make a reliable estimate of the possible financial impact at this stage, if any. The group works with all its customers to ensure appropriate product quality and we have not received claims in respect of our emissions after-treatment components from this or any other customer. Our vision is for a world that's cleaner and healthier; today and for future generations. We are committed to enabling improving air quality and we work constructively with our customers to achieve this.

16 Contingent liabilities (continued)

On a separate matter, the group is involved in investigating environmental contamination at a site for which it has been identified as a potentially responsible party under US law. Johnson Matthey Inc. is party to litigation brought by the Pennsylvania Department of Environmental Protection (PaDEP) regarding contamination at a site in Chester County, Pennsylvania, that was operated by Johnson Matthey Inc. between 1951 and 1969, when it sold its interest in the site. A site investigation has been completed, but remediation has not yet commenced. On 24th September 2021, PaDEP announced a proposed remedy for the site; it is now accepting public comments. Johnson Matthey has asserted various legal defences, but the litigation is currently stayed and these have not yet been addressed. Whether and to what extent Johnson Matthey and other potentially responsible parties (given subsequent use of the site by third-party entities) have any liability for the remediation has not yet been determined. It is the directors' current view that the group cannot reliably assess the outcome of the litigation nor reasonably estimate the quantum of future remediation costs or the group's share of such costs and as such no provision for the remediation has been recognised in these consolidated accounts.

17 Transactions with related parties

There have been no material changes in related party relationships in the six months ended 30th September 2021 and no related party transactions have taken place which have materially affected the financial position or performance of the group during that period.

18 Events after the balance sheet date

On 11th November 2021, the group's board announced its decision to pursue the sale of all or parts of the Battery Materials business with the ultimate intention of exiting. An impairment charge of £314 million was recognised against the carrying amount of the assets (see note 4). Capital expenditure incurred since 1st October 2021 has been reduced and future commitments paused. Depending on the outcome of the sale the group may incur further impairment charges and/or closure costs. There are also £155 million of term loans associated with our Battery Materials investment in Poland which are likely to be prepaid.

On 18th November 2021, the group's board approved a share buyback of around £200 million which will commence in 2022.

19 Non-GAAP measures

The group uses various measures to manage its business which are not defined by generally accepted accounting principles (GAAP). The group's management believes these measures provide valuable additional information to users of the accounts in understanding the group's performance. Certain of these measures are financial Key Performance Indicators which measure progress against our strategy.

Definitions

Measure	Definition	Purpose
Sales[1]	Revenue excluding sales of precious metals to customers and the precious metal content of products sold to customers.	Provides a better measure of the growth of the group as revenue can be heavily distorted by year on year fluctuations in the market prices of precious metals and, in many cases, the value of precious metals is passed directly on to customers.
Underlying operating profit[2]	Operating profit excluding non-underlying items.	Provides a measure of operating profitability that is comparable over time.
Underlying operating profit margin[1,2]	Underlying operating profit divided by sales.	Provides a measure of how we convert our sales into underlying operating profit and the efficiency of our business.
Underlying profit before tax[2]	Profit before tax excluding non-underlying items.	Provides a measure of profitability that is comparable over time.
Underlying profit for the year[2]	Profit for the year excluding non-underlying items and related tax effects.	Provides a measure of profitability that is comparable over time.
Underlying earnings per share[1,2]	Underlying profit for the year divided by the weighted average number of shares in issue.	Our principal measure used to assess the overall profitability of the group.
Return on Invested Capital (ROIC)[1]	Annualised underlying operating profit divided by the 12 month average equity, excluding post tax pension net assets, plus average net debt for the same period.	Provides a measure of the group's efficiency in allocating the capital under its control to profitable investments. The group has a long-term target of a return on invested capital of 20% to ensure focus on efficient use of the group's capital.
Average working capital days (excluding precious metals)[1]	Monthly average of non-precious metal related inventories, trade and other receivables and trade and other payables (including any classified as held for sale) divided by sales for the last three months multiplied by 90 days.	Provides a measure of efficiency in the business with lower days driving higher returns and a healthier liquidity position for the group.
Free cash flow	Net cash flow from operating activities after net interest paid, net purchases of non-current assets and investments, dividends received from joint ventures and associates and the principal element of lease payments.	Provides a measure of the cash the group generates through its operations, less capital expenditure.
Net debt (including post tax pension deficits) to underlying EBITDA	Net debt, including post tax pension deficits and quoted bonds purchased to fund the UK pension (excluded when the UK pension plan is in surplus) divided by underlying EBITDA for the same period.	Provides a measure of the group's ability to repay its debt. The group has a long-term target of net debt (including post tax pension deficits) to underlying EBITDA of between 1.5 and 2.0 times, although in any given year it may fall outside this range depending on future plans.

1 Key Performance Indicator

2 Underlying profit measures are before profit or loss on disposal of businesses, gain or loss on significant legal proceedings, together with associated legal costs, amortisation of acquired intangibles, major impairment and restructuring charges and, where relevant, related tax effects. These items have been excluded by management as they are not deemed to be relevant to an understanding of the underlying performance of the business.

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

19 Non-GAAP measures (continued)

Reconciliations to GAAP measures

Sales

See note 2.

Underlying profit measures

Six months ended 30th September 2021	**Operating profit £ million**	**Profit / (loss) before tax £ million**	**Tax expense £ million**	**Profit / (loss) for the period £ million**
Underlying	**293**	**264**	**(42)**	**222**
Gain on significant legal proceedings	**44**	**44**	**(4)**	**40**
Amortisation of acquired intangibles	**(3)**	**(3)**	**-**	**(3)**
Major impairment[1]	**(314)**	**(314)**	**27**	**(287)**
Reported	**20**	**(9)**	**(19)**	**(28)**

[1] For further detail please see note 4.

Six months ended 30th September 2020	Operating profit £ million	Profit before tax £ million	Tax expense £ million	Profit for the period £ million
Underlying	151	109	(17)	92
Amortisation of acquired intangibles	(5)	(5)	1	(4)
Major impairment and restructuring charges	(78)	(78)	14	(64)
Reported	68	26	(2)	24

Underlying earnings per share

	Six months ended	
	30.9.21	30.9.20
Underlying profit for the period (£ million)	**222**	92
Weighted average number of shares in issue (million)	**192.8**	192.7
Underlying earnings per share (pence)	**114.8**	47.7

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

19 Non-GAAP measures (continued)

Return on Invested Capital (ROIC)

	Period ended 30.9.21 £ million	Year ended 31.3.21 £ million	Period ended 30.9.20 £ million
Annualised underlying operating profit	**646**	504	425
Average net debt	**1,071**	1,294	1,504
Average equity	**2,753**	2,771	2,774
Average capital employed	**3,824**	4,065	4,278
Less: Average pension net assets	**(206)**	(261)	(258)
Less: Average related deferred taxation	**37**	47	44
Average capital employed (excluding post tax pension net assets)	**3,655**	3,851	4,064
ROIC (excluding post tax pension net assets)	**17.7%**	13.1%	10.4%
ROIC	**16.9%**	12.4%	9.9%

Average working capital days (excluding precious metals)

	Six months ended 30.9.21 £ million	Year ended 31.3.21 £ million	Six months ended 30.9.20 £ million
Inventories	**2,004**	1,814	2,074
Trade and other receivables	**1,916**	2,422	2,415
Trade and other payables	**(3,050)**	(3,325)	(3,575)
	870	911	914
Working capital balances classified as held for sale	**25**	-	6
Total working capital	**895**	911	920
Less: Precious metal working capital	**(356)**	(552)	(313)
Working capital (excluding precious metals)	**539**	359	607
Average working capital days (excluding precious metals)	**40**	57	70

Free cash flow

	Six months ended	
	30.9.21 £ million	30.9.20 £ million
Net cash inflow from operating activities	**412**	482
Interest received	**6**	33
Interest paid	**(40)**	(77)
Purchases of property, plant and equipment	**(141)**	(139)
Purchases of intangible assets	**(43)**	(36)
Proceeds from sale of non-current assets	**2**	-
Principal element of lease payments	**(7)**	(7)
Free cash flow	**189**	256

Issued by: Johnson Matthey Plc
5th Floor, 25 Farringdon Street, London EC4A 4AB

19 Non-GAAP measures (continued)

Net debt (including post-tax pension deficits) to underlying EBITDA

	30.9.21 £ million	31.3.21 £ million	30.9.20 £ million
Cash and deposits	**223**	119	197
Money market funds	**523**	462	573
Bank overdrafts	**(42)**	(36)	(32)
Cash and deposits transferred to assets classified as held for sale	**-**	-	14
Cash and cash equivalents	**704**	545	752
Borrowings and related swaps - current	**(309)**	(26)	(371)
Interest rate swaps - current	**3**	-	-
Borrowings and related swaps - non-current	**(1,054)**	(1,252)	(1,220)
Interest rate swaps - non-current	**17**	20	31
Lease liabilities - current	**(11)**	(11)	(11)
Lease liabilities - non-current	**(48)**	(51)	(58)
Lease liabilities - transferred to liabilities classified as held for sale	**(1)**	-	(1)
Net debt	**(699)**	(775)	(878)
Increase in cash and cash equivalents	**156**	276	480
Less: Increase in borrowings	**(63)**	(70)	(284)
Less: Principal element of lease payments	**7**	14	7
Decrease in net debt resulting from cash flows	**100**	220	203
New leases, remeasurements and modifications	**(4)**	(3)	(1)
Disposal of businesses	**-**	1	-
Exchange differences on net debt	**(20)**	107	19
Other non-cash movements	**-**	(6)	(5)
Movement in net debt	**76**	319	216
Net debt at beginning of year	**(775)**	(1,094)	(1,094)
Net debt at end of year	**(699)**	(775)	(878)
Net debt	**(699)**	(775)	(878)
Add: Pension deficits	**(47)**	(49)	(58)
Add: Related deferred tax	**8**	9	11
Net debt (including post tax pension deficits)	**(738)**	(815)	(925)
Underlying EBITDA for this period	**389**		235
Underlying EBITDA for prior year	**684**		705
Less: Underlying EBITDA for prior half year	**(235)**		(350)
Annualised underlying EBITDA	**838**	684	590
Net debt (including post tax pension deficits) to underlying EBITDA	**0.9**	1.2	1.6

19 Non-GAAP measures (continued)

	30.9.21 £ million	31.3.21 £ million	30.9.20 £ million
Underlying EBITDA	**389**	684	235
Depreciation and amortisation	**(99)**	(190)	(89)
Gain on significant legal proceedings	**44**	-	-
Major impairment and restructuring charges	**(314)**	(171)	(78)
Finance costs	**(38)**	(158)	(77)
Finance income	**9**	73	36
Share of losses of joint ventures and associates	**-**	-	(1)
Income tax expense	**(19)**	(33)	(2)
(Loss) / profit for the period	**(28)**	205	24

At 30th September 2021 cash and cash equivalents includes £54 million (31st March 2021: £nil) of restricted amounts relating to cash held in South Africa. The cash has been restricted as a result of a change in company residency status. The group anticipates extracting and/or utilising this in the near term and is reviewing options.

2021

2nd December
Ex dividend date

3rd December
Interim dividend record date

2022

1st February
Payment of interim dividend

26th May
Announcement of results for the year ending 31st March 2022

21st July
131st Annual General Meeting (AGM)

Cautionary Statement

This announcement contains forward looking statements that are subject to risk factors associated with, amongst other things, the economic and business circumstances occurring from time to time in the countries and sectors in which the group operates. It is believed that the expectations reflected in this announcement are reasonable but they may be affected by a wide range of variables which could cause actual results to differ materially from those currently anticipated.

Johnson Matthey Plc
Registered Office: 5th Floor, 25 Farringdon Street, London EC4A 4AB
Telephone: +44 (0) 20 7269 8400
Fax: +44 (0) 20 7269 8433
Internet address: www.matthey.com
E-mail: jmpr@matthey.com

Registered in England – Number 33774
LEI code: 2138001AVBSD1HSC6Z10

Registrars
Equiniti, Aspect House, Spencer Road, Lancing, West Sussex BN99 6DA
Telephone: 0371 384 2344 (in the UK) *
+44 (0) 121 415 7047 (outside the UK)
Internet address: www.shareview.co.uk

* Lines are open 8.30am to 5.30pm Monday to Friday excluding public holidays in England and Wales.