Responsible business

JM has long contributed to the sustainability of key global industries

Our vision of a cleaner, healthier world, today and for future generations, ensures sustainable business is embedded explicitly in what we bring to the world as well as how we conduct ourselves while making that contribution. The JM values, which we use to guide our actions, align with the UN SDGs.

Our sustainability framework embeds our vision in all that we do, and ensures we deliver on our strategy in a way that is best for our planet and those we share it with.

Its six goals are the indicators of progress in sustainability topics that are material to JM and these are summarised in the table below.

	Sustainable business goal	Sustainable business KPIs	Baseline measure	Baseline	2019/20	2025 target	More information
Health and	For health and safety, aspire to zero harm	Annual TRIIR	TRIIR in 2016/17	1.00	0.78	0.6	Page 40
safety 1		Annual LTIIR	LTIIR in 2016/17	0.48	0.35	0.2	Page 40
•	'	Annual OSHA severity rate	Rate in 2016/17	18.5	18.5	6.0	Page 40
Our	Ensure JM is truly	Employee engagement index score	2016/17	62	63	73	Page 42
people 2	inclusive, fostering employee engagement and development within a	Employee enablement index score	2016/17	63	63	72	Page 42
	diverse global workforce	Diversity and inclusion plan implementation (%)	Refinitiv Diversity & Inclusion score in 2018	57	60.5	78	Page 44
Low carbon operations	Reduce our greenhouse gas (GHG) emissions per unit of production output by 25%	Tonnes annual GHG emissions (Scope 1+2) / tonnes manufactured product sold	CO _{2 eq} emissions intensity for 2016/17	3.8	3.2	2.8	Pages 48 and 49
3	Source 60% of our global electricity demand from renewable sources	% electricity from certified renewable sources	% electricity from renewable sources in 2018/19	24%	26%	60%	Pages 48 and 49
Responsible sourcing	Improve sustainable business practices in our supply chains	% Tier 1 strategic suppliers assessed in the last 3 years and compliant with	% of Tier 1 strategic suppliers assessed in 2017/18	11%	17%	100%	Page 49
4		Supplier Code of Conduct	% of these compliant with the code	73%	76%	100%	Page 49
	Double the positive	% annual sales giving contribution to UN SDGs	2017/18 sales data against UN SDG indicators (% of group sales)	86.9	85.9%	>90%	Pages 26 and 50
Sustainable products			2017/18 data relating to: Million tonnes of pollutants removed	3.59*	2.96	7.18*	Pages 50 and 51
5	impact that JM's products make on a cleaner, healthier world	Annual aggregation of product sustainability	Number of lives positively impacted	138,000	323,000	920,000	Pages 50 and 51
		benefits in key areas	Million tonnes of GHGs removed (CO _{2 eq})	10.6	9.8	21.2	Pages 50 and 51
			Tonnes of GHGs avoided (CO _{2 eq})	213,000	225,000	426,000	Pages 50 and 51
Community engagement	Increase our volunteer work within our local communities	Cumulative number of volunteer days across JM	Number of employee volunteer days across JM in 2017/18	678	4,476 (cumulative total)	50,000	Page 52

^{*} Restated due to adjustment in scope of vehicles included in certain small markets.

⁺ Read more: Our KPIs on pages 35 and 36

⁺ Read more: Additional non-financial performance information is provided on pages 220 and 221





For health and safety, aspire to zero harm.

Health and safety

9 GRI 403

We are committed to conducting all our activities in ways that achieve high standards of health and safety for all employees and those affected by our operations.

In 2019/20 we continued to focus on process safety, which is about how we safely manage our most hazardous processes, and occupational health and safety, which is about incidents that happen more frequently but are usually less severe, like slips, trips, falls, cuts and sprains.

During the year we made good progress against our targets to reduce significant risk in our major hazard processes and on improving overall health and safety performance.

We have introduced personal safety action plans for leaders at all levels – from GMC to those at the front line. These plans include practical activities to promote a proactive safety culture by demonstrating more visible, higher quality safety leadership, leading to greater employee engagement and, in turn, improved health and safety performance. We have also increased the regularity and quality of our health and safety communications with targeted and measurable campaigns to drive awareness, engagement and personal ownership.

Health and safety is everybody's responsibility. Across JM, everyone is required to follow five clear and simple safety principles and, with a health and safety element a key requirement of all employees' performance reviews, we ensure it remains firmly on everyone's radar and that they are clear about what is expected from them.

Our Group Environmental, Health and Safety (EHS) Policy is supported by a core group of eight health and safety policies which we call 'lifesaving policies'. These policies are available in local languages and cover high risk topics, where policy breaches could endanger life or lead to serious injury. We have continued to provide guidance to our sites on how to implement them and monitor compliance through EH&S audits.

All sites have action plans for implementing our lifesaving policies and good progress is being made against those plans.

- Read more: Governance processes relating to health and safety on page 46
- r Environment, health and safety risk on page 71

Process safety

We use an industry-standard framework to manage our process safety risks. We have created a working infrastructure, with a group process safety team, subcommittees with defined responsibilities, and selected site process safety champions. We provide JM specific process safety training at all levels from senior executives to process operators and around 1,500 of our site-based staff completed the training in 2019/20.

By conducting site surveys, we have identified sites with process safety hazards and ranked these as high, medium or low to enable us to target our process safety efforts. All these sites with process safety risks have carried out maximum credible event (MCE) studies which identified the highest risks and put in place actions to mitigate the level of risk. Around 90% of all actions from these studies have now been completed which has resulted in significant reduction of risk and the remaining actions are on track.

Our Process Safety Risk Management audit programme continued this year using a revised set of risk-based audit protocols. All but one of our high hazard sites have now completed an audit. We maintained our programme of training and communications too, which included a four day global process safety conference in May 2019, attended by around 80 of our process safety champions.

At certain sites, we are investing in renewing and replacing older plant assets to address major risks. For those risks which are common across JM we take a more collaborative approach of developing and sharing best practice, such as for the use of chlorine where a working group is now in place to develop and maintain JM policy and guidance on the design and operation of chlorine systems.

We have made good progress on our journey to identify and continuously improve process safety risks. Our key lagging indicator, which is the industry standard ICCA (International Council of Chemical Associations) process safety incident severity rate, has reduced from 2.1 in March 2018 to 1.0 in March 2020.

However, positive metrics aside, there have been some process safety incidents in 2019/20 where the outcome could easily have been more severe. Although none of these incidents resulted in personal injury, there was damage to equipment. In all these incidents we quickly assessed the cause to prevent recurrence and learnings have been shared globally across JM. For example, following one particular incident we developed and launched specific guidance on the assessment of dust hazards and completed a gap analysis on 15 sites that were judged to be high hazard.

We will continue to reinforce our strong focus on implementing our process safety strategy, particularly in light of our experiences in 2019/20. We have recognised that our sites need time, support and resources to implement these changes and as a result we have launched new risk-based guidance and provided additional support to ensure that these improvements and the other elements of our process safety programme become fully embedded.

Occupational health and safety

Our sustained focus on behavioural safety has continued and after a few years where performance was flat, 2019/20 has shown improvements in both our leading and lagging indicators.

We have continued to reinforce reporting of learning events where we look at near misses, unsafe conditions and unsafe acts – or injuries that had only just been avoided. This year we again reported a greater number of learning events (up by 26%). These continue to provide valuable lessons and are helping us to successfully reduce our injury rates.

We have also continued to drive a positive safety culture and personal ownership at all levels of the organisation. At a leadership level, our EHS Leadership Committee assists the company in meeting its EHS responsibilities and in creating a positive safety culture across the whole of JM. Site visits, which include making safety observations, safety conversations, personal safety messages and reviews of EHS actions, highlight the visible involvement of leadership.

For the first time last year, leaders from the GMC down, set and shared their own personal safety action plans with their site leadership teams. These plans, prepared by the individual leaders, set out the activities they will undertake to show more visible safety leadership and promote a proactive safety culture.

Responsible business continued

We have now integrated EHS leadership training into our leadership programmes at all levels and a global EHS induction programme for leaders and managers will launch this year as we embed health and safety culture from the start with new joiners. We also continued with our programme of regional EHS conferences with site operations staff.

We have a groupwide occupational health policy in place and provide guidance to sites for the management of chemical exposure.

The number of occupational illnesses reported each year across JM remains relatively low, reducing to 14 this year and a rate of 0.09 per 200,000 working hours in a rolling year (2018/19: 21 illnesses and a rate of 0.16). Following the introduction of mental wellbeing programmes and services globally during the year (see page 44), we are encouraged that the number of work related stress cases has reduced this year. However, ergonomic related injuries represented 22% of all our injuries over the last year. To address this, we have been rolling out a specific tool to help effectively assess ergonomic risk and held an ergonomics forum for all sites to provide support and understanding of correct ergonomic practices at work.

This year, our performance has improved. We have:

- Reduced our lost time injury and illness rate (LTIIR) by 39% from 0.57¹ to 0.35 vs our 2025 target of 0.2.
- Reduced our total recordable injury and illness rate (TRIIR) by 23% from 1.01¹ to 0.78 vs our 2025 target of 0.6.
- Reduced our severity rate² by 40% to 18.5 (at end of March 2020 compared with the 12 months to March 2020) vs our 2025 target of 6.0.
- Reduced the number of lost and restricted days during the last 12 months by 1,091 days.

There were no employee or contractor fatalities in the year.

- Data for 2018/19 has been restated due to injuries and illnesses that were reported or reclassified after the year end
- ² Severity rate (as defined by the US Occupational Safety and Health Administration, OSHA) measures the average number of lost or restricted work days per injury event in the workplace.

With a number of major capital investment projects underway at the moment, we have a higher than usual number of contractors on our sites.

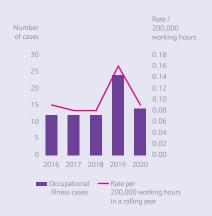
By clearly setting out our EHS expectations and monitoring them regularly with our capital construction partners, we have maintained our high standards and seen a reduction in our contractor lost time injury rate over the last 12 months.

 Read more: Contractor lost time injury and illness rates on page 221

Response to COVID-19

Protecting our people as the COVID-19 pandemic has developed has been a major priority and we acted quickly based on our learnings from our sites in China to put in place guidance globally on the implementation of the necessary controls that met local state and government requirements and JM standards. These included increased hygiene practices, social distancing, reduced workplace density and temperature monitoring before entry into site. We are continuing to develop and add to the guidance as the situation evolves. We are also making sure that there is strong reinforcement of health and safety culture as people return to work to help prevent any dips in performance. We know that the impact of COVID-19 on people's daily lives may also take its toll on their personal wellbeing and have been providing employees with more regular communications, tips and resources to support them through these more challenging times.

Occupational illness cases



Lost time injury and illness rate (LTIIR)¹

per 200,000 working hours in a rolling year



Total recordable injury and illness rate (TRIIR)¹

per 200,000 working hours in a rolling year



¹ Data for 2018/19 has been restated due to injuries and illnesses that were reported or reclassified after the year end

Our people



Ensure JM is a truly inclusive organisation that fosters employee engagement and development within a diverse and global workforce.

People

9 GRI 404

Our people are at the heart of JM's business strategy. For us to deliver solutions from our world class science and realise our vision, we are developing our culture further, where our people can be successful; a culture which attracts, retains and develops the very best talent.

Like many organisations, what JM needs from its people and what they demand from JM is being significantly impacted by the pace at which markets are moving as well as new business challenges. As JM executes its strategy, we are driving a period of transformative change to build an organisation which is more market focused, lean and agile, and a fulfilling place for our employees to work. Our people investments over the past few years have laid the foundations and we are now in a strong position to leverage these to accelerate change and reshape the way we work, in line with our strategy and vision.

People risk on page 72

Our culture ambition

Passionately purpose driven

Working together to make the world cleaner and healthier, being innovative and curious to create value from our science, learning and growing from what we do so JM can continue to evolve.

Creating shared value

Courageously facing outwards, we lead and shape markets, collaborating as one JM across boundaries to create great solutions for our customers and constantly find smarter ways to achieve our goals.

Boldly drive performance

Embracing change with a real sense of pace and focus, together we go the extra mile to deliver results. Because we care, we are open, honest, and hold ourselves and others to account.

A culture for success

Achieving our strategy requires us to have a culture in place that enables, engages and energises our employees. We recognise that to successfully transform as a company some elements of our culture need to change.

Our culture is an outcome of the way we work and the behaviours our people demonstrate. With the appropriate culture we can accelerate the change required to execute our strategy. Over the past 18 months we have engaged all levels of our organisation and external stakeholders to shape our culture ambition, aligning it to our vision and values and setting ourselves up for the future.

We will be embedding our culture ambition through everything we do at JM; it will support the way we work with one another and our customers, and the way we support our people to succeed.

Our culture ambition will be brought to life in our change programmes and by all our leaders who role model required behaviours and ways of working. We will monitor progress through employee perception, customer feedback and the successful execution of transformation.

Our values are aligned to the needs of our long term strategy and are embedded throughout our people processes.

A great place to work

Our ambition is to make JM an even greater place to work, where safety is a priority, diversity and inclusion are valued and development encouraged so that we deliver our results by effectively executing our JM strategy.

Our values

Protecting people and the planet

We practise the highest standards of health and safety, promote wellbeing for people both inside and outside of work, and seek to safeguard our planet.

Acting with integrity

We do the right thing, for people and for the world. We do what we say we'll do, expect the same of each other and speak up when there's a problem. We place importance on relationships internally and externally, treating others with respect and care.

Working together

We encourage collaboration inside JM and out, sharing and embracing diverse viewpoints. We tackle problems together, put our ideas into practice and take pride in combining our contributions to create something better for JM and our customers.

Innovating and improving

We adapt and embrace new ideas to make us stronger and our world cleaner and healthier. We are confident and resilient through change, growing and developing ourselves and JM, to ensure we are a leader in our chosen markets.

Owning what we do

We take accountability for our own work, and know we are also part of something bigger. We take the initiative, seek clarity and demand high standards from ourselves and our colleagues.

Responsible business continued

This ambition is enabled by our key people aims which are to:

- Attract and retain the best and most suitable talents.
- Develop employees to achieve the highest levels of performance and achieve their career potential.
- Create an environment where employees are recognised and rewarded for their overall contributions
- Foster a culture of success, where our values matter and are used as a guide for people to do the right thing.
- Support employees through an evolution of change and transformation.

We have implemented progressive, global people policies and practices, aligned to our vision, going beyond statutory requirements to recognise best practice. We review our people policies and risks in accordance with our governance framework, with the board being responsible for overseeing the overall people strategy. The Nomination Committee oversees talent and succession plans and decisions. The Remuneration Committee is responsible for overseeing and ensuring the Remuneration Policy is adhered to.

Attracting and retaining the best

Over the last year our overall headcount has increased (see table on page 43). Females make up 28% of our overall workforce in JM and 33% of new hires. While we continue to make progress on gender balance, we have lower proportions of females in our science and engineering roles. To address this, we have introduced gender balance objectives as part of our diversity and inclusion aspirations for 2025.

Building a robust talent pipeline for the future is important for us and we continue to hire graduates into science, operations and commercial disciplines. A new cohort of 33 graduates are set to join JM in the UK, US and China this year, 57% of whom are female.

Our voluntary employee turnover has reduced this year to 9.0%. Total employee turnover, including restructuring programmes and retirements, was 11.8% this year (2018/19: 13.2%).

Reward and recognition

We continue to ensure that our rewards are competitive and aligned with local markets. We have looked creatively at different ways that we can add benefits beyond purely monetary rewards.

We have enhanced our employee recognition schemes and this has had a positive impact on employee engagement scores. We celebrate our employees' achievements with the annual JM global awards. We also have an informal 'Say thanks' programme, which recognises individuals and teams by way of an e-card and awards that can be redeemed in the form of small gifts. In addition, we are also celebrating the loyalty our employees have shown to us through long service awards.

Talent and career management

A refreshed approach to talent management has been implemented at all manager levels over the last 18 months which will help us identify and accelerate a more diverse leadership talent pipeline in line with our business needs. It has revealed untapped potential in our mid-career pipeline and we plan to target development to accelerate talent and reduce our succession risk. We are delighted to have identified relatively higher numbers of females with development potential, which will support our 2025 gender balance aspirations.

Employee feedback highlighted the difficulties that some people experience in advancing their careers in JM. In response we have launched our career portal 'MyCareer'. This year we also ran a global JM careers week at all major locations, which many of our employees greatly appreciated. These events combined seminars, toolkits and speakers to highlight the rich and varied opportunities we have in JM and provide simple tools to help our people build personal career plans.

We have focused on reducing our reliance on external recruitment and our efforts are starting to have an impact. The percentage of internal vs external hires rose to 33% from 27% last year. Our transformation will require a workforce with multi-faceted skills and experiences and we will continue to focus on talent and career management this coming year.

Employee engagement

We continue to value and act on the feedback from our people about how engaged they feel working at JM. From our 2016 baseline scores of 61 for engagement and 62 for enablement, we set a goal to achieve respective scores of 73 and 72 by 2025, aligned with high performing companies. These targets form part of goal 2 of our sustainable business framework.

Following a mixed outcome when we remeasured in 2018 (59 for engagement

and 63 for enablement), we have invested significant energy to start to address the key issues.

Our most recent 2019 pulse survey shows significant improvement on engagement (up 4 points to 63) with step change improvements in trust in leadership and pride in the organisation. We have also seen engagement of our longer serving employees increase significantly. Our efforts to cascade clear priorities, recognise employees' efforts, prioritise wellbeing and maintain efforts on career and personal development conversations have all had a positive impact. However, enablement in our 2019 survey remained flat at 63. While the survey reveals that employees feel their work is more challenging, stimulating and fulfilling, there are employees at some of our sites who feel barriers are getting in the way of their productivity. This is valuable feedback that we are factoring into how we organise our operating models, aiming for a leaner and less complex organisation.

As part of the recent changes to the UK Corporate Governance Code, boards are expected to engage more fully with employees and understand the issues on the ground. The JM board already has several mechanisms to meet and talk to staff to build on. Following a review of options and a discussion on how best to achieve this, the JM board decided to implement country engagement focus groups as the mechanism through which to have two-way dialogue with the workforce.

Focus groups comprising a diverse mix of employees, chaired by senior members of the leadership team, were run in the US and China during November 2019. Feedback from these pilot sessions was consolidated with results of the employee opinion survey and a set of recommendations presented to the board including; improving prioritisation, line manager communications and raising the visibility of our diversity and inclusion (D&I) strategy. The board supported recommendations and asked to accelerate two-way dialogue in JM. As part of the response, country engagement forums will be run regularly in the UK, China, US and Germany and members of the board will be directly involved.

Learning and development

g GRI 404-2

Realising our growth ambitions by unlocking performance and creating a more agile organisation requires us to strengthen leadership capability.

g GRI 102-8 and GRI 401-1

Number of staff* as of 31st March										
	Permanen	it employees	Temporary	Total Temporary employees (excluding agency staff) Agency staff						
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Europe	7,445	6,714	316	397	7,761	7,111	1,056	1,185	8,817	8,296
North America	3,099	3,105	34	13	3,133	3,118	33	51	3,166	3,169
Asia	2,423	2,376	96	73	2,519	2,449	110	159	2,629	2,608
Rest of World	665	662	74	59	739	721	1	1	740	722
Total group	13,632	12,857	520	542	14,152	13,399	1,200	1,396	15,352	14,795

^{*} For definitions see page 216.

Employees by gender and region as at 31st March 2020							
	Permanent e	Permanent employees T			Total (excluding agency staff)		
	Male	Female	Male	Female	Male	Female	
Europe	69%	31%	66%	34%	69%	31%	
North America	76%	24%	50%	50%	76%	24%	
Asia	81%	19%	74%	26%	81%	19%	
Rest of World	66%	34%	55%	45%	65%	35%	
Total group	73%	27%	65%	35%	72%	28%	

Voluntary employee turnover 2020	Voluntary employee turnover 2019	Total employee turnover 2020	Total employee turnover 2019
8.3%	8.7%	10.0%	10.7%
10.4%	12.5%	15.1%	18.3%
10.6%	13.1%	14.2%	14.7%
4.1%	8.4%	8.6%	9.8%
9.0%	10.4%	11.8%	13.2%
	employee turnover 2020 8.3% 10.4% 10.6% 4.1%	employee turnover 2020 2019 8.3% 8.7% 10.4% 12.5% 10.6% 13.1% 4.1% 8.4%	employee turnover 2020 employee turnover 2019 employee turnover 2020 8.3% 8.7% 10.0% 10.4% 12.5% 15.1% 10.6% 13.1% 14.2% 4.1% 8.4% 8.6%

Gender diversity statistics

The table below shows the gender breakdown of the group's employees as at 31st March 2020.

As at 31st March 2020	Male	Female	Total	% male	% female
Board	7	3	10	70%	30%
GMC	5	4	9	56%	44%
Subsidiary directors	118	15	133	89%	11%
Senior managers*	47	16	63	75%	25%
New recruits	1,392	690	2,082	67%	33%
Total group	10,252	3,900	14,152	72%	28%

^{*} Senior managers are defined as the direct reports of the GMC. For the purposes of the UK Corporate Governance Code 2018 disclosure, Senior managers are defined as the GMC and Company Secretary. This disclosure is stated within the GMC statistics above and their direct reports are included within this Senior managers disclosure. Some individuals are included in more than one category.

New joiners by gender and region							
	Total joiners	Joiners male	Joiners female				
Europe	1,215	63%	37%				
North America	411	71%	29%				
Asia	417	74%	26%				
Rest of World	39	67%	33%				
Total group	2,082	67%	33%				

Total group	3,504	26%
Rest of World	415	63%
Asia	192	8%
North America	538	18%
Europe	2,359	32%
	Average number of employees represented*	% represented
Trade union representation		

¹ Average number of employees who were covered by collective bargaining arrangements and represented by trade unions.

Responsible business continued

We have now launched four of our five 'Aspire' leadership development programmes. Attended by a total of 486 line managers to date, these programmes provide consistent skills and behavioural development for our first line leaders right through to our executives. We recognise the impact coaching can have on employee engagement, productivity and enabling change. We plan to invest in developing coaching capability by implementing a new skills framework and high quality external coaching for our leaders at all levels.

Our online learning, available on our iLearn portal, has been accessed by more than 45% of employees in the last year. We have also seen significant increases in the take up of online learning during COVID-19. We see this increase as positive and plan to build on this further for the future.

Diversity and inclusion (D&I)

9 GRI 405

D&I is seen as a critical driver of business performance and we have set an ambition and roadmap to ensure D&I is embedded into our culture. As a part of goal 2 of our sustainable business framework, we have a target to achieve a ranking within the top 100 employers globally for D&I (within the Refinitiv, formally Thomas Reuters, index) and a gender balance target to have 40% of roles at mid-senior levels occupied by females by end 2025 from a base of 25%.

In line with our Equal Opportunities Policy, we recruit, train and develop employees who are the best suited to the requirements of the job role, regardless of gender, ethnic origin, age, religion or belief, marriage or civil partnership, pregnancy or maternity, sexual orientation, gender identity or disability.

People with disabilities can often be denied a fair chance at work because of misconceptions about their capabilities, and we work to enhance their opportunities by attempting, wherever possible, to overcome the obstacles. This might mean modifying equipment, restructuring jobs or improving access to premises, provided such action does not compromise health and safety standards. This is set out in our policy, which extends to employees who have become disabled during their employment and who will be offered employment opportunities consistent with their capabilities. We would also look to make reasonable adjustments for new recruits.

We have seen progress against our D&I ambition this year. We now have five employee resource groups (Pride, Gender, Disability, Black Employees and Early Careers) with whom we are working to actively drive our D&I agenda and we have joined the Valuable 500 network of global organisations committed to raising awareness of disability. Our global flexible working policies (including arrangements for parental and bereavement leave) introduced in 2018/19 marked a significant step forward in how we look after our employees and their families. These appear to be having a positive impact and part time working among our male and female colleagues has increased slightly. We were able to improve our Refinitiv Index score by 3.5 points to take us to 60.5. Gender balance at mid-senior levels has increased to 27% and we have seen increases in our Equileap ranking to #23 (up from #75).

Read more: Gender diversity statistics table on page 43

Gender pay gap

g GRI 405-2

Johnson Matthey's combined UK gender pay gap has reduced from 8.5% to 6.0% and continues to be well placed against the national average gender pay gap of 17.3%. A full copy of our report can be found on our website.

matthey.com/gender-pay-19

Supporting employee wellbeing, including through COVID-19

Ongoing transformative change requires our workforce to be healthy and resilient and we are committed to the wellbeing of our employees. In response to increased numbers of stress cases last year, our focus in 2019/20 was mental wellbeing. Our core campaign, 'Time to talk', launched a global wellbeing platform giving all JM employees access to a wide range of wellbeing resources and our global employee assistance programme. We also marked World Mental Health Day on 10th October 2019 with events across the organisation. These efforts have shown positive signs with a reduced number of reported stress cases compared with the prior year (see page 40).

COVID-19 has required us to rapidly change the way we work and we recognise that it has presented a whole range of different challenges for our people. Alongside our focus on keeping people safe, we have worked hard to enable them to work effectively, whether that is remotely or on site.

Staying connected has been really important and our teams have come up with a whole host of ways to support each other. We continue to support employees' mental wellbeing, particularly in light of the impact of COVID-19, and are increasing our activities to support physical wellbeing. Underpinning all of this is our fantastic network of over 100 wellbeing ambassadors, who continue to support our wellbeing strategy locally.

Ethics and compliance

g GRI 102-16

Our value of acting with integrity helps shape a strong ethical culture of 'doing the right thing' which is critical to delivering our strategy and vision. We aim to make our reputation for doing the right thing a strategic advantage for our business.

We set our standards for ethics and compliance globally, supported by our overarching 'Code of Ethics', and our approach has two pillars:

- (i) promoting an ethical culture across the company; and
- (ii) implementing a compliance programme underpinned by a framework applied to each risk area.
- Matthey.com/code-of-ethics

The programme is underpinned by a framework of policies, standards and our Code, all of which are aligned to each risk area and supported by training. The risk areas include bribery and corruption, data protection, export controls and sanctions, conflicts of interest, competition / anti-trust, financial crime (including the corporate criminal offence of failing to prevent the facilitation of tax evasion), and modern slavery (see page 45). The programme brings together how we approach risk management, internal controls and promoting an ethical culture across the company.

r Ethics and compliance risk on page 73

We continually evaluate our ethics and compliance programme in relation to changes in legislation and to understand any gaps or weaknesses that require more attention. During the year we focused on further embedding the programme in China as a result of our understanding of some of the difficulties faced in doing business there. China is becoming an increasingly important market for us across all sectors and we held several workshops and training for our Chinese teams to address specific risks presented by this market.

We have also recently launched a new policy which sets a global standard on the use of third parties in some of our higher risk jurisdictions. Targeted training for those roles most impacted is planned for 2020/21 and we will also refresh our procedures for onboarding third party intermediaries to ensure alignment across all jurisdictions.

Creating a culture of doing the right thing

9 GRI 102-17

In April 2019 we retrained our employees on our refreshed Code of Ethics. All employees are required to take a code of ethics module annually, reinforcing the basics and taking a deeper dive into a selection of topics covered. Additional targeted training is provided to people whose roles expose them to specific risk areas.

Our growing global network of approximately 125 ethics ambassadors continue to drive our culture for doing the right thing and acting as a sounding board for employees and providing guidance on where to go for help or to raise a concern. This year, they played an important role in our first ever 'Ethics Week', celebrating Global Ethics Day on 16th October and World Values Day the day after.

We encourage our employees and anyone we do business with to speak up when they have a concern or are unsure about something, and they can do this through local management, their ethics ambassador, HR or the legal function.

We also provide employees (and third parties) with an independently run 'speak up' helpline (also available online) to raise concerns anonymously, where local law permits.

An Ethics Panel made up of senior leaders meets monthly to provide oversight of investigations into all speak ups received. The panel reports three times a year to the board, with a particular focus on identifying themes and opportunities to improve the way we do things.

+ Read more: Speak up reports on page 221

Anti-bribery and corruption risks

9 GRI 20

We believe the most significant compliance risk that JM faces is bribery and corruption based on JM's business activities and global reach. In February 2020 we launched our refreshed policy on Anti-Bribery and Corruption and a separate Gifts, Hospitality and Charitable Donations policy. These global policies reflect JM's continued zero tolerance approach to bribery and corruption and provide key guidance that reflects the bribery and corruption risks we encounter at JM today. Further policy training and role specific guidance, including additional focus work in China, continues to be rolled out.

JM uses third party intermediaries (TPIs) to support our business and customers and has policies and processes in place to manage the risks, especially in the area of bribery and corruption.

Human rights

We support the principles set out in the UN Universal Declaration of Human Rights and the International Labour Organisation Core Conventions, including the conventions on child labour, forced labour, non-discrimination, freedom of association and collective bargaining. We also support the principles endorsed under the UN Global Compact and the UN Guiding Principles on Business and Human Rights (the 'Ruggie' Principles).

We are working to embed them throughout our operations and whenever we enter into business in a new territory, make an acquisition or enter a joint venture. There were no human rights grievance reports made against Johnson Matthey during the year.

Modern slavery

g GRI 408

In line with the UK Modern Slavery Act 2015, we make an annual public statement, which is posted on our website, describing the steps we have taken during the year to ensure that slavery and human trafficking are not taking place, either in our businesses or our supply chains.

These steps include public policies and codes (including our Code of Ethics and Supplier Code of Conduct), our supply chain due diligence programme and an independent confidential 'speak up' line available to all stakeholders to report concerns and grievances.

matthey.com/modern-slavery

After completing their online training, all staff are required to complete an online code acknowledgment confirming that they will work in accordance with the commitments in the code. In 2019/20, 66% employees completed this online code acknowledgment (2018/19: 62%). In addition, particularly for employees working in our manufacturing plants, we provide classroom training on the code and record code acknowledgment completion locally. We are putting in place mechanisms to enable us to centrally capture this information in future.

Celebrating Ethics Week at JM

This year we celebrated our first ever Ethics Week at JM. The week was an opportunity to get everyone at JM to think about ethics and the importance of doing the right thing.

Our global network of ethics ambassadors took the lead and organised a range of fun and engaging activities to ensure the ethics message reached everyone across JM sites. From quizzes and games to lunch and learns, the activities encouraged employees to consider what doing the right thing means in their role at JM.

We heard first hand from our sector chief executives, who provided insights on topics including leadership values, organisational reputation, good decision making and speaking out as well as speaking up. Employees also got the opportunity to ask questions of JM's senior leaders via a live yam jam.

This truly global effort helped to shine a spotlight on ethics across JM and employee feedback was very positive. So much so, Ethics Week is now a firm fixture in JM's annual calendar of events.



Responsible business continued





Reduce our greenhouse gas (GHG) emissions per unit of production output by 25%.

Environment

JM's products and services have an overwhelmingly positive impact on the environment when they are used.

We reinforce the positive impact of the products we sell with a responsible approach to environmental management.

JM's manufacturing processes generate greenhouse gases (GHGs) through the burning of fossil fuels to generate the elevated temperatures required. Some of our processes also produce emissions that could, if not managed effectively, affect the local environment. These gases include nitric oxides and volatile organic chemicals.

JM consumes water for a variety of reasons, whether as a raw material in the production process, or for heating or cooling operations. In addition, certain operations generate waste, some of which can be hazardous and requires specialist treatment by external companies. Wherever possible we recover and recycle waste materials containing platinum group metals.

Read more: Full details of our environmental performance in these areas is included in the Additional non-financial performance information section on pages 220 and 221

Managing environmental performance

We have group policies, processes and systems which, together with our environmental strategy, ensure that our environmental performance is managed to a high standard. A total of 85% of JM manufacturing sites operate environmental management systems that meet the ISO14001:2014 standard. There are corporate standards set out in five key areas of environmental performance which are assessed during regular EHS audits. Our EHS Leadership Committee is responsible for agreeing the group's approach to carbon, GHG reduction strategy and reviewing environmental performance.

Many of JM's operations are covered by environmental permit or licence. JM, as a minimum standard, ensures it complies with all conditions placed on its businesses by the regulatory bodies. JM measures key environmental indicators using an electronic reporting system and this data is used internally to drive performance improvements. This data is externally assured.

Read more: Independent greenhouse gas and health & safety assurance statement on page 219

Climate change

Addressing climate change requires a transition to a low carbon world, in the energy and mobility sectors, and also across other industries. JM fully recognises the Intergovernmental Panel on Climate Change (IPCC) science on climate change, is a signatory of the Paris Climate Pledge to keep global temperature rise below 2°C and is committed to the United Nations Sustainable Development Goals (UN SDGs). We have identified six of the UN SDGs for our particular focus, including SDG13 (Climate Action). We are proud of the contribution many of our products make to directly enable the transition to a low carbon economy (read more on pages 50 and 51).

This year we have taken the first steps to aligning our reporting to the Task Force on Climate-related Financial Disclosures (TCFD) framework and we are committed to implementing these voluntary recommendations in full by 2021.

Governance

Our governance processes cover the breadth of matters relating to environment, health and safety, including climate change.

The board is responsible for oversight of our strategic direction and progress against our strategic priorities to ensure we are positioned to deliver long term sustainable business performance. During discussions on strategy, the board considers the market drivers we are exposed to in our diverse business portfolio, including market responses to climate change, the resulting opportunities and challenges that can impact our business strategies and how we are responding. The board also reviews our sustainability and environmental risks and performance (and also risks and performance relating to health and safety) against our targets.

The Audit Committee supports the board and the Group Management Committee (GMC) by conducting regular reviews of our risk processes, and controls against our principal risks.

The GMC champions strategy development and risk management in line with the board's expectations on risk appetite, supported by individual sector management teams for review and execution, and addressing sector-specific dynamics.

Our diverse business portfolio means we consider climate change impacts predominantly via market responses and an environmental sustainability lens. We are further analysing the validity of an independent risk for climate change.

Strategy - Markets

Climate change results in different impacts on our diverse business portfolio. Our products, such as battery materials, fuel cells and hydrogen production technologies, represent opportunities as the mobility and energy markets respond to climate change by moving away from fossil fuels to more diverse power sources. Other areas, such as our Health Sector, are less directly exposed to climate change dynamics. Other markets are at risk of declining over time, such as the demand for our automotive emission control catalysts, if the mobility sector transitions heavily into electrified powertrains.

The rate and extent of change of our key markets in response to climate change is the subject of extensive ongoing scenario planning. For example, we have framed our scenario planning for the mobility sector to include different climate change scenarios, the impact of vehicle emission regulations and other market factors such as car sharing and urbanisation.

The diversity of our business portfolio and the strength of our science, operations and commercial activities builds resilience and positions us strongly to serve future demands.

Strategy – Operations

Regulations: Conducting the transition to a low carbon economy at pace may continue to drive additional regulatory requirements, both nationally and internationally. We monitor developments in this area and manage our activities to remain in compliance.

Energy: We actively monitor our energy use and implement energy efficiency programmes across all of our operating sites. Energy costs are included in budget planning cycles. During 2020/21 we are extending energy forecasting to include GHG forecasting, including energy procurement strategies and options into the forecast, to better plan mitigating actions.

9 GRI 201-2

TCFD-related references

Governance: Disclose the organisation's governance around climate-rel	ated risks and opportunities
Describe the board's oversight of climate-related risks and opportunities.	Page 46: Climate change Pages 86 and 87: Board committees Pages 90 and 91: Board risk oversight
Describe management's role in assessing and managing risks and opportunities.	Page 46: Climate change Page 13: Group Management Committee Pages 16 to 19: Our strategy
Strategy: Disclose the actual and potential impacts of climate-related ribusinesses, strategy and financial planning where such information is r	
Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	Page 46: Climate change Pages 67 to 74: Risks and uncertainties
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	Page 46: Climate change Pages 16 to 19: Our strategy Pages 67 to 74: Risks and uncertainties
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Page 46: Climate change Pages 16 to 19: Our strategy Pages 67 to 74: Risks and uncertainties
Risk: Disclose how the organisation identifies, assesses, and manages c	limate-related risks
Describe the organisation's processes for identifying and assessing climate-related risks.	Page 46: Climate change Pages 16 to 19: Our strategy Pages 67 and 68: Risk management approach
Describe the organisation's processes for managing climate-related risks.	Pages 46: Climate change Pages 67 and 68: Risk management approach
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Page 46: Climate change Pages 67 and 68: Risk management approach
Metrics and targets: Disclose the metrics and targets used to assess and opportunities where such information is material	l manage relevant climate-related risks and
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Page 46: Climate change Pages 24 and 25: Sustainable business framework goals to 2025
Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Page 48: Greenhouse gas reduction Page 48: Greenhouse gas disclosure
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Page 46: Climate change Pages 24 and 25: Sustainable business framework goals to 2025

During 2019/20 we took a strategic decision to maximise the amount of renewable energy sourced for our first commercial battery cathode materials manufacturing plant located in Konin, Poland. The use of low carbon energy to manufacture key components is beneficial to the whole lifecycle carbon footprint of an electric vehicle and ensures our business grows with minimal carbon impact.

Physical impacts: Climate change increases the risk of extreme weather events which can impact our operations or supply chains. We manage this disruption via our business continuity plans, which detail actions and alternate supply routes for various situations. Where there is an exposure to extreme weather events, such as hurricanes on the eastern seaboard of the USA, we have designated shelter areas for employees.

The impact of climate change on water availability is also important. We periodically assess our sites for water risks and manage our water use responsibly.

Risks

Climate change is incorporated into our risk management process as a driver of certain principal risks, especially 'Future growth', 'Environment, health and safety' and 'Failure of operations' and is considered when building those risks. We are also considering the validity of an independent risk for climate change. We recognise that effective management of climate change risks are crucial to deliver our growth strategy and inspire confidence in our stakeholders.

 Future growth risk on page 71, Environment, health and safety risk on page 71 and Failure of operations risk on page 73

Metrics and targets

We follow the Greenhouse Gas Protocol when calculating our GHG emissions, dividing them into three scopes. Our Scope 1 emissions are from the burning of natural gas and other fuels as an energy source for our processes and facilities. Some of our processes also generate GHGs, and these are also included in Scope 1. Scope 2 emissions relate to our electricity purchases. Scope 3 emissions cover the different elements of our value chain.

Goal 3 of our sustainable business framework includes a target for our Scope 1 and 2 emissions intensity of 2.8 tonnes CO₂ equivalent per tonne of manufactured product sold by 2025. In 2019/20 our emissions intensity was 3.2. Using an intensity metric allows us to focus on the efficiency of our GHG footprint even in the face of changing product mix and demand. We remain on track to meet the goal.

Responsible business continued

During 2019/20 we also set a renewable energy target, where 60% of our electricity must be certified renewable by 2025.

Greenhouse gas reduction

9 GRI 305

We lower our own contribution to GHG emissions with a combination of energy efficiency initiatives and low carbon / renewable electricity purchases.

In addition to our sustainable business goal 3 (see above and page 35), we also recognise that our absolute emissions of GHGs are an important metric. Since the launch of our sustainable business framework in 2017, we have achieved:

- 16% reduction in absolute Scope 1 and 2 emissions.
- 12% reduction in absolute Scope 1 emissions.
- 20% reduction in absolute Scope 2 (market based method) emissions.

This rate of reduction of our GHG emission intensity and our absolute Scope 1 and 2 emissions are key parts

of fulfilling our Paris Pledge for Action commitment.

We are currently assessing possible approaches to limit our value chain (Scope 3) emissions.

Renewable energy

We aim to source 60% of our electricity demand globally from renewable sources by 2025, and we continue to identify cost effective renewable electricity supply contracts. Since 1st April 2019, all our UK sites have been operating on grid-connected certified renewable electricity. Across JM globally in 2019/20, 26% of our electricity came from certified renewable sources where the energy source has a Renewable Energy Guarantee of Origin (REGO) certificate, the highest form of renewable energy validation (2018/19 restated*: 24%).

* Restated following review and reclassification of data submitted by some sites after the year end.

A total of 1.2% of our electricity came from local solar power facilities that are not grid connected.

Where we are not using renewable electricity, we actively manage our electricity purchasing to minimise the carbon footprint. Competitive electricity markets for the supply of grid electricity are operational at 72% of our sites. At 69% of these sites, the carbon intensity of electricity we purchased was lower than the national or regional average.

We are investigating the potential of power purchase agreements to help accelerate our access to renewable electricity, particularly in geographies with lower availability of renewable power over the existing grid. We have committed to maximising the amount of renewable energy for our first battery materials plant, currently under construction in Poland, from start up in 2022.

We disclose our environment, social and governance (ESG) performance through the Carbon Disclosure Project (CDP) climate change programme which looks at risks and opportunities of climate from the world's largest companies on behalf of institutional investors.

matthey.com/cdp-investor

Greenhouse gas disclosure - Operational carbon footprint

,	2019/20						
	Global	UK only	Global (excl UK)	Global	UK only	Global (excl UK)	% change (global)
Scope 1 (tonnes CO _{2 eq})	199,125	59,669	139,456	220,317*	58,907	161,410	-10%
Scope 2 – market based method (tonnes CO _{2 eq})	192,334	3,761	188,572	202,813*	11,049	191,764	-5%
Scope 2 – location based method (tonnes CO _{2 eq})	252,757	40,407	212,350	277,861*	50,898	226,963	-9%
Total operational carbon footprint – Scope 1 and 2 market based method (tonnes CO _{2 eq})	391,459	63,430	328,028	423,123*	69,956	353,174	-7%
Total operational carbon footprint – Scope 1 and 2 location based method (tonnes CO _{2 eq})	451,882	100,076	351,806	498,178*	109,805	388,373	-9%
Total Scope 1 and 2 carbon intensity – market based (tonnes CO _{2 eq} /tonnes sales)	3.2	2.6	3.3	3.0	Not measured	Not measured	+8%
Scope 3 – electricity transmission and distribution losses (tonnes CO _{2 eq})	20,461	2,879	17,582	22,183*	3,818	18,365	-8%
Scope 3 – business travel (tonnes CO _{2 eq})	9,015	4,613	4,401	Not measured	Not measured	Not measured	

Energy efficiency and consumption

9 GRI 302

_	2019/20						
	Global	UK only	Global (excl UK)	Global	UK only	Global (excl UK)	% change (global)
Total energy consumption (GJ)	4,879,064	1,519,125	3,359,939	5,201,603*	1,542,040	3,659,563	-6%
Total energy efficiency (GJ/tonne)	39.6	62.0	34.0	36.8*	Not measured	Not measured	+10%

^{*} Restated following review and reclassification of data submitted by some sites after the year end.

Efficient use of energy is a key lever to minimise our GHG impact and lower costs. Where we are sourcing renewable / low carbon energy, we also recognise that using less of what is generated makes it more available for use by others, further helping the transition to a low carbon economy.

We spent £68 million on energy in 2019/20 (2018/19: £72 million*, restated). Energy use within our facilities decreased by 6%, with electricity use across the group decreasing by 6% and gas usage by 5%. This was due partly to the Riverside, US site closure during 2018/19, and due to lower use at our Clitheroe, UK site which did not run its generator for four months due to maintenance, and partly due to lower production output at some sites.

Our energy efficiency declined by 10% this year. Total mass of product produced in 2019/20 was lower than the prior year, but despite the lower output, some of our energy intensive assets – such as furnaces – had to be kept running for operational efficiency and safety reasons.

We have also progressed various projects around the world that directly benefit energy efficiency. These include installing high efficiency compressors in Japan and Brimsdown, UK, improved efficiency of a gas oven in Shanghai, China, and better drying equipment management in Mexico. We restarted our combined heat and power unit in Royston, UK, which resulted in less grid electricity being procured. Going forward, the recent introduction of an automated meter reading system there will also help identify additional energy saving opportunities.

Read more: Energy generation and consumption on page 221





Improve sustainable business practices in our supply chains and, through collaboration, ensure full compliance with our minimum standards from strategic suppliers.

Responsible sourcing

The value chain for the commodities that go into our products comprises our suppliers, and we have policies and processes in place to manage our key relationships and risks within both our Procurement function and as part of our ethics and compliance framework (see pages 44 and 45).

Due to the varied nature of JM's businesses, the principal risks in our supply chains depend on the nature of the business. However, JM's supply chains include metals identified as conflict minerals and other materials, containing minerals such as cobalt, which originate in parts of the world where there are well documented reports of serious human rights abuses, including modern slavery (see page 45) and conflict minerals (see below). Consequently, we place particular emphasis on how we manage and mitigate them.

Supplier sustainability assessment

9 GRI 308 and GRI 414

We procure goods and services globally and our supply chains are multi-tiered. Supply failure is a principal risk and monitoring and understanding the risk is challenging but essential. Some of our strategic raw materials are available from only a limited number of countries.

Supply failure risk on page 72

Our JM Supplier Code of Conduct is available in multiple languages on our website. We expect all our suppliers to comply with this code as a condition of contracting. During the year we have updated our Supplier Code of Conduct to incorporate more aspects of sustainability, particularly GHG management, material provenance and global data protection.

We plan to launch this revised code during 2020 and, with it, a broader, more robust supplier due diligence programme. In preparation for this, we have temporarily paused our existing programme, except for our work with suppliers of critical metals to support the strategy of our Battery Materials business and conflict minerals as detailed below. As a result, under the definition of our goal 4 framework, no further current suppliers were audited during 2019/20.

matthey.com/supplier-code-of-conduct

Conflict minerals

The term 'conflict minerals' refers to tin, tungsten, tantalum and gold (3TG) which originate from the Democratic Republic of Congo (DRC) and surrounding countries, in particular from areas of military conflict where most mining is artisanal and linked to serious human rights abuses.

Our conflict minerals due diligence process is based on the Organization for Economic Co-operation and Development (OECD) Guidelines and includes keeping records that enable us to track the suppliers of all the raw materials we use and identify which smelter the conflict minerals came from.

We are working towards being compliant with the new European Union Conflict Mineral Regulation, which was enacted in July 2017, ahead of the January 2021 deadline.

We only use material from refiners and smelters which conform to the Responsible Minerals Assurance Process (RMAP) assessment protocols and are listed on the Responsible Minerals Initiative (RMI) database. We have identified over 150 3TG smelters across all tiers of our supply chain and 100% are currently listed as conformant with the RMAP process.

We also use our in-house database to respond to customer requests for information on conflict minerals in our products and to provide them with a tailored answer to any query they have. This year we have responded to 104 customer requests for information, an increase of 21% on the previous year.

matthey.com/conflict-minerals

Critical metals for battery materials

We are committed to using only raw materials that have been ethically sourced in our cathode products. At present, the DRC holds about 50% of the global reserves of cobalt and although there are some mining companies which are operating ethically in the country, there is a significant amount of illegal artisanal mining in uncontrolled conditions, leading to serious human rights abuses.

In 2018 we partnered with third party experts RCS Global to develop and implement a world leading due diligence programme which ensures that we have full transparency 'back to mine' for all our raw materials that contain lithium, cobalt and nickel. During 2019 RCS Global performed on-site audits of several prospective Tier 1 suppliers of cobalt and nickel for our eLNO portfolio of battery materials as part of our pre-qualification process. We have also rolled out the due diligence programme to our suppliers of critical raw materials for our lithium iron phosphate (LFP) family of battery materials.

Our critical minerals supplier audit programme conforms to the standard laid out in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (third edition) and provides assurance against the standards laid out in our Supplier Code of Conduct. All on-site audits of our suppliers are completed by RCS Global to the ISO 19011 standard.

To further our commitment to transparency in the battery materials supply chain, in early 2020 we joined the Global Battery Alliance (GBA).

Responsible business continued

Together with 41 other global organisations, we agreed to ten guiding principles for a creation of sustainable battery value chains globally by 2030. Further details are set out GBA's 'A Vision for a Sustainable Battery Value Chain in 2030'.

We also joined the Cobalt Institute and will align our corporate reporting framework and policies with the Cobalt Industry Responsible Assessment Framework (CIRAF) quidance during 2020/21.

www.rcsglobal.com

Platinum group metals

Johnson Matthey Plc and Johnson Matthey Inc are accredited as good delivery refiners on the London Platinum and Palladium Markets (LPPM). We have implemented their responsible platinum and palladium guidance for all material handled through our UK and US refineries. During the year we have partnered with third party experts to ensure our pgm due diligence programme complies fully with the standard.

Our Platinum and Palladium Supply Chain Policy Statement, which is available on our website, sets out our commitments and the steps that we take to fulfil them.

https://matthey.com/platinum-and-palladiumsupply-chain

In addition to following LPPM's guidance, we work collaboratively with customers through the International Platinum Group Metals Association (IPA) to ensure that the pgms we source globally are obtained ethically and responsibly.





Double the positive impact that JM's products, services and technologies make to a cleaner, healthier world.

Sustainable products

Our business strategy is to use our science and technology capabilities to create products and services to solve our customers' complex problems that are vital to making the world cleaner and healthier; today and for future generations.

Goal 5 of our sustainable business framework measures our impact and in 2019/20, 85.9% of our sales came from products and services that positively contributed to the UN SDGs (2018/19: 87.3%). Our sustainable business goal 5 is to increase this to >90% by 2025.

This year, sales of products that have a direct impact on the UN SDGs made up a lower proportion of group sales, in particular as a result of lower sales of emission control catalysts and active pharmaceutical ingredients. Parts of the business with limited contribution to the UN SDGs, such as some areas within our PGM Services business and also our formaldehyde technologies, contributed a greater proportion to total group sales.

We also measure the positive impact that our key products have had on people and the planet over the last 12 months (see table opposite).

Across our portfolio, through our investments in new opportunities, there are new products, services and technologies in the pipeline that we expect will make a positive contribution to the UN SDGs in future years.

Product stewardship and toxicology

The products we sell to our customers often form an important part of the end product supplied to the user – a JM emission control catalyst being an important part of a car, for example. And while we do not manufacture the end product itself, we are concerned with the whole life of the JM product within it, with our responsibilities extending far downstream of our own operations.

This 'whole life' responsibility is what we call product lifecycle management. We set ourselves high standards; customers want to see evidence that we understand any hazards inherent in our products and that, through understanding their uses, we can, in turn, help them manage any consequent risks. Equally, our other external stakeholders want assurance that the potential impacts – on the environment, our employees and downstream users – are well managed.

Effective product lifecycle management is essential to our business to identify and mitigate any risk to our portfolio. Our social licence to operate depends on our compliance with chemicals regulations and on our voluntary stewardship of our products all the way down the value chain.

We aim to design-in green chemistries at the start of a product's life and we are increasingly integrating product stewardship into new product innovation and development.

We have well established systems to ensure the effective management of our products throughout their lifecycle. Our groupwide policies and guidance are aligned with the global framework set by the Strategic Approach to International Chemicals Management (SAICM) to promote chemical safety around the world.

We have procedures in place at group and sector level to identify regulatory obligations, both future and current, and create the documentation necessary to ensure compliance. Our internal committees assess hazard and exposure data to identify opportunities for risk reduction in our operations. Finally, business compliance with lifecycle management policies forms part of our EHS audits.

Safe use of substances

g GRI 416

We seek to replace 'high hazard' substances – chemicals with significant potential, if poorly managed, to harm human health or the environment – where safer and economic alternatives are available. When replacement is not possible, through detailed risk assessment backed by extensive data packages, we ensure robust risk management measures are in place. We also work actively with other companies to provide regulators with the best available information on industry practice such that any regulatory restrictions can be properly evidence based.

Potential new products are assessed at an early stage of their development against safety and regulatory criteria. Higher hazard chemistries are subject to more detailed risk assessments and senior level review to potentially grant time-limited approvals for their use. Our policies, especially on new product innovation, emphasise the need to investigate whether safer alternatives are available.

We use or manufacture only a very limited number of substances considered regulated¹, or of international concern². As a proportion of our portfolio, approximately 5% of products consist of, or use in their production, such substances.

- ¹ e.g. SVHCs (substances of very high concern) under REACH, RoHS or California Prop 65 listed substances
- e.g. controlled by the Montreal Protocol, Stockholm and Rotterdam Conventions, GHS category 1A/1B carcinogens, mutagens or reprotoxins, etc.

Clean air for all

2.96 million tonnes

of pollutants removed

(2018/19: 3.35 million tonnes*) 2025 target 7.18 million tonnes

The total tonnes of air pollutants (oxides of nitrogen, carbon monoxide, hydrocarbons and particulate matter) removed by our emission control catalyst products fell this year as fewer vehicles were produced globally.

Of the tonnes of pollutants removed, particulate matter represents only a small amount because of its low mass. However, the sheer number of small particulates produced by vehicles is cause for substantial public health concern and has been the target of tightening legislation globally.

Over the past year, we estimate that our products removed almost double the mass of particulate matter from gasoline direct injection vehicles compared with the prior year as the number of our particulate filter products sold increased.

Tightening emission legislation in Europe and Asia over the coming years is likely to increase demand for particulate filter products.

* Restated due to adjustment in scope of vehicles included in certain small markets.

Shaping a new era of clean energy

9.8 million tonnes

(CO₂ equivalent) removed

(2018/19: 10.1 million) 2025 target 21.2 million tonnes The quantity of greenhouse gases (GHGs) removed by our products ($\mathrm{CO_2}$ equivalent) was slightly reduced due to a lower contribution from our technologies that are used by customers to abate nitrous oxide, a highly potent GHG, from their chemical manufacturing plants.

Two of the customer plants we supply were shut down in the year. This was partially offset by two new installations, but these were only in partial operation for the year.

Achieving more from less

225,000 tonnes

(CO2 equivalent) of GHGs avoided

(2018/19: 216,000 tonnes) 2025 target 426,000 tonnes The quantity of GHGs avoided (CO₂ equivalent) by our products increased this year due to greater demand for our fuel cell technologies, reflecting the ongoing transition to cleaner power generation choices. In addition, we have supplied our lithium iron phosphate battery cathode materials to new automotive applications during the year.

Ongoing investments in both our next generation ultra high energy density battery cathode materials, eLNO, and our fuel cell components for automotive applications will continue to drive our contribution in this area.

Longer, healthier lives

323,000 lives

positively impacted

(2018/19: 154,000*) 2025 target 920,000 lives The number of lives impacted by our recently launched pharmaceutical products increased this year as we benefited from a further expanded therapy base. New therapies containing our APIs included an extended release treatment for Attention Deficit Hyperactive Disorder (ADHD) and an exclusive treatment for Duchenne Muscular Dystrophy.

We continue to work with our partners and invest in R&D to develop and manufacture target molecules efficiently at scale, which will continue to increase our contribution to people's health.

* Restated to reflect updated market data.

Product regulatory compliance

During the year we put in place preparations to manage regulatory compliance in the event of the UK taking a hard / no-deal exit from the EU, based on our best understanding of the regulatory frameworks that would be in place at that time. We also actively liaised with representatives in UK government providing our industry perspective and expertise to inform their decision making. It increasingly appears that the UK will have its own REACH-like regulation and JM is advocating for a pragmatic approach to data requirements and regulatory deadlines to ensure our industry can comply in an efficient manner.

Internally, we are assessing the financial, operational and supply chain implications of compliance with a UK-REACH regulation and continue to provide support to UK government departments in their preparations for the post-transition period.

We work within trade associations and consortia as an effective way to support the application of best scientific methods to increase the understanding of our chemistries and products, and to communicate this within our supply chains. During the year we joined two new voluntary European Industry initiatives, one led by Cefic and one jointly led by Eurometaux and the European Chemicals Agency, to further improve the quality of the hazard, risk assessment and risk management information submitted in REACH registrations.

Regulations continue to be amended and new regulations are proposed that impact our operations and supply chains. We monitor and assess the impacts to ensure JM is well prepared. Efforts are ongoing to track, prepare and comply with developing legislative requirements in China, Russia and India, for example.

We use a systematic product responsibility reporting scheme to monitor the performance of our operations and maintain surveillance of the company's products and services. In 2019/20, there were no notifications of significant end user health effects involving our products. We did not identify any non-compliance with regulations or voluntary codes concerning health and safety impacts of products and services or product and service information, labelling and marketing communications.

Policy on animal testing: matthey.com/ stewardship-testing

Responsible business continued





Increase the use of volunteer days to support our community and charity partners through the JM employee volunteering programme.

Community and social impact

At Johnson Matthey we have a long tradition of supporting our local communities. Our initiatives are designed to empower our employees to achieve JM's vision through means beyond the reach of their jobs.

Goal 6 of our sustainable business framework aims to increase their reach even further through volunteering.

Our global volunteering policy grants employees two days each year to volunteer in their community with organisations they care about. We also double funds that our employees raise for charities of their choice through our match giving programme (up to £1,000 per employee per year).

This year our employees volunteered 2,682 days – well over double the previous year (2018/19: 1,116 days). This is thanks to a new global network of community investment ambassadors who have successfully mobilised volunteering, creating forces of good within their communities. In December we celebrated International Volunteer Day and employees collectively volunteered over 500 days across 23 countries.

JM is also pleased to have donated £77,000 to match money raised by employees in 2019/20.

In the community, our people lead the way and we've been inspired by their contributions to science, technology and engineering education over the years. Increasingly, the world needs science to make it cleaner and healthier and while we continue to respond to this demand with our technology, we are now ready to respond further.

Our reformed approach to social impact, which we will roll out in 2020/21, will support learners, particularly those at a socioeconomic disadvantage, to access better science education. We'll do this by building stronger connections between people and science – tackling key areas like perceptions, careers and teaching – to open more eyes to the thrill and important impact of our world changing industry.

COVID-19 is just one of many global issues highlighting the role of science in society more generally.

There are shortages of specific skills in science which must be addressed and, through our outreach, we're committed to promoting the science jobs that lack supply, so that our industry is best positioned to tackle future challenges.

In the short term, to support our communities through COVID-19, we're listening to our employees again. Our people have been eager to aid relief by using their paid volunteer leave, which we've encouraged where safe. This has included supporting vulnerable neighbours, delivering safety leaflets and making safety masks for healthcare workers. To meet their efforts, IM has committed to match employees' personal donations to the small and frontline charities in their communities that are most in need of support. We have also announced our dedicated £1 million fund for science education aimed at improving access to science education for children and young people. This fund is being strengthened further by personal donations committed by our Board of Directors.

Community investment summary

Total group	1,513	1,091*	+39%
Employee volunteering time	573	251*	+128%
Indirect expenditure	573	251*	+128%
Corporate donations to charities Donations by sites to local charities and community projects	305 635	331 509	-8% +25%
Direct expenditure	940	840	+12%
	in 2019/20 £'000	in 2018/19 £'000	% change

Restated to include updated data following year end

New science labs in India

In May 2019, 25 of our people travelled to India for a leadership training module. During the trip they volunteered at a disadvantaged school in Gurgaon. The group taught lessons to 75 students, who in return delivered presentations about air pollution. More than £16,000 was donated to the school from JM, some of which was raised (and matched) by the JM team. These funds have been used to construct a new science lab and computer space. The school's first science exhibition took place thanks to the new room, and in March this year a second science lab was constructed in one of the other school buildings, benefiting 120 additional students.

