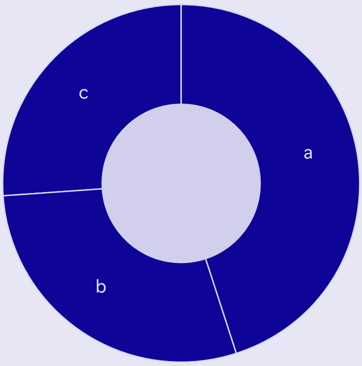
GROUP AT A GLANCE

FREE CASH FLOW [1,2] **£505m** 2021: £(1,485)m	STATUTORY CASH FLOWS FROM OPERATING ACTIVITIES **£1,850m** 2021: £(259)m	UNDERLYING REVENUE [1,2] **£12,691m** 2021: £10,947m	STATUTORY REVENUE [1] **£13,520m** 2021: £11,218m
UNDERLYING OPERATING PROFIT [1,2] **£652m** 2021: £414m	STATUTORY OPERATING PROFIT [1] **£837m** 2021: £513m	UNDERLYING PROFIT BEFORE TAX [1,2] **£206m** 2021: £36m	STATUTORY LOSS BEFORE TAX [1] **£(1,502)m** 2021: £(294)m
UNDERLYING EARNINGS PER SHARE [1,2] **1.95p** 2021: 0.11p	STATUTORY (LOSS)/EARNINGS PER SHARE [1] **(14.24)p** 2021: 1.48p	NET DEBT [3] **£(3,251)m** 2021: £(5,157)m	LIQUIDITY [4] **£8.1bn** 2021: £7.1bn



UNDERLYING REVENUE BY BUSINESS IN 2022

a. Civil Aerospace	**45%**
b. Defence	**29%**
c. Power Systems	**26%**
New Markets and other businesses [5]	**nil**

ORDER BACKLOG [1,5] **£60.2bn**	GROSS R&D EXPENDITURE [2,6] **£1.3bn**	COUNTRIES WITH ROLLS-ROYCE PRESENCE **48**	EMPLOYEES (MONTHLY AVERAGE) **41,800**

[1] 2022 and 2021 figures represent the results of continuing operations
[2] A reconciliation of alternative performance measures to their statutory equivalent is provided on pages 203 to 206
[3] Net debt (including lease liabilities) is defined on page 107
[4] Liquidity is defined as net funds plus any undrawn facilities, as listed on page 48
[5] See note 2 on page 129
[6] See note 3 on page 132 for a reconciliation of gross R&D expenditure to total R&D expenditure

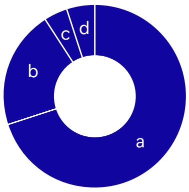
See note 2 on page 125 for a reconciliation between underlying and statutory results

OUR BUSINESSES IN 2022

CIVIL AEROSPACE

Civil Aerospace is a major manufacturer of aero engines for the large commercial aircraft, regional jets and business aviation markets. The business uses its engineering expertise, in-depth knowledge and capabilities to provide through-life service solutions for its customers.

UNDERLYING REVENUE



a. Large Engines	**70%**
b. Business Aviation	**21%**
c. Regional	**4%**
d. V2500	**5%**

UNDERLYING REVENUE

£5,686m

2021: £4,536m

UNDERLYING OPERATING PROFIT/(LOSS)

£143m

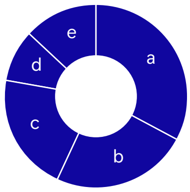
2021: £(172)m

See page 22

DEFENCE

Defence is a market leader in aero engines for military transport and patrol aircraft with strong positions in combat and trainer applications. It has significant scale in naval and designs, supplies and supports the nuclear propulsion plant for all of the UK Royal Navy's nuclear submarines.

UNDERLYING REVENUE



a. Transport	**33%**
b. Combat	**24%**
c. Submarines	**21%**
d. Naval	**9%**
e. Other	**13%**

UNDERLYING REVENUE

£3,660m

2021: £3,368m

UNDERLYING OPERATING PROFIT

£432m

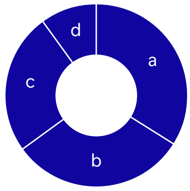
2021: £457m

See page 24

POWER SYSTEMS

Power Systems, with its product and solutions brand *mtu*, is a world-leading provider of integrated solutions for onsite power and propulsion, developing sustainable solutions to meet the needs of its customers.

UNDERLYING REVENUE



a. Power Generation	**34%**
b. Marine	**31%**
c. Industrial	**25%**
d. Defence	**10%**

UNDERLYING REVENUE

£3,347m

2021: £2,749m

UNDERLYING OPERATING PROFIT

£281m

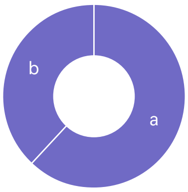
2021: £242m

See page 26

NEW MARKETS

New Markets are early-stage businesses. They leverage our existing, in-depth engineering expertise and capabilities to develop sustainable products for new markets, focused on the transition to net zero.

R&D EXPENDITURE



a. Rolls-Royce Electrical	**62%**
b. Rolls-Royce SMR	**38%**

UNDERLYING REVENUE

£3m

2021: £2m

UNDERLYING OPERATING LOSS

£(132)m

2021: £(70)m

See page 28

CHAIR'S STATEMENT

Rolls-Royce is a British industrial icon with world-leading technologies and exceptional people. We have significant opportunities to build on our foundations, realise our potential and create value that will benefit us all.

DAME ANITA FREW, CHAIR

Pride is a word so often used in conjunction with Rolls-Royce – the pride our engineers take in the products they develop or the pride all our people take in working for this iconic company. Rolls-Royce is a British industrial icon with a long heritage of innovation, from the Merlin engine all the way through to today's Trent XWB, which has helped change the world. I share that sense of pride. It has deepened over the past year as I have had the opportunity to meet many more of our committed and dedicated employees.

As many of you know, as a third generation Rolls-Royce employee, I grew up surrounded by my father and grandfather's passion and enthusiasm for Rolls-Royce's innovation, creativity and world-class engineering. I also saw first hand the impact on the Company and all employees of living through a financial crisis. It is critical, therefore, that we build financial resilience and sustainable performance. We must remain in control of our own destiny and able to weather whatever the external environment throws at us.

Any change journey starts with an acceptance of the current position and our new Chief Executive, Tufan Erginbilgic, who joined the Board in January 2023, has already delivered an honest assessment of our strengths and weaknesses. There are many positives – our strong market positions, the strength of our customer relationships, our exceptional technical competence, the commitment and passion of our people and the key role we play in the energy transition. Tufan, in his Chief Executive's review, talks passionately about why he joined Rolls-Royce, his commitment to the business and the challenges and opportunities that he sees. This shows the potential for significant performance improvements across our Group. This will benefit all our stakeholders. We will be a stronger long-term partner for our customers and suppliers. We will have the capacity to invest in innovation, engineering excellence and energy transition and we will be better able to reward our employees and investors.

Performance in 2022

In my first full year as Chair, we have made some progress towards a stronger financial future, as shown by our results for 2022. This was despite two significant macro events. Firstly, the bounce back from the pandemic led to inflationary and supply chain pressures, as lockdowns ceased and economic activity resumed in many parts of the world, albeit unevenly. Secondly, the Russia-Ukraine conflict exacerbated many of those inflationary pressures. Throughout the year, we continued to focus on operational execution, while actively managing inflation and supply chain challenges through tight cost control and robust long-term contracts with suppliers and customers, which enabled us to pass through much of the inflation risk. As a result, we were able to deliver on our financial expectations for the year (see page 18). Our expectations for 2023 (see page 19), however, are only the start of our new journey.

During the year, we laid some positive foundations for the future, achieving a number of significant contract, customer and partnership wins across the Group. In Civil Aerospace, we signed new large engine orders from Malaysia Aviation Group, Norse Atlantic Airways and Qantas. We also secured our place on a new aircraft platform with the Trent XWB powering a new freighter from Airbus. After the end of the year, we announced our first ever widebody engine deal with an airline customer in India. The deal will make Air India the largest operator of our Trent XWB-97 engines in the world. In Defence, the Bell V-280 Valor was selected by the US Army for the future long range assault aircraft programme. Power Systems also secured a number of important defence wins, including an order for engines for the British army and a five-year service contract to support all of our engines that power Britain's naval fleet. Finally, Rolls-Royce Electrical entered into a partnership with Hyundai Motor Group to collaborate on all-electrical propulsion and hydrogen fuel cell technology.

Leadership transition

In many ways, 2022 marked the end of a chapter for Rolls-Royce. All three of the short-term commitments made by the business at the height of the pandemic have now been met. The first commitment was met in 2021 as we completed, ahead of schedule, the restructuring programme we undertook as a result of the impact of the pandemic. Our return to positive free cash flow in 2022 marked the delivery of our second short-term commitment. Finally, during the summer, we completed the sale of ITP Aero to a consortium of investors, which marked the completion of our third and final short-term commitment: to deliver proceeds of around £2bn from a disposal programme.

Perhaps the most obvious ending of a chapter, however, was that relating to Warren who stood down as Chief Executive at the end of 2022. During his seven years at the helm of Rolls-Royce and a total of eight on the Board, he navigated more major crises than many chief executives experience in a whole career. Several of those crises had their roots planted well before Warren took over and one, the pandemic, was of an unprecedented scale compared with anything else that has happened in global aviation since World War II. Warren showed incredible tenacity and integrity throughout. He was hugely admired by our employees, many of whom speak of the hugely enjoyable personal interactions they had with him whenever he visited one of our sites. Personally, it was a great pleasure to work with him, albeit briefly, as Chair and I know many people learned a lot from his humility, empathy and, above all, his unquenchable curiosity. I and the rest of the Board would like to thank him for his passion, commitment and dedication to Rolls-Royce. We all wish him well for the future.

Board developments

I inherited a Board in transition and while the task of ensuring the correct Board composition is never ultimately concluded, we have a significant level of diversity in terms of experience, skills, geography, leadership style, gender and ethnicity. Part of a Chair's role is also to ensure a culture of openness and transparency in which all views can be expressed and a 'collective brain' brought to bear on all issues. To ensure that brain is as high functioning as possible, requires diversity of thought. The breadth we now have encompasses everything from a wide range of business experience and sectoral expertise to cultural consideration and improved gender balance. We also have a firm grounding in engineering and technology and core competence in areas such as disciplined capital allocation which will stand us in good stead for the coming years.

I have already written about Tufan, who was appointed last summer following an in-depth global search conducted by external advisers (see page 72). Among other moves, Irene Dorner stepped down from the Board in May and Lord Jitesh Gadhia joined in April and became Chair of the Remuneration Committee following the 2022 Annual General Meeting (AGM). Lee Hsien Yang stepped down from the Board in December having reached his nine-year term. We recently announced the appointment of Birgit Behrendt with effect from the conclusion of the AGM on 11 May 2023. On joining the Board, Birgit will be appointed to the Nominations & Governance Committee and the Safety, Ethics & Sustainability Committee. Birgit brings extensive global operational experience in large, complex international industrial groups having spent much of her executive career at Ford Motor Company, latterly as Vice President Global Purchasing. Her non-executive appointments have focused on industrial groups beyond the automotive industry, all with a focus on sustainability and transformation. Mike Manley has indicated his intention to step down from the Board of Rolls-Royce in order to focus on his US business interests and will not be standing for re-election at this year's AGM on 11 May. Mike has been a valued member of the Board and I would like to thank him for his dedication during his time with Rolls-Royce.

The role of a board and its chair can, to some, appear somehow at arms' length to the operation of a business itself and somewhat distanced from the concerns of employees themselves. Amidst its supervisory, oversight and governance activities, which are well documented within this report (see page 59), the Board has, to my mind, a strong ambassadorial role. This is most obvious when dealing with our wide range of external stakeholders, with whom we continued to engage throughout the year (see page 50). During my first full year as Chair, I have endeavoured to further this mindset across the Board when interacting with our people. One of the opportunities we had during the year was our Meet the Board event immediately following the AGM, at which employees from across the Group were able to interact with Board members and share experiences, discuss concerns and swap insights. The level of interaction was terrific and such dialogue will be even more important going forward.

While there is significant activity to come in the year ahead, much groundwork was laid down by the Board in 2022. I continued to meet with our major institutional investors in order to understand their expectations and concerns. These interactions have remained insightful and instructive and have provided valuable feedback for the whole Board.

Board involvement in climate governance

The Board also took tangible steps during the year to remain abreast of current best practice in terms of climate change reporting. During 2022, we received tailored training on climate-related matters (see page 34) and the Board reviewed the Group's climate-related governance. We were also actively involved in interactions with the Science-Based Targets initiative (SBTi) and continued to closely review preparation for Taskforce on Climate-related Financial Disclosures (TCFD) reporting.

Shareholder payments

We had a ten year track record of payments to shareholders prior to the pandemic but had to cease payments in 2020 to protect our balance sheet. We are still restricted by some of the conditions attached to our loan facilities from making payments to shareholders at this time. We are committed to returning to an investment grade credit rating through performance improvement and to resuming shareholder payments.

Looking forward

As Tufan makes clear in his review (see page 6), we are now embarked upon the creation of a high-quality, sustainable, cash generative business with a strong balance sheet and growing returns, that can invest surplus capital in profitable growth. As our business strengthens we will create significant value for all stakeholders and be better able to play a key role in helping our customers benefit from the energy transition.

I would like to take this opportunity to thank, on behalf of the whole Board, everyone in Rolls-Royce for their hard work and continued dedication.

Dame Anita Frew
Chair

CHIEF EXECUTIVE'S REVIEW

We must harness the pride of our people to create a more successful company. We will reassert Rolls-Royce as a high-performing, growing and competitive business that has earned the right to invest in future growth. We are capable of moving faster, aiming higher and delivering stronger returns for all our stakeholders.

TUFAN ERGINBILGIC, CHIEF EXECUTIVE

It is an honour to lead Rolls-Royce. There are only a handful of companies whose products have helped shape modern society. From the birth of transatlantic flight and Europe's first high speed rail service to the development of the jet engine itself, our ingenuity has helped bring the world closer together. Our brand is estimated to be one of the top five most reputable in the world and we have strong market share in attractive markets.

During my introduction to the Company, I have spent time at our largest sites in the UK, Germany and US. Since joining, I have met many smart, hard-working and dedicated people and what struck me about all of them was the pride they feel in working for Rolls-Royce, in being part of a story that stretches back for generations. The people I have met are passionate about the products we make, excited about the possibility of their next invention and invested in our engineering capability. I am proud to be here too and I intend to harness the pride our people have and use it to create a stronger and much more successful company.

My career has been about partnering engineering expertise with a granular strategy, business acumen and intense performance management. What I strive to create, and have achieved in my previous roles, is an organisation that thrives on what I term strategic progress. That means setting clear targets, managing performance with real focus and creating a mindset that is constantly looking to go further and improve the business everyday.

This needs to happen at Rolls-Royce because, as a business, we must do better. We can move faster, aim higher and deliver stronger returns for all our stakeholders. It is that potential of Rolls-Royce as a business, not its place as a household name, that was the primary motivator for me when I accepted the job as Chief Executive.

That potential needs to be realised in an external environment that is changing rapidly. Rising inflation, recessionary pressures, interest rate increases and supply chain issues are realities that we need to face head on. We need to respond proactively to the major trends around us including the energy transition, digitalisation and the growth of the middle classes in the developing world. We must ensure that we move at a greater pace than the world around us and not get left behind.

If the past few years have taught the business community anything, it is that uncertainty and change are the norm. We have seen the pandemic give way to geopolitical and macroeconomic shocks, causing an inflationary environment and destabilising supply chains. Further shocks cannot be ruled out and Rolls-Royce must be able to face them in a stronger position than it has held in the past. This requires a stronger balance sheet to build resilience and to underpin profitable growth opportunities.

I am very confident that Rolls-Royce has the potential to do this but today we are underperforming and we have been for an extended period of time. Our total shareholder return over the last five years is negative. Cash generation is unsatisfactory. Our debt is too high. Too much of our gross profit is spent on overheads, interest payments and other costs. We must quickly and significantly improve our cash generation to strengthen our balance sheet. We need to get back to an investment grade credit rating through organic self-help, building on the £2bn raised from the disposal programme.

If the past few years have taught the business community anything, it is that uncertainty and change are the norm. Rolls-Royce must be able to face the future in a stronger position than it has held in the past.

Profit and margins must improve to create a quality business with satisfactory returns on capital employed. Our underperformance is most evident in Civil Aerospace but improvement is something that all our businesses need to deliver. In the past, Rolls-Royce has relied too much on market recovery to drive its success and our low operating margins and high cost base mean that we are not resilient enough to external factors when the environment is unfavourable.

We owe it to our stakeholders to perform better. It will require turning passion for engineering projects into a passion for profitable growth. We will set clear goals, performance manage with

NEW CAPITAL ALLOCATION FRAMEWORK

Higher priority on deleveraging the balance sheet and re-establishing shareholder payments and then on discretionary investment.

Cash flow
(before all investments)

− **Safety capex and engineering spend**

− **Contractual committed investment**

= **Practical available cash flow**

Priorities

Deleverage > **Shareholder payments** > **Discretionary investments**

Only projects which demonstrate satisfactory scores against these criteria will be considered for investment.

Strategic fit
Attractive market
Carbon impact
Competitive position

Financial fit
Profitability
Expected returns
Payback
Investment risk

Execution
Delivery risk
Probability of success
Timing and environment
Environment, social, governance

real focus and create a winning mindset. That last element unlocks belief within an organisation which creates the energy required to deliver extraordinary outcomes.

We need to apply a clear financial framework to, firstly, strengthen our balance sheet; secondly, reward investors with growing returns; and, thirdly, invest our surplus capital to drive future growth. Improving our cash generation will enable us to pay down debt and deleverage the balance sheet, in order to position ourselves to return to an investment grade credit rating as soon as possible. This will make us stronger and give us flexibility to allocate capital to drive growth in the future.

We have to make the right capital allocation choices to grow the business in the most value accretive way. We cannot continue to allocate capital to projects that have low returns. This will mean capital allocation decisions in line with strategy and centrally allocated capital to markets and programmes in line with the framework.

Strategically, we remain committed to helping our customers embrace net zero and we remain steadfast in our opinion that Rolls-Royce has an important role to play in the energy transition. The pace and level of our investment, however, will vary across the business depending on the market opportunity, fit with strategy and our capability.

We must reward the patience and support of our investors. I firmly believe that generating greater returns for shareholders and investing in future growth are not binary options. Good businesses do both. For Rolls-Royce to do both, we will need to change. Before addressing how we will change, we will first look at where we stand today.

Improved profit and cash in 2022

Our financial figures showed an increase on 2021 for revenue, profit and cash. Underlying revenue increased by 14%. Underlying operating profit was £652m, £238m higher than the prior year, with the increase driven by Civil Aerospace and Power Systems. Free cash flow from continuing operations of £505m was £2.0bn higher than the prior year, led by engine flying hour recovery. Net debt of £3.3bn was down from £5.2bn at end 2021, due to disposals and improved cash flow.

Increased profits in Civil Aerospace and Power Systems were partly offset by lower profit in Defence and increased investment in New Markets. Margin growth reflected improvements in long term service agreement (LTSA) contract margins and increased spare engines profit in Civil Aerospace. This was partly offset by the non-repeat of a foreign exchange revaluation credit in Civil Aerospace and legacy spare parts sales in Defence in 2021, and lower margins in Power Systems due to cost increases.

Free cash flow from continuing operations improved from an outflow of £1.5bn in 2021 to an inflow of £0.5bn, driven by 35% growth in large engine flying hours, comparatively lower growth in large engine major shop visits at 19%, and higher Defence cash flow. Higher inventory in Power Systems saw its cash conversion ratio fall.

In 2023, a continued recovery in our end markets and the actions we are taking give us confidence in delivering higher profit and cash flow.

OUR TRANSFORMATION PROGRAMME

To realise our priorities and the potential embedded within our business, we have launched the boldest change programme Rolls-Royce has carried out in many years.

One Rolls-Royce, winning together

Our guidance for 2023 is, however, only the start of the journey. I see a business that is capable of far more. We cannot rely upon external factors alone to deliver better results. We have already carried out extensive work benchmarking our Group performance and that of our businesses against our peers. That work shows there is significant scope for us to deliver materially higher profit, cash flows and returns in the medium-term. We have now launched a number of multi-year priorities and we are committed to operating a 'one Rolls-Royce' model, aligning the whole organisation behind them.

Our priorities are clear. They are:

- focus on the safety of our people and products;
- significantly improve earnings and the cash potential of the business;
- deliver substantial efficiency improvements;
- improve cash generation and deleverage the balance sheet;
- develop a clear and granular strategy;
- play a key role in the energy transition; and
- engage our people and build capability.

It is imperative that the safety of our people and products remains our top priority throughout this process. In my previous roles, I have been able to achieve financial resilience and stronger returns while delivering record-setting safety performance. Safety is absolutely paramount to me and I fully understand how crucial both product and personal safety is within Rolls-Royce, which operates in some of the world's most regulated safety-critical industries. We will not tolerate any degradation of standards in the pursuit of efficiencies and, in fact, we will look to improve both.

To realise these priorities and the potential embedded within our business, we have launched the boldest change programme Rolls-Royce has carried out in many years. Internally, we refer to it as 'winning together' a name which signifies that this is about being the best we possibly can be and that it involves everyone within the organisation. It is not an activity which is the responsibility of one individual project team, it is the responsibility of everyone in Rolls-Royce. Our transformation programme will ensure that everyone moves at pace and is held accountable for their deliverables.

The transformation consists of seven workstreams and each of them is led by a senior leader. We are already delivering changes as we work at pace. Activity on many of the workstreams is already underway and as the year progresses we will look to embed the performance management and culture we need to ensure long-term sustainable success across the Group.

Efficiency and simplification

We are examining the organisational structure of the Group including synergies that we can harness from our one Rolls-Royce approach. We see opportunities for footprint consolidation as well as direct and indirect third party efficiencies. While costs were removed during the pandemic, particularly in Civil Aerospace, this was predominantly linked with the dramatic reduction in flying activity. We believe there remains significant opportunity to right-size our cost base to deliver sustainable cost efficiencies across the whole Group.

Commercial optimisation

We are bringing a sharper commercial edge to everything that we do to deliver increased profitability of contracts to improve our earnings, cash generation and returns. This means being rewarded by our customers for the value our products bring and the risks we take. A stronger Rolls-Royce will be a much better partner, better able to deliver operationally and invest in new products. I have met with a number of our largest customers already who understand this.

Business improvements
These programmes, now live within each business and led by our Business Presidents, are tasked with building plans to deliver the full potential of the business. Each business has a resourced programme aligned to our winning together change programme. We have set stretching performance targets following peer benchmarking analysis and we have already identified performance gaps we must address. Each business will be able take advantage of the other workstreams in this winning together programme to continually improve and reinforce their plans.

Working capital
This workstream is tasked with delivering a significant and structural reduction in working capital across the Group. By deep diving into the operational value chain and addressing working capital in its component parts, we believe that there are sustainable improvements available.

Strategic review
Our strategic review process has now been launched. This Group-wide review will decide which areas we are going to invest in and which ones we will not. This investment prioritisation activity will ensure that we focus on profitable opportunities, in new technologies where we are differentiated, where the market size is sufficiently large and where there is a good fit and synergy with our existing activities.

This exercise is not about searching for easy wins but about taking tough decisions to create enduring value for all our stakeholders. The result of this review will be mid-term targets and a strategic implementation plan that we will share in the second half of 2023.

Performance management
In order to succeed in all these areas, our performance management workstream is vital as it will enable us to ensure we are both proceeding with urgency and on track to achieve our goals. This work is already underway and will formalise as the year progresses. We will manage our businesses in a tight and timely manner and deliver on our expectations of high performance from everyone in support of our priorities and strategy.

Purpose and culture
Later in the year we will complement our transformation with our final remaining workstream, purpose and culture. This will embed our purpose and winning culture throughout Rolls-Royce.

We are already in action across all of these workstreams. It is a multi-year programme that will establish a high-performing Rolls-Royce and we will start to see the impact of this programme this year.

A new mindset for a winning company
Alongside being clear in setting out the 'what' of our change programme, what needs to be done differently and to what ends, we are also being very clear on the 'how', how we go about doing this. Alongside the greater strategic clarity, we have set clear expectations of leadership. While this mindset starts at the top, it is permeating throughout the business. We are going to hold ourselves accountable for delivery and performance and we are all team players, working as one company. On a practical level, this means taking a Group approach to making investment choices. On a more emotional level, it means we are all in this together. We are all passionate and committed to the extraordinary success of Rolls-Royce and, ultimately, here to make a real difference.

> ***We are all team players working as one company. We have a lot of hard work ahead of us but we have begun at pace and the potential rewards for all our stakeholders are great.***

I believe we have the potential to be a much higher quality and more competitive company. The ultimate purpose of this activity is to create a Rolls-Royce of which all stakeholders can be proud. We have a lot of hard work ahead of us, but we have begun at pace and the potential rewards for all our stakeholders are great.

Through the actions we are now taking, we will reassert Rolls-Royce as a high-performing and competitive business with strong returns, profitability and cash flow. That will earn us the right to invest in future growth.

Rolls-Royce has created tremendous engineering solutions in the past which have engendered pride among our people. Now that same pride will be generated by realising the full potential of Rolls-Royce. I couldn't be more excited to be part of this team.

Tufan Erginbilgic
Chief Executive

STRATEGY

PURPOSE, VISION AND MISSION

We provide power that is central to the successful functioning of the modern world. As a broad-based power and propulsion provider, we operate in some of the most complex, critical systems at the heart of global society.

Purpose
Power is vital to the success of our customers and drives the economic development of the world. We create value for all stakeholders by harnessing the potential of cutting-edge technologies to create safe, cleaner and more efficient power and propulsion solutions.

We operate in some of the most complex and critical parts of the global economy that are central to the successful functioning of the modern world. Our products and services enable our customers to connect people, societies, cultures and economies together; they meet the growing need for power and energy; and enable governments to equip their armed forces with the power required to protect their citizens.

Vision
We create industrial technologies using our expertise and an extensive network of partners, suppliers and customers built over many years, adding to our winning position. We combine distinct engineering disciplines to deliver highly complex power and propulsion solutions in the air, at sea and on land. The thread linking the Group together is the technical and engineering expertise and commercial skillset required to develop complex solutions, products and services. We build long-term relationships with our customers through our services offerings and these relationships ultimately enable us to deliver value for all our stakeholders.

Mission
Global economic development is driving increased demand for energy, international trade and travel. We provide the power that supports that growth – connecting, powering and protecting society – and we understand that power must be made compatible with combatting climate change. As our customers increasingly search for more sustainable solutions, we believe the energy transition creates opportunities for innovation and growth as well as further efficiency in the way we run our operations. It also provides long-term careers for our people and a strong draw for future talent seeking an opportunity to join a company creating innovative solutions, adding value to our stakeholders and supporting energy transition.

OUR VALUES AND BEHAVIOURS

Trust	Integrity	Safety

Embrace Agility	Be Bold	Pursue Collaboration	Seek Simplicity

Our values and behaviours
Trust: We strive to outperform the expectations of our stakeholders. We have to earn trust every day and always remember it is easy to lose.

Integrity: We live up to all our ethical principles and we demonstrate this by being true to ourselves and showing honesty and good judgement in all that we do.

Safety: We put health and safety first. We care about the health and safety of our people and our products.

Embrace Agility: We explore different ways of doing things, we respond quickly and adapt to challenges.

Be Bold: We believe in ourselves, push boundaries and speak up.

Pursue Collaboration: We find strength in working together, both inside and outside of our business, and value the diversity of people and perspectives.

Seek Simplicity: We keep it simple and remove complexity in how we communicate and the way we work.

Strategic review

We have launched a Group-wide strategic review that will help us to identify and assess strategic options, prioritise growth opportunities and assess current portfolio attractiveness. The result of this review will be a granular strategic plan with clearly defined milestones and key performance indicators to enable us to measure the progress.

Near-term areas of focus

In 2022, we dealt with external pressures, particularly in our supply chain and the inflationary issues caused by the recovery from the pandemic, the Russia-Ukraine conflict and economic uncertainty. We are taking the necessary actions to protect our business from the risks of inflation, supply chain disruption and a tightening labour environment. We see the benefits of productivity and efficiency improvements and expect to see more progress to come, alongside being ever more disciplined on our commercial terms. In 2022, demand for our products and services continued to improve significantly, with a record year for order intake in Power Systems, accompanied by continued recovery in Civil Aerospace engine flying hours and a strong order book in Defence. We continue to capitalise on the opportunities presented by our long-term customer relationships and installed product base; to grow our capabilities in core markets and create new business opportunities.

Delivering on our commitments

We are delivering on our commitment to rebuild our balance sheet in the medium term. We have completed four disposals since 2020 with the sale of ITP Aero in September 2022. We repaid a £2bn debt facility in September 2022, significantly reducing our net debt position while maintaining strong liquidity. In the second part of the year, Fitch, Moody's and S&P Global upgraded our credit rating outlook which is a stepping stone to achieving our mid-term ambition of returning to an investment grade credit rating. In 2022, we grew our revenue and made significant progress on profitability which allowed us to deliver against our commitment to return to positive cash flow. We are also seeing the benefits from operational improvements. We will work on increasing the momentum by protecting the efficiencies that have been achieved and focus on supply chain and pricing strategy optimisation, cost control and working capital discipline alongside being more disciplined on our commercial terms.

We are also delivering against our commitment to simplify the way we communicate our business performance. In May 2022, we held an investor day to help investors with their understanding of the key drivers of our financial and operational performance and provided more details about the cost reduction programme and expected near-term improvements. We have introduced a new approach to foreign exchange hedging where we will carry a smaller hedge book, with a declining percentage of cover over a five-year period, which will mean that market movements in foreign exchange will impact us sooner. This change is more cost effective, brings us in line with our peers and allows us to anticipate and react to risks more quickly.

Maximise value from existing capabilities

We are the beneficiaries of years, in some cases decades, of hard work, investing in the development of new products and growing market share. Across all our businesses, the key driver of revenue is the number of installed products in the market. This provides resilience against original equipment sales volatility and allows us to increase the scope of our aftermarket reach continuously and to maximise value through the lifecycle of the product.

This is especially true for Civil Aerospace. We are moving beyond a period of unprecedented investment in new Civil Aerospace engine programmes, with four new large engines and three new business jet engines launched in the last decade, to a period in which we will realise the benefits of that effort and investment. Increasing the size of our installed fleet in Civil Aerospace will drive aftermarket revenues which will create value in the medium term and beyond as older engines in our fleet will be retired and replaced with newer models. We remain focused on our services strategy to deliver high quality services to our customers while increasing the returns from the installed products by optimising our processes and operational footprint, reducing costs of maintenance and improving time on wing. There are two key areas we are working on: firstly, the fuel efficiency improvement of existing and newly developed products; and secondly, enabling our customers to use the products in a way that is compatible with sustainable fuels. We can pull the technology levers in our control through testing our existing products with new lower carbon and sustainable fuels and creating upgrade kits, where necessary, to assist adoption.

Growth opportunities

Over many years, Rolls-Royce has built expertise that led to the development of a wide range of technologies and products across various industries and markets. We are continuously exploring opportunities to develop new solutions for existing markets, applying current technologies to new markets, as well as entering new markets with new products.

Innovation is difficult in those sectors where emissions need to reduce but it plays a critical role in developing our Civil Aerospace and Defence businesses. For instance, where our customers around the world are exploring ways to reduce the carbon footprint, there is demand for newer, more efficient products that are compatible with sustainable fuels. In Power Systems we are working on developing new sustainable technologies that allow us to tap into new addressable markets and stay competitive in existing markets while helping our customers in their net zero transition. Our New Markets business, comprising Rolls-Royce SMR and Rolls-Royce Electrical, draws on our existing technological and engineering expertise and experience in delivering complex solutions while working across a wide range of partners.

PRIORITIES

Our purpose, vision and mission provide an overall framework within which our strategic focus sits. This provides our people with clear guidance on our in-year priorities.

PRIORITIES TO WIN TOGETHER

1	**Focus on the safety of our people and products**	G H
2	**Significantly improve earnings and the cash potential of the business**	A B C F
3	**Deliver substantial efficiency improvements**	C D F I
4	**Improve cash generation and deleverage the balance sheet**	B C F
5	**Develop a clear and granular strategy**	D E G I
6	**Play a key role in the energy transition**	A B D E I
7	**Engage our people and build capability**	G H

Links to key performance indicators

Financial performance indicators

A Order backlog
B Underlying revenue
C Underlying operating profit/(loss)
D Capital expenditure as a proportion of underlying revenue
E Self-funded R&D as a proportion of underlying revenue
F Free cash flow from continuing operations

Non-financial performance indicators

G Customer metric
H Employee engagement
I Sustainability

See Key Performance Indicators on pages 16 and 17

EXTERNAL ENVIRONMENT

Conflict in Europe

The Russia-Ukraine conflict has brought large-scale armed conflict to Europe, leading to a humanitarian crisis through the lives and livelihoods lost and disrupted. It has triggered mass displacement of people, political realignment and international sanctions as well as sharp escalations in food and energy costs. Cuts to supplies of gas to Europe are amplifying stresses in commodity markets and bring into focus the importance of secure access to energy; with policy shifting towards more diversified, increasingly domestic energy supply. The conflict has resulted in changes to the political landscape, including a re-appraisal of national security and defence priorities in countries most impacted by the conflict.

Our response

Following the imposition of sanctions on Russia affecting areas of Rolls-Royce business, and an internal review of our willingness to do business in Russia, we took the decision in March 2022 to stop doing business in Russia. All of our activities affected by sanctions, which were first introduced in February 2022, were stopped immediately. We are reducing our reliance on Russia for titanium through securing a long-term agreement with an alternative supplier. As countries re-evaluate their defence capabilities, we are responding to customers and we are increasing production capacity in our Power Systems business to meet increased demand for military power and propulsion equipment. The need for domestic energy security sovereignty creates an opportunity for Rolls-Royce SMR.

Economic uncertainty

Global economic activity in 2022 was impacted by a broad and deep series of issues resulting in lower-than-expected growth and levels of inflation higher than seen in several decades. The post-COVID-19 global economy continues to face powerful challenges. Initial problems resulting from high levels of government debt and post-pandemic supply chain disruption have been compounded by conflict in Europe, fuelling a cost-of-living crisis, as well as by a slowdown in China driven in part by continued intermittent lockdowns. Sustained uncertainty over energy supplies has contributed to reduced economic activity, particularly in manufacturing, dampening consumer and, to an extent, business confidence. Inflationary pressures have triggered a rapid and synchronised tightening of monetary conditions driving interest rate rises and a powerful strengthening of the US dollar against most other currencies. Labour markets remain tight with historically low unemployment rates and high levels of vacancies. Household debt levels are rising and discretionary spend falling.

Our response

Diversity in our portfolio helps us to be resilient to short-term shocks. Throughout the pandemic, our Defence and Power Systems businesses helped offset some of the impact in Civil Aerospace. We have taken a number of actions to protect our business from the risks of inflation, supply chain disruption and a tightening labour environment through a sharper focus on pricing, productivity and costs. Many of our long-term contracts, as are common in the aerospace sector, contain inflation-linked pricing clauses based on standard indices for energy, materials and wages to mitigate cost increases. In Power Systems, a shorter cycle business, we have been able to raise prices in an environment where demand is strong and margins are closely leveraged to volumes. In Defence, we are working hard to manage supply chain costs through long-term purchasing agreements. Across the business we are taking steps to right size, reduce our cost base and focus investments; and will continue to manage the current energy and raw material inflation risks through supplier agreements and hedging policies.

Long-term trends

Despite the turbulence in 2022, underlying longer-term opportunities and challenges presented by demographics, global economic development and environmental pressures remain. According to the UN, the global population reached eight billion in 2022 and is set to increase to almost ten billion by 2050, with more than 70% of people living in urban environments. Population and economic growth will lead to increased demand for power in markets served by Power Systems. Defence budgets, mainly driven by threat perception and economic growth, are forecast to grow with at least low single digits in real terms each year. One key determinant for demand in our Civil Aerospace business is the number of people in middle and higher-income levels able to afford air travel. Significant growth is expected globally but particularly in countries like China and India. With commitments to reduce greenhouse emissions being increasingly formalised, while being a tremendous societal challenge, this will provide business opportunities to bring cutting-edge technologies to market.

Our response

In Civil Aerospace, we are now positioned to realise the benefits of having built market position over the last few decades. At the same time, we are developing technologies for next-generation aero-engines, certifying our products to be compatible with low and net zero carbon fuels and beginning research into the longer term potential of hydrogen. We have structured our Power Systems business to address particular growth areas in power generation, commercial marine and industrial segments. Through our joint ventures in China and India we are well-positioned to serve these rapidly growing markets. Our Defence business is well positioned in new markets that could enable growth beyond the existing core. Through Rolls-Royce SMR, we seek to bring to scale an affordable, low-carbon source of power and through Rolls-Royce Electrical we will pioneer electrical power and propulsion in the emerging advanced air mobility market. We are working to enable all our products, on air, sea and land, to be used sustainably.

BUSINESS MODEL

We have a business model which we believe creates value for our stakeholders.

Our cross-cutting capability and assets that support our strategy

Brand and heritage

Our brand has global appeal; is enduring; engages a wide range of stakeholders; and is a powerful tool for attracting customers, partners and talent.

People and culture

We create an environment where all our people can be at their best. We work hard to release their full potential.

Innovation and technology

Delivering highly complex systems solutions has enabled us to build a significant breadth of disciplines; while the nature of our products means we have acquired extraordinary depth.

Partnerships

We build meaningful relationships with partners across the value chain.

Global network and infrastructure

Our geographic footprint ensures we are able to serve customers wherever they are.

Digitalisation

We use digital tools and skills across our business to drive operational efficiency and quality service.

Business excellence

We drive a culture of continuous improvement.

See our Viability Statement on page 49 and Stakeholder Engagement on pages 50 to 55

Our competitive advantage comes from:

Cutting-edge technologies
Our technologies ensure that our customers have the vital power that meets their emerging needs in an increasingly sustainable manner.

System solutions
We integrate individual enabling technologies into complete systems and power solutions, providing customers with the ability to work with a single partner.

1 Anticipate the needs of our customers
Link to risks: c, d, g, h, i, j

2 Develop cutting-edge technologies
Link to risks: a, c, d, e, f, i, j

3 Design solutions
Link to risks: a, c, d, e, f, j

4 Develop world-class production capability
Link to risks: a, b, c, d, e, f, j

DISCIPLINED CAPITAL ALLOCATION

1. Anticipate the needs of our customers
Our focus on building complete power solutions provides the basis for strong customer relationships. Increasingly, our customers are requiring us to develop more sustainable solutions as they look to make the transition to net zero. Our aftermarket model of through-life support further deepens our connection with customers.

2. Develop cutting-edge technologies
Our products rely upon cutting-edge technologies, which are generated from intellectual property developed over decades and often in collaboration with our long-term partners.

3. Design solutions
We harness the potential of design thinking and digital applications to create solutions that generate the greatest value from our cutting-edge technologies.

4. Develop world-class production capability
We use our production expertise and network of partners to harness new manufacturing techniques and technologies.

System life
We provide complete through-life support of our products during their lengthy operating lives which creates opportunity from aftermarket services.

5
Grow installed original equipment base
Link to risks:
a, b, c, d, e, h, i, j

6
Capture through-life value of in-service products
Link to risks:
a, b, c, d, e, f, h, i, j

7
Generate stakeholder value
Link to risks:
a, b, c, d, e, f, g, h, i

See page 7

Value creation for our stakeholders

Customers
We develop product solutions that improve the competitiveness and efficiency of our customers.
See Business Review pages 22 to 29

Investors
We aim to return to generating attractive returns for investors over the long term.
See Remuneration Committee Report pages 77 to 95

Employees
We enable them to learn and develop in a style and at a pace that suits them, at every point of their career.
See People and Culture pages 37 to 40 and Non-financial KPIs page 17

Partners
We create partnerships based on collaboration where each partner benefits from the relationship.

Communities
We improve the communities that we impact locally, nationally and globally.
See People and Culture pages 37 to 40

GROSS R&D EXPENDITURE	INVESTMENT IN LEARNING AND DEVELOPMENT (HOURS)
£1.3bn	581,505
SPEND WITH EXTERNAL SUPPLIERS	**HOURS OF EMPLOYEE TIME VOLUNTEERED**
£8.3bn	48,347

See Stakeholder Engagement pages 50 to 55

5. Grow installed original equipment base
Increasing our installed product base generates both in-year growth and the potential for our business to capture long-term service revenue.

6. Capture through-life value of in-service products
Our substantial installed product base provides a large, diverse and long-term revenue, profit and cash flow stream.

7. Generate stakeholder value
Our activities worldwide generate added value for a wide range of stakeholders.

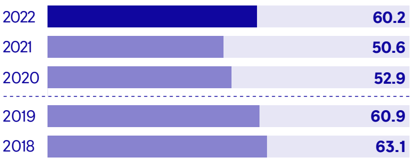
Principal risks
a Safety
b Business continuity
c Climate change
d Competitive environment
e Compliance
f Cyber threat
g Financial shock
h Market shock
i Political risk
j Transformation
k Talent and capability

See Principal Risks page 42 to 47

KEY PERFORMANCE INDICATORS

FINANCIAL PERFORMANCE INDICATORS [1,2]

ORDER BACKLOG (£BN)

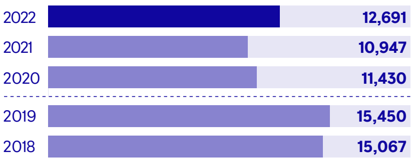


How we define it
Total value of firm orders placed by customers for delivery of products and services where there is no right to cancel. This KPI is the same as the statutory measure for order backlog. See note 2 on page 129 for more information.

Why it is important
Order backlog provides visibility of future business activity.

Link to remuneration
Customer orders drive future revenue growth which, in turn, enables profit and cash flow growth. Profit and free cash flow performance are key financial metrics in the Rolls-Royce Incentive Plan, accounting for 60% of the metrics in 2022.

UNDERLYING REVENUE (£M)

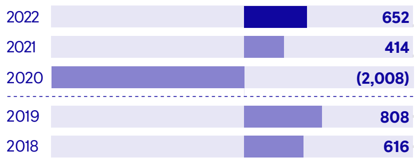


How we define it
Revenue generated from operations at the average exchange rate achieved on effective settled derivative contracts in the period that the cash flow occurs. See note 2 on page 125 for more information.

Why it is important
Underlying revenue provides a measure of business growth and activity.

Link to remuneration
Underlying revenue growth maximises the opportunity to improve profit and free cash flow performance in the year, both of which are financial metrics in the Rolls-Royce Incentive Plan.

UNDERLYING OPERATING PROFIT/(LOSS) (£M)

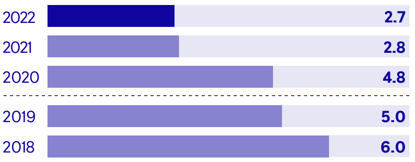


How we define it
Operating profit generated from operations at the average exchange rate achieved on effective settled derivative contracts in the period that the cash flow occurs. It excludes M&A, exceptional items and certain other items outside of normal operating activities. See note 2 on page 125 for more information.

Why it is important
Underlying operating profit indicates how the effect of growing revenue and control of our costs delivers value for our shareholders.

Link to remuneration
Profit is a key financial performance measure for our Rolls-Royce Incentive Plan.

CAPITAL EXPENDITURE AS A PROPORTION OF UNDERLYING REVENUE (%)

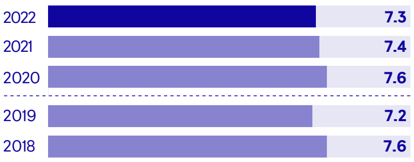


How we define it
Cash purchases of property, plant and equipment (PPE) in the year for continuing operations relative to underlying revenue.

Why it is important
This measure demonstrates the balance between essential investments in infrastructure and delivering short-term shareholder returns.

Link to remuneration
Disciplined allocation of capital expenditure optimises in-year profit and cash flow performance without compromising longer-term growth. Long-term metrics in the Rolls-Royce Incentive Plan in 2022 and 2023 reward strong financial performance.

SELF-FUNDED R&D AS A PROPORTION OF UNDERLYING REVENUE (%)

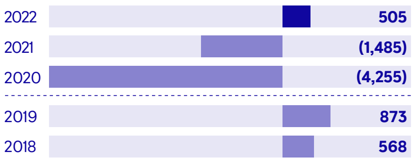


How we define it
In-year self-funded cash expenditure on R&D before any capitalisation or amortisation relative to underlying revenue.

Why it is important
This measure demonstrates the balance between long-term strategic investments and delivering short-term shareholder returns.

Link to remuneration
Disciplined control and allocation of R&D expenditure optimises in-year profit and cash flow performance without compromising long-term growth through innovation. There is a balance of long-term metrics which reward strong financial performance and also relative returns to our shareholders through total shareholder return (TSR) in the 2023 Incentive Plan.

FREE CASH FLOW FROM CONTINUING OPERATIONS (£M)



How we define it
Free cash flow is the change in cash and cash equivalents excluding: transactions with ordinary shareholders; amounts spent or received on activity related to business acquisitions or disposals; financial penalties paid; exceptional restructuring payments; proceeds from increase in loans; and repayment of loans. Cash flow from operating activities is our statutory equivalent. See note 28 on page 172.

Why it is important
Free cash flow is a key metric used to measure the performance of our business and how effectively we are creating value for our shareholders. It enables the business to fund growth, reduce debt and make shareholder payments.

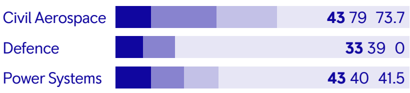
Link to remuneration
Free cash flow is a key financial metric in the Rolls-Royce Incentive Plan.

[1] The adoption of IFRS 16 *Leases* in 2019 had no material impact on our financial KPIs
[2] 2021 figures represent the results of continuing operations. 2020 figures have been restated, where relevant, to show ITP Aero as a discontinued operation in line with 2021 reporting. 2018 and 2019 figures have not been restated

A reconciliation from the alternative performance measure to its statutory equivalent can be found on pages 203 to 206

NON-FINANCIAL PERFORMANCE INDICATORS

CUSTOMER METRIC (%)



Shown as a percentage of maximum outturn

■ 2022 ■ 2021 ■ 2020

How we define it
In 2019, we introduced a new balanced scorecard of metrics for each business. The business scorecards include on-time delivery, engine availability and quality amongst other indicators. The focus for 2022 has been on the individual business performance against the scorecards.

Why it is important
Customer satisfaction demonstrates whether we are meeting our commitments to our customers across our businesses. This, in turn, drives our cash and profitability.

Link to remuneration
This metric accounts for up to 15% of the individual business incentive outturns.

EMPLOYEE ENGAGEMENT (SCORED 1 TO 5) [3]

How we define it
In 2019, we introduced a new survey, Gallup Q12. Responses are scored on a scale of one to five. The employee engagement score averages the responses to all 12 questions in the survey. Our target for 2022 was to score a grand mean of 3.84. See page 39 for more information.

Why it is important
Our people are crucial to delivering future business success. This is an objective way to assess how engaged our employees are with the business and its leaders.

Link to remuneration
Employee engagement performance against our target accounts for up to 10% of the Rolls-Royce Incentive Plan.

SUSTAINABILITY

The metrics for the Rolls-Royce Incentive Plan combine short-term measures which focus on in-year performance, with longer-term strategic measures. The sustainability metric is a longer term measure with targets set at the start of 2021, which will form 5% of the 2023 Rolls-Royce Incentive Plan.

How we define it
Targets for the three year performance period ending 31 December 2023 relate to product compatibility with sustainable fuels.

Why it is important
Proving compatibility of our products with sustainable fuels is central to our strategy for supporting customers in the energy transition.

Link to remuneration
This metric accounts for up to 5% of the Rolls-Royce Incentive Plan for 2023.

[3] External assurance over the employee engagement score is provided by Bureau Veritas. See page 199 for their assurance statement

A reconciliation from the alternative performance measure to its statutory equivalent can be found on pages 203 to 206

FINANCIAL REVIEW

We delivered on our remaining short-term commitments in 2022. We continue to focus on improving our performance to strengthen our balance sheet and put us on a path to generate long-term sustainable value for stakeholders.

PANOS KAKOULLIS, CHIEF FINANCIAL OFFICER

In 2022, our underlying revenue was £12.7bn, underlying operating profit increased to £652m and we returned to a positive cash flow £505m. We completed our programme of disposals, achieving around £2bn in total proceeds, which we used to repay debt. Strengthening our balance sheet is a priority and we remain committed to achieving an investment grade rating in the medium term through performance improvements. Although our 2022 results were improved year-on-year, we must do more. We will be bolder with our ambitions in 2023 and beyond as we deliver sustainable value to our stakeholders.

Demand for our products and services continued to meaningfully improve, with a record year for order intake in Power Systems, accompanied by continued recovery in Civil Aerospace flying hours and progress in Defence, underpinned by key contract wins.

Financial performance

Our financial performance improved in 2022, largely driven by the recovery of our end markets following the pandemic. Large engine flying hours were up 35% compared with 2021. We generated free cash flows of £505m, a £2.0bn improvement on the prior year, reflecting higher large engine flying hour receipts, which grew ahead of shop visit events. On an organic basis, underlying revenue improved by 14% and underlying operating profit improved by 48%, helped by the mix of OE engine sales in Civil Aerospace. In 2022, there was a higher volume and different mix of large spare engine sales, with more third party sales to capacity providers than in the prior year. Spare engines carry a higher margin than installed engine sales and accounted for a greater proportion of total engine sales than the 10% to 15% we typically expect in a year. Spare engine sales will be higher than the typical range next year also, as we grow the pool of spare engines to underpin fleet health and improve resilience. Contractual improvements in 2022 also increased the expected returns on our long-term contracts. These contract improvements trigger the recognition of additional revenue and profits. These catch-ups are a normal part of our business and are a good indicator of progressive and sustainable performance improvement.

In 2022, we faced challenges from supply chain disruption and inflation. We are actively managing these headwinds through a sharper focus on pricing, productivity and costs and we will continue to address these areas as we strive to succeed in a challenging external environment. Examples of our actions to tackle these issues include our partnership approach with key suppliers, ensuring that we have contractual pricing protection in place through long-term contracts and the hedging of key raw materials and energy. We are tackling rising costs and supply chain constraints by repairing and reusing spare parts where we can. We will continue to improve our productivity and efficiency as we remain focused on these areas, as well as being more disciplined on our commercial terms.

Strengthening our balance sheet

Strengthening our balance sheet remains a high priority. Our net debt was reduced to £3.3bn from £5.2bn. Since 2020, we have completed four disposals, including the sale of ITP Aero in September 2022 with proceeds of €1.6bn and a dividend of €0.1bn paid shortly prior to completion. The proceeds of this disposal were used to repay a £2bn loan, which was supported by an 80% guarantee from UK Export Finance. As a result, we ended the year with £4.1bn of drawn debt, all of which is on fixed interest rates and £3.3bn net debt, including £2.6bn of cash and £1.8bn of lease liabilities. Our credit ratings are currently below investment grade, which is unacceptable and we must address this. We have seen positive momentum with outlook upgrades from Fitch, Moody's and S&P Global in 2022. Our liquidity position remains strong with £8.1bn of liquidity and no significant debt maturities before 2024.

Simplification of reporting

We are committed to simplifying our reporting and the way we communicate our business performance. In 2022, we held an investor day at our Civil Aerospace site in Derby, UK, which was also streamed online. This event brought to life the changes we have started to make in our business to reduce cost and improve performance. This additional information, illustrated by a number of examples, helped investors to better understand the way our business works and how we are focusing on the improvements required to deliver better financial performance.

Other examples of how we are driving simplicity include our new approach to foreign exchange hedging. Historically, we have hedged a declining percentage of our net foreign exchange exposure across a rolling ten-year horizon, based on our projected net US dollar revenues. Under our new approach, we will carry a smaller hedge book, with a declining percentage of cover over a five-year period, which will mean that market movements in foreign exchange will impact us sooner. This change is more cost effective, brings us in line with our peers and allows us to react quicker to changes in the external environment. We also refreshed our results press release to make it clearer and more concise.

Investing wisely

Capital allocation is critical to generating the right returns from our business. Our first priority is to reduce our debt, accelerating progress to an investment grade credit rating. We also recognise the importance of shareholder returns, both from investing in high return opportunities and from shareholder payments, which we aim to resume once our balance sheet is stronger.

We have strict criteria that we follow when considering investments. Firstly, any investment must be aligned to our strategy, taking us in the right direction to achieve our goals and vision. Linked to this are our strict criteria on sustainability and carbon impact, where investment opportunities must demonstrate alignment with our decarbonisation ambitions. Secondly, it needs to have a risk and reward profile that generates value. Our investments aim to generate a combination of near, medium and long-term returns. We are looking to strike a balance of protecting and growing our established businesses and pursuing long-term growth opportunities.

As we focus on strengthening our balance sheet we will be vigilant with our capital allocation decisions. In 2022, we spent £1.3bn on research and development, £359m of which was paid for by funding from third parties. Investments made in 2022 included engineering to increase time on wing for our in-service engines, leading to better aftermarket margins as well as longer-dated investments in new products. Not all of our capital allocation decisions are based purely on commercial returns. The health of our people and the safety of our processes and products remain the top priority, where investment will be made to ensure our people can be at their best in a safe environment. In 2022, we approved an investment to replace one of our ageing Defence test beds with a state-of-the-art facility, ensuring on-going health and safety standards are met.

Outlook

A continued recovery in our end markets and the actions we are taking give us confidence in delivering higher profit and cash flows in 2023. This is based on large engine flying hours at 80% to 90% of the 2019 level and 1,200 to 1,300 total shop visits. We expect underlying operating profit between £0.8bn and £1.0bn, including £100m to £200m of targeted contract improvements (2022: £319m). We expect free cash flow of between £0.6bn to £0.8bn, which is based on £500m to £700m growth in the Civil LTSA creditor (2022: £792m), a year-on-year headwind of approximately £200m associated with legacy Boeing OE concessions and around £100m adverse impact in 2023 due to fires at two suppliers' premises in late 2022 and early 2023. This cash impact will reverse in 2024.

Panos Kakoullis
Chief Financial Officer

Statutory and underlying Group financial performance from continuing operations

£ million	2022 Statutory	2022 Impact of hedge book [1]	2022 Impact of acquisition accounting	2022 Impact of non-underlying items	2022 Underlying	2021 Underlying
Revenue	13,520	(829)	–	–	12,691	10,947
Gross profit	2,757	(264)	58	(74)	2,477	1,996
Operating profit	837	(264)	58	21	652	414
Gain arising on disposal of businesses	81	–	–	(81)	–	–
Profit before financing and taxation	918	(264)	58	(60)	652	414
Net financing costs	(2,420)	1,935	–	39	(446)	(378)
(Loss)/profit before taxation	(1,502)	1,671	58	(21)	206	36
Taxation	308	(416)	(9)	69	(48)	(26)
(Loss)/profit for the year from continuing operations	(1,194)	1,255	49	48	158	10
Basic (loss)/earnings per share (pence)	(14.24)				1.95	0.11

[1] Reflecting the impact of measuring revenue and costs at the average exchange rate during the year and the valuation of assets and liabilities using the year end exchange rate rather than the rate achieved on settled foreign exchange contracts in the year or the rate expected to be achieved by the use of the hedge book

- **Revenue:** Underlying revenue of £12.7bn was up 14%, largely driven by underlying revenue increases across Civil Aerospace, Defence and Power Systems. Statutory revenue of £13.5bn was 21% higher compared with 2021. The difference between statutory and underlying revenue is driven by statutory revenue being measured at average prevailing exchange rates (2022: GBP:USD1.24; 2021: GBP:USD1.38) and underlying revenue being measured at the hedge book achieved rate during the year (2022 GBP:USD1.50; H1 2021: GBP:USD1.39; H2 2021: GBP:USD1.59).
- **Operating profit:** Underlying operating profit of £652m (5.1% margin) versus £414m (3.8% margin) in the prior year. The year-on-year growth was led by Civil Aerospace and Power Systems, partly offset by marginally lower year-on-year profits in Defence and increased investment in New Markets. Statutory operating profit was £837m, higher than the £652m underlying operating profit largely due to the £264m negative impact from currency hedges in the underlying results. Net charges of £21m were excluded from the underlying results as these related to non-underlying items comprising: net restructuring charges of £47m; net impairments of £65m, partly offset by the write back of exceptional Trent 1000 programme credits of £69m; and a £22m pension past service credit.
- **Profit before taxation:** Underlying profit before tax of £206m included £(446)m net financing costs primarily related to net interest payable. Statutory loss before tax of £(1,502)m included £(1,579)m net fair value losses on derivative contracts, £(308)m net interest payable and a net £81m profit from disposals of businesss from continuing operations.
- **Taxation:** Underlying taxation charge of £(48)m (2021: £(26)m). This reflects a tax charge on overseas profits of £(175)m and a tax credit due to increases in certain UK deferred tax assets of £127m. Deferred tax has not been recognised on current year UK tax losses. The tax charge in 2021 was driven by similar factors.

Free cash flow

£ million	2022 Cash flow	2022 Impact of hedge book	2022 Impact of acquisition accounting	2022 Impact of other non-underlying items	2022 Funds flow	2021 Funds flow
Operating profit	837	(264)	58	21	652	414
Operating profit/(loss) from discontinued operations	86	–	–	–	86	(43)
Depreciation, amortisation and impairment	1,076	–	(58)	(65)	953	971
Movement in provisions	(197)	91	–	83	(23)	(136)
Movement in Civil LTSA balance	1,158	(366)	–	–	792	66
Other operating cash flows [1]	72	(53)	–	22	41	(90)
Operating cash flow before working capital and income tax	3,032	(592)	–	61	2,501	1,182
Working capital (excluding Civil LTSA balance) [2]	(348)	(165)	–	(19)	(532)	(810)
Cash flows on other financial assets and liabilities held for operating purposes	(660)	737	–	–	77	(85)
Income tax	(174)	–	–	–	(174)	(185)
Cash from operating activities	1,850	(20)	–	42	1,872	102
Capital element of lease payments	(218)	20	–	–	(198)	(374)
Capital expenditure and investment	(512)	–	–	36	(476)	(426)
Interest paid	(352)	–	–	–	(352)	(331)
Settlement of excess derivatives	(326)	–	–	–	(326)	(452)
Other	49	–	–	(78)	(29)	39
Free cash flow	491	–	–	–	491	(1,442)
– of which is continuing operations	505				505	(1,485)

[1] Other operating cash flows includes profit/(loss) on disposal, share of results and dividends received from joint ventures and associates, interest received, flows relating to our defined benefit post-retirement schemes, and share based payments
[2] Working capital includes inventory, trade and other receivables and payables, and contract assets and liabilities (excluding Civil LTSA balances)

Free cash flow in the year was £0.5bn, an improvement of £2.0bn compared with the prior year driven by:

— **Operating cash flow before working capital and income tax of £2.5bn,** £1.3bn higher year-on-year. The improvement at the Group level was principally due to higher flying hours in Civil Aerospace. Large engine flying hours increased by 35%, driving a £1.3bn increase in invoiced EFH receipts (from £2.3bn in 2021 to £3.6bn in 2022). Large engine major shop visit volumes of 248 were 19% higher than in the prior year (2021: 208). The movement in provisions of £(23)m largely related to utilisation of the Trent 1000 provision and movements in the contract loss provisions. Other operating cash flow movement of £41m included £36m interest received, the £131m improvement year-on-year was mainly due to lower pension contributions and higher dividends received from joint ventures.

— **Working capital £(0.5)bn,** £0.3bn better year-on-year. Supply chain disruption resulted in an increase in inventories through 2022, notably in Civil Aerospace and Power Systems, which partly unwound at the end of the year. This was partly offset by a net inflow across payables and receivables reflecting collections of overdue debts in Civil Aerospace (c£180m in 2022), increased advance payment receipts in Power Systems (a c£150m year-on-year benefit) and a £63m advance payment received in Defence.

— **Income tax of £(174)m,** net cash tax payments in 2022 were £(174)m (2021: £(185)m).

— **The capital element of lease payments was £(198)m,** £(176)m lower than 2021 (£(374)m). In the prior year the elevated cost was driven by end of lease payments made on a small number of engines, as well as timing impacts on lease payments, with 2022 returning to more typical levels.

— **Capital expenditure and investments of £(476)m,** comprising £(302)m PPE additions net of disposals, £(202)m intangibles additions, partly offset by a net movement in investments of £28m. The combined additions were similar to last year.

— **Interest paid of £(352)m,** including lease interest payments, similar to the £(331)m in 2021. Following the repayment of the £2bn UK Export Finance backed loan in September 2022, we would expect interest paid to fall in 2023.

— **Settlement of excess derivative contracts of £(326)m,** down from £(452)m in 2021. The decrease was in line with previously communicated guidance and reflects the profile of derivative contracts taken out to reduce the size of the hedge book. In total £710m of excess derivative settlements are left to be settled between 2023 and 2026.

Balance sheet

£ million	2022	2021	Change
Intangible assets	4,098	4,041	57
Property, plant and equipment	3,936	3,917	19
Right of use assets	1,061	1,203	(142)
Joint ventures and associates	422	404	18
Contract assets and liabilities	(10,681)	(8,836)	(1,845)
Working capital [1]	2,297	1,458	839
Provisions	(2,333)	(1,582)	(751)
Net debt [2]	(3,251)	(5,110)	1,859
Net financial assets and liabilities	(3,649)	(3,034)	(615)
Net post-retirement scheme deficits	(420)	(225)	(195)
Taxation	2,468	1,787	681
Held for sale [3]	–	1,305	(1,305)
Other net assets and liabilities	36	36	–
Net liabilities	**(6,016)**	**(4,636)**	**(1,380)**
Other items			
US$ hedge book (US$bn)	19	22	
Civil LTSA asset	885	915	
Civil LTSA liability	(8,257)	(7,129)	
Civil net LTSA liability	(7,372)	(6,214)	

[1] Net working capital includes inventory, trade receivables and payables and similar assets and liabilities
[2] Net debt (adjusted by £0.1bn to exclude net debt held for sale in 2021) includes £86m (2021: £37m) of the fair value of derivatives included in fair value hedges and the element of fair value relating to exchange differences on the underlying principal of derivatives in cash flow hedges
[3] Held for sale in 2021 mainly related to ITP Aero which was disposed of on 15 September 2022

Key drivers of balance sheet movements were:

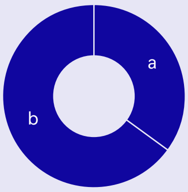
- **Contract assets and liabilities:** The £(1,845)m movement in the net liability balance was mainly driven by an increase in deposits, foreign exchange movements and invoiced LTSA receipts in Civil Aerospace exceeding revenue recognised in the year, partly offset by £360m positive LTSA catch-ups.
- **Working capital:** The £2.3bn net current asset position was £0.8bn higher than prior year, due to increased inventory of £1.0bn mostly in Civil Aerospace due to delayed outputs and supply chain disruption and Power Systems to support sales. Receivables increased by £1.6bn and payables increased by £(1.8)bn primarily driven by ITP Aero being external to the Group at year-end. Other drivers included higher trading volumes resulting in higher payables and receivables.
- **Provisions:** The £(751)m increase primarily reflected the adoption of the amendment to IAS 37 for Onerous Contracts – Cost of Fulfilling a Contract which increased contract loss provisions by £(723)m on 1 January 2022. The amendment clarifies that the direct cost of fulfilling a contract comprises the incremental costs of fulfilling that contract and also an allocation of other costs that relate directly to fulfilling contracts.
- **Net debt:** Decreased from £(5.1)bn to £(3.3)bn driven by the completion of the disposal programme and free cash inflow of £0.5bn. Our liquidity position is strong with £8.1bn of liquidity including cash and cash equivalents of £2.6bn and undrawn facilities of £5.5bn. Net debt included £(1.8)bn of lease liabilities (2021: £(1.7)bn).
- **Net financial assets and liabilities:** A £(615)m increase in the net financial liabilities driven by a change in fair value of derivative contracts largely due to the impact of the movement in GBP:USD exchange rates, partly offset by deals that matured in the year.
- **Net post-retirement scheme deficits**: A £(195)m increase in the net deficit driven by an increase in bond yields and inflation impacting both plan assets and obligations.
- **Taxation:** The net tax asset increased by £681m, most of which related to an increase in the deferred tax asset on unrealised losses on derivatives of £329m and certain other UK deferred tax assets of £118m reflecting tax relief that will be taken in the future, based on profit forecasts. There has also been a £165m decrease in deferred tax liabilities, the majority of which related to a reduction in the UK pension surplus.

Civil Aerospace

Civil Aerospace is a major manufacturer of aero engines for the large commercial aircraft, regional jets and business aviation markets. The business uses its engineering expertise, in-depth knowledge and capabilities to provide through-life service solutions for its customers.

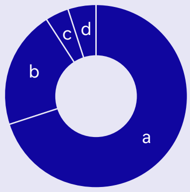
UNDERLYING REVENUE	UNDERLYING OPERATING PROFIT/(LOSS)	ORDER BACKLOG
£5,686m	**£143m**	**£47.7bn**
2021: £4,536m	2021: £(172)m	2021: £41.1bn

UNDERLYING REVENUE MIX



a. OE	**35%**
b. Services	**65%**

UNDERLYING REVENUE MIX BY SECTOR



a. Large Engines	**70%**
b. Business Aviation	**21%**
c. Regional	**4%**
d. V2500	**5%**

Market overview

The Civil Aerospace market continues to recover from the effects of the COVID-19 pandemic. In 2022, recovery continued and our large engine flying hours (EFH) were 64% of 2019 levels, a solid improvement from 48% in 2021. The restrictions in China were a key hurdle to get back to pre-pandemic levels, along with increased staffing for airlines and airports to meet demand in countries that have largely recovered. Business aviation flying hours continue to be above 2019 levels and original equipment (OE) engine deliveries are increasing as expected with a strong start for our Pearl family of engines. Industry forecasts for the recovery in long-haul travel are positive with a predicted return to 2019 large engine flying levels in 2024.

The aerospace market was impacted by the Russia-Ukraine conflict which caused supply-chains to become strained and some raw materials have been in short supply for the whole industry. We have actively managed the disruption by having diversified sources of supply and through the use of hedging for near and mid-term price protection.

Inflation risk increased in 2022, with higher costs for energy, raw materials, freight and wages impacting our own costs and those of our suppliers. We manage inflation risk by having long-term contracts with our customers, suppliers and hedging counterparties and by having a cost aware culture that focuses on cost saving initiatives and efficiencies. As a result, we were able in part to protect margin against inflation in 2022. Our actions resulted in improvement in our long-term service agreement margins, which contributed to positive catch-ups in the year.

Market activity for large engine passenger aircraft is now increasing, albeit from a low base as a result of the pandemic. OE deliveries rose by 15% year-on-year, with 165 Business aviation deliveries (2021: 114) and 190 total large engine deliveries (2021: 195). In 2022, we delivered 44 large spare engines (2021: 36), which represented 23% of total large engine deliveries (2021: 18%). This is above the typical range of 10% to 15% of total engine deliveries, as we grow the pool of spare engines to underpin fleet health and improve resilience. We expect this elevated level of spare engine deliveries to continue in 2023 and 2024.

Total shop visits were 1,044 versus 953 in 2021. There were 248 large engine major shop visits in 2022 versus 208 in 2021. In 2022, we agreed with Air China to create a joint-venture overhaul facility that will eventually support up to 250 shop visits per year.

Financial performance

Underlying revenue of £5.7bn was up 25%. OE revenue of £2.0bn was up 23% reflecting higher spare engine deliveries. Services revenue of £3.7bn was up 26% on the prior year, reflecting higher large engine shop visits, aftermarket revenue growth from business aviation, regional and V2500, and positive LTSA catch-ups £360m, (2021: £214m).

Underlying operating profit was £143m (a 2.5% margin) versus a loss of £(172)m in 2021. The year-on-year increase was driven by improvements in LTSA contract margins, with an onerous provision credit of £51m (2021: a £122m charge) and £319m of positive LTSA catch-ups (2021: £256m), a higher volume and different mix of large spare engine sales with more third party sales to capacity providers than in the prior year, increased aftermarket profit, and reduced losses on installed large engine OE deliveries. This was partly offset by the non-repeat of a foreign exchange revaluation credit of c£140m in 2021.

Trading cash flow was £226m versus £(1,670)m in the prior year. The improvement was due to higher engine flying hour receipts reflecting the growth in LTSA flying hours, which grew at a materially faster rate than shop visits in 2022. Cash flows in 2022 benefited from the recovery of overdue balances from airlines incurred during the pandemic of c£180m.

Improvements in underlying operating profit and cash flows were delivered despite the challenges associated with inflation and the supply chain, which are expected to persist in 2023.

Financial overview

£ million	2022	Organic change [1]	FX	2021	Change	Organic change [1]
Underlying revenue	**5,686**	**1,126**	**24**	**4,536**	**25%**	**25%**
Underlying OE revenue	1,982	374	(4)	1,612	23%	23%
Underlying services revenue	3,704	752	28	2,924	27%	26%
Underlying gross profit	**853**	**359**	**20**	**474**	**80%**	**76%**
Gross margin %	15.0%			10.4%	4.6%pt	4.3%pt
Commercial and administrative costs	(371)	(71)	(3)	(297)	25%	24%
Research and development costs	(452)	(15)	(3)	(434)	4%	3%
Joint ventures and associates	113	23	5	85	33%	27%
Underlying operating profit/(loss)	**143**	**296**	**19**	**(172)**	**nm**	**nm**
Underlying operating margin %	**2.5%**			**(3.8)%**	**6.3%pt**	**6.0%pt**

	2022	2021	Change
Trading cash flow	**226**	**(1,670)**	**1,896**

Key operational metrics:

	2022	2021	Change
Large engine deliveries	190	195	(5)
Business jet engine deliveries	165	114	51
Total engine deliveries	**355**	**309**	**46**
Large engine LTSA flying hours (million)	10.0	7.4	2.6
Large engine LTSA major refurbs	248	208	40
Large engine LTSA check & repair	455	402	53
Total large engine LTSA shop visits	**703**	**610**	**93**

1 Organic change is the measure of change at constant translational currency applying full year 2021 average rates to 2022. All underlying income statement commentary is provided on an organic basis unless otherwise stated

Operational and strategic progress

Within our Civil Aerospace business we have a large installed product base of more than 4,100 large engines and around 8,600 business aviation and regional engines. Around two thirds of these are covered by LTSA contracts, which provide aftermarket services for our customers for many years. Our order book in Civil Aerospace stands at 1,300 new large engines, due for delivery over the next few years.

OE orders slowed during the COVID-19 pandemic but recovered substantially in 2022 with considerable orders from Malaysia Aviation Group, Norse Atlantic Airways and Qantas, as well as a large order with Air India in 2023. These OE orders also include TotalCare agreements, which will create value into the future and demonstrate a return in demand, which we expect to continue into 2023.

Increasing time on wing and reducing the cost of our maintenance activities are key value drivers in our aftermarket business model. In May, at our Civil Aerospace investor day, we talked about how product improvement, life limited parts extensions, enhancing temperature limits and better aircraft operations are all contributing to a greater time on wing. In addition, utilising lean engine overhaul methods, increased re-use of parts, more repair of parts and advanced repair technologies are reducing our shop visit costs.

The launch of the Airbus A350 as a freighter aircraft in 2022 was an important addition and gives us significant new opportunity in the freight market. Furthermore, we are seeing an increase in passenger to freighter conversions on the Airbus A330, which will keep our engines flying for longer and extend our aftermarket contracts.

As shop visit events return, we will assess the size of our operation and take action where required. We continue to grow our MRO network to support future shop visit volumes, for example the launch of our new MRO partnership with Air China.

We remain focused on the decarbonisation of the civil aerospace market and we will continue to collaborate with third parties to explore sustainable aviation fuel (SAF) and clean propulsion systems. One of our commitments is to demonstrate that all of our Trent and Business Aviation engines are compatible with 100% SAF by the end of 2023. All our Trent and Business Aviation engines are already certified and ready to operate on a 50% SAF blend with traditional fossil-based aviation jet fuels. A recent agreement with Air bp will ensure that all fuel supplied for engine testing at our Derby, UK, Bristol, UK, and Dahlewitz, Germany, facilities will be 10% SAF. In addition, Air bp will also provide the fuel for the testing of our UltraFan demonstrator engine, which will be carried out entirely on SAF.

In business aviation, our Pearl 10X engine development programme continues to make good progress. The Pearl 10X, which is the newest member of the state-of-the-art Pearl family and the first of our engines to power a business aviation aircraft produced by Dassault, has surpassed its target thrust level on the first test run, making it the most powerful business aviation engine in our portfolio. Furthermore, the development programme has included rigorous testing of the new ultra-low emissions ALM combustor, which is compatible with 100% SAF. Further progress was made on our Pearl 700 development programme for the new Gulfstream G700/800, with EASA engine certification achieved in September 2022.

Outlook

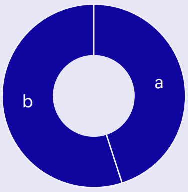
Industry forecasts predict a continued recovery in international travel which is a key driver of our financial performance. In 2023, we expect large EFH to be in the range of 80% to 90% of the 2019 levels compared with 64% in 2022. Business and regional markets are expected to continue to perform above 2019 levels, with growth year-on-year.

Defence

Defence is a market leader in aero engines for military transport and patrol aircraft with strong positions in combat and trainer applications. It has significant scale in naval and designs, supplies and supports the nuclear propulsion plant for all of the UK Royal Navy's nuclear submarines.

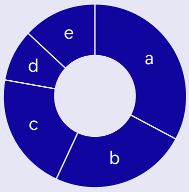
UNDERLYING REVENUE	UNDERLYING OPERATING PROFIT	ORDER BACKLOG
£3,660m	**£432m**	**£8.5bn**
2021: £3,368m	2021: £457m	2021: £6.5bn

UNDERLYING REVENUE MIX



a. OE	**45%**
b. Services	**55%**

UNDERLYING REVENUE MIX BY SECTOR



a. Transport	**33%**
b. Combat	**24%**
c. Submarines	**21%**
d. Naval	**9%**
e. Other	**13%**

Market overview

We continue to be a trusted and key supplier to governments in the provision of defence power for the protection of society, preservation of peace and in underpinning economic and social stability. We operate with integrity in a tightly regulated and closely controlled industry in the provision of defence power. We remain long-term partners in the development, manufacture and maintenance of countries' defences, as we power critical military assets that deter threats and save lives.

Defence budgets are increasing globally and this increased investment is providing for the long-term success of our Defence business and will underpin new contract wins to provide robust value to the Group over many decades. However, due to the long life of our Defence products and the availability and readiness of fleets currently, we are not immediately affected by changes to defence demand and governmental budget uplifts.

The defence market is long cycle, with production programmes spanning decades. Customer contracts typically range between one and five years and the Defence business has been going through a cycle of renewals. In 2022, contract renewals totalling USD1.8bn were agreed, including five additional years of support for the US Navy T-45 flight trainer aircraft and C-130J and KC-130J transport airport aircraft for the US Marine Corps and Kuwait. In addition, in 2022, we won a contract with the UK Ministry of Defence to provide support for our Adour engine which powers the Hawk Jet trainer aircraft. This 11-year contract, worth £105m, will enable us to provide the maintenance, repair and overhaul of the two Adour engines in service in the UK.

There was a high level of programme win activity in our Defence business in 2022, with the end of the year seeing announcements that will underpin the long-term outlook for the business. The Bell V-280 Valor, powered by our AE1107F engines, was selected by the US Army for the future long range assault aircraft programme. Meanwhile, the governments in the UK, Italy and Japan announced the launch of the new global combat air programme (GCAP) to create a sixth-generation fighter jet due to enter service in 2035, building on the research and development progress already made by team tempest. Australia concluded negotiations for the first deliveries of the Australian Hunter frigate programme which will be powered by our MT30 gas turbine engine.

Financial performance

Order intake in our Defence business was £5.4bn in 2022 versus £2.3bn in 2021, with a book-to-bill of 1.5x versus 0.7x last year. The Bell V-280 Valor, powered by our AE1107F engines, was selected by the US Army for the Future Long Range Assault Aircraft programme. Major contract awards included the renewal of $1.8bn of services contracts in the U.S. for trainer and transport aircraft over the next five years. These awards, combined with increased military activity and spending underpin the long-term outlook for the business. Our order backlog at the year end was £8.5bn, with 86% order cover in 2023 and a high degree of cover in 2024 and beyond.

Revenue increased 2% to £3.7bn. OE revenue was up 10% year-on-year, with strong growth in Submarines along with new programmes (including B-52 and UK Combat). This more than offset reductions in services revenue, down 3% due to the non-repeat of legacy spare parts sales made in 2021.

Operating profit was £432m (11.8% margin) versus £457m (13.6% margin) in the prior year, reflecting the non-repeat of £45m of high margin one time legacy spare parts sales in the prior year and the changing mix of the business. Self-funded R&D and investment levels were elevated, as we support growth across the portfolio including the UK Future Combat programme and opportunities in North America.

Trading cash flow of £426m improved versus £377m last year, despite slightly lower underlying profit and increased inventory, due to an advance payment from one of our customers of £63m.

Financial overview

£ million	2022	Organic change [1]	FX	2021	Change	Organic change [1]
Underlying revenue	**3,660**	**78**	**214**	**3,368**	**9%**	**2%**
Underlying OE revenue	1,634	136	87	1,411	16%	10%
Underlying services revenue	2,026	(58)	127	1,957	4%	(3)%
Underlying gross profit/(loss)	**726**	**(28)**	**33**	**721**	**1%**	**(4)%**
Gross margin %	19.8%			21.4%	(1.6)%pt	(1.3)%pt
Commercial and administrative costs	(174)	(6)	(7)	(161)	8%	4%
Research and development costs	(122)	(9)	(8)	(105)	16%	9%
Joint ventures and associates	2	(1)	1	2	–	–
Underlying operating profit	**432**	**(44)**	**19**	**457**	**(5)%**	**(10)%**
Underlying operating margin %	**11.8%**			**13.6%**	**(1.8)%pt**	**(1.6)%pt**

	2022	2021	Change
Trading cash flow	**426**	**377**	**49**

[1] Organic change is the measure of change at constant translational currency applying full year 2021 average rates to 2022. All underlying income statement commentary is provided on an organic basis unless otherwise stated

Operational and strategic progress

At a time where there is heightened focus on military and defence applications, we continue to support our customers in maintaining peace and providing protection for society. Rolls-Royce does not provide or manufacture weapons for our customers.

Our position in the US has been further solidified with the completion of a major investment programme in our naval facilities in Pascagoula, Mississippi and Walpole, Massachusetts. These will provide increased capability and capacity to meet US Navy demand for the manufacture of propellers and propulsion components for their naval platforms. These investments, in addition to the previous investment made in our Indianapolis facility, mean we are well positioned to provide the US Department of Defence with world-class products and services for decades to come.

A new market opening up for us is participation in the manufacture of advanced nuclear microreactors for deployable military applications and base power in the US. We are proud to be a key part of a contract awarded by the US Department of Defense to build the first full-scale transportable microreactor prototype for delivery in 2024, developing technology which will enable militaries to become untethered from fossil fuels and increase their energy resilience. The transportable microreactor will also have potential for commercial applications such as disaster recovery and remote location power coverage.

In the UK, we opened our nuclear skills academy based in Derby to enhance the pipeline of talent in this field. The academy has funding to take on 200 apprentices each year for the next ten years and will be a key enabler as we explore solutions to satisfy the growing demand of society for clean, carbon-free energy.

In July, at the Farnborough Air Show, the UK Government's defence, science and technology laboratory and the UK's national security strategic investment fund announced a joint programme to deliver significant enhancements to UK defence capabilities through the development of innovative hypersonic technologies. Rolls-Royce is partnered with Reaction Engines and the Royal Air Force's rapid capabilities office on the hypersonic air vehicle experimental programme which aims to establish the UK as a leader in reusable hypersonic air systems.

In November, the Rolls-Royce Trent 700 engine helped the Royal Air Force and industry partners carry out a world-first 100% sustainable fuel flight using a military aircraft of its size, and the first of any aircraft type in the UK.

Our Defence site at Bristol, UK became the first Rolls-Royce production facility to achieve net zero carbon status on operational emissions (excluding product test emissions) during the year. The site utilises a combination of rooftop solar and onsite ground source heat pumps, alongside the procurement of renewable electricity and gas. A small quantity (<10%) of independently verified carbon offsets were used to achieve net zero carbon status where there is no immediately viable alternative to mitigating residual emissions, such as diesel usage in emergency generators. We will apply learnings from the decarbonisation of operations at Bristol, UK, to the wider estate to help support our goal of reaching net zero facility emissions by 2030.

Outlook

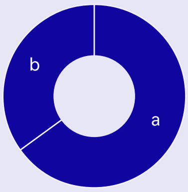
Our Defence business is resilient, with many programmes already in place stretching out over future decades. Our order book is strong at £8.5bn and order coverage is 86% for 2023. Increased government spending on military and defence applications provides confidence for the future, as we look to take an ever-increasing role in the protection of society, whilst pursuing lower carbon solutions for our customers.

Power Systems

Power Systems, with its product and solutions brand mtu, is a world-leading provider of integrated solutions for onsite power and propulsion, developing sustainable solutions to meet the needs of its customers.

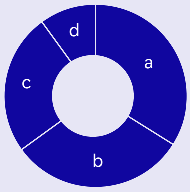
UNDERLYING REVENUE	UNDERLYING OPERATING PROFIT	ORDER BACKLOG
£3,347m	**£281m**	**£4.0bn**
2021: £2,749m	2021: £242m	2021: £2.8bn

UNDERLYING REVENUE MIX



a. OE	**65%**
b. Services	**35%**

UNDERLYING REVENUE MIX BY SECTOR



a. Power Generation	**34%**
b. Marine	**31%**
c. Industrial	**25%**
d. Defence	**10%**

Market overview

The short-cycle nature of Power Systems relative to our Civil Aerospace and Defence businesses means there has been a greater degree of inventory build, due to supply chain disruption as well as to provide a buffer stock to minimise disruption to our customers as we work through our order backlog. We monitor our supply chain closely and expect these inventory levels to begin to unwind in 2023 as we balance financial health with meeting the needs of our customers.

Part of the Power Systems supply chain has been impacted by the Chinese economy closing and reopening through 2022. As a result of this, and industry-wide pressures on the supply chain, our Power Systems business suffered heightened disruption to its production and output. This led to a larger amount of inventory being held in our Power Systems business, as we waited for parts input to complete orders and ship these to our customers. The reopening of the Chinese economy and manufacturing facilities across Greater China towards the end of 2022 is a promising signal that disruption will be more limited going forward. We continue to monitor the situation closely and will take mitigating action to limit disruption to our customers, whilst maintaining appropriate levels of inventory across the business.

Financial performance

Order intake in our Power Systems business was £4.3bn, 29% higher than the prior year, a record level for the business. We saw strong demand in many of our end markets, notably Power Generation including mission critical backup power, and for our engine systems and services. As a result, we now have 76% order cover for 2023.

Underlying revenue was £3.3bn, up 23% and above the previous peak in 2019. Services revenues grew 16% as product utilisation increased in our end markets, and OE revenue rose by 26%. Sales were strongest in the industrial and power generation end markets, partly offset by lower activity in China.

Operating profit was £281m (8.4% margin) versus £242m (8.8% margin) in the prior year. The lower margin versus the prior year reflects higher costs associated with inflation and supply chain disruption, increased self-funded R&D, one-off charges including intangible asset impairments and write-downs of assets due to the Russia-Ukraine conflict, partly offset by the benefit of higher volumes.

Trading cash flow was £158m, a conversion ratio of 56% versus 90% last year. The lower conversion year-on-year reflects a higher level of inventories due to supply chain disruption and the pace of revenue growth, partly offset by increased customer advance payments.

Financial overview

£ million	2022	Organic change [1]	FX	2021	Change	Organic change [1]
Underlying revenue	**3,347**	**626**	**(28)**	**2,749**	**22%**	**23%**
Underlying OE revenue	2,187	462	(19)	1,744	25%	26%
Underlying services revenue	1,160	164	(9)	1,005	15%	16%
Underlying gross profit	**918**	**148**	**(8)**	**778**	**18%**	**19%**
Gross margin %	27.4%			28.3%	(0.9)%pt	(0.9)%pt
Commercial and administrative costs	(441)	(62)	4	(383)	15%	16%
Research and development costs	(204)	(49)	2	(157)	30%	31%
Joint ventures and associates	8	4	–	4	–	–
Underlying operating profit	**281**	**41**	**(2)**	**242**	**16%**	**17%**
Underlying operating margin %	**8.4%**			**8.8%**	**(0.4)%pt**	**(0.4)%pt**

	2022	2021	Change
Trading cash flow	158	219	(61)

[1] Organic change is the measure of change at constant translational currency applying full year 2021 average rates to 2022. All underlying income statement commentary is provided on an organic basis unless otherwise stated

Operational and strategic progress

We are focused on being the market leader for mission critical power and propulsion solutions, as we are transforming our business from supplying stand-alone engines to fully integrated products and services. Key contract wins strengthen our market position and secure future demand. Notable contract wins include more than 500 *mtu* engines for the UK's future Boxer tanks, a service partnership with the Royal Navy and the extension of a frame agreement with world leading luxury yacht manufacturer, Ferretti Group. These are in addition to the supply of a new large-scale battery storage system for Dutch energy supplier Semperpower.

Our pathway to net zero remains a priority. This year the world's first hybrid diesel-battery-electric regular passenger operation train ran from London to Aylesbury in the UK with *mtu* Hybrid PowerPacks, reducing CO_2 emissions by up to 25%. We also took a 54% stake of German electrolyzer stack company Hoeller Elektrolyzer to develop *mtu* electrolyzers for producing green hydrogen. Furthermore, we announced the development of *mtu* methanol engines for large yachts and *mtu* hydrogen engines for power generation.

Last year, we pledged to prove that our most successful engine series can be used with sustainable fuels by the end of 2023. In 2022, we took significant steps towards meeting our net zero ambitions by reaching key milestones, including the achievement of our series 4000 and series 1600 engines having run on a range of sustainable synthetic fuels.

In 2022, we signed a contract with a solar park with 3.7 MWp capacity in southern Germany, which will generate around four million kilowatt hours of electricity per year for Power Systems. This power generation source saves 1,300 tonnes of CO_2 per year compared to electricity available through the German grid network.

For our efforts to drive decarbonisation, Power Systems has been awarded the special global transition high potential prize which recognises companies that have taken practical steps in their strategies to prevent global warming by more than 1.5°C by the year 2100.

We are prepared to support the increasing customer demands for military products as a result of the shift in security policy. We will do this in a timely and reliable manner, ensuring that our Power Systems business contributes to global security. *mtu* solutions power many of the vehicles and vessels on which operational readiness depends.

Outlook

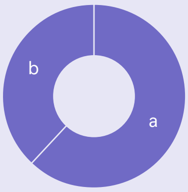
As customers look to ensure a continuous source of power for their applications, we are well placed to take advantage of increasing demand. Inventory unwind began in 2022 and will continue through 2023.

New Markets

New Markets are early-stage businesses.
They leverage our existing, in-depth engineering expertise and capabilities to develop sustainable products for new markets, focused on the transition to net zero.

UNDERLYING REVENUE	UNDERLYING OPERATING LOSS	EMPLOYEES (FTE AT YEAR END)
£3m	**£(132)m**	**1,059**
2021: £2m	2021: £(70)m	2021: >570

VALUE R&D SPEND £108M



a. Rolls-Royce Electrical	**62%**
b. Rolls-Royce SMR	**38%**

Market overview

Our New Markets business is made up of our Rolls-Royce SMR (Small Modular Reactor) business and Rolls-Royce Electrical. As we develop greener solutions for future use, nuclear and electrification applications will play a pivotal role in our product mix and make-up. We continue to invest in these technologies along with our partners and we use our combined expertise to progress on the path to net zero.

Nuclear power will play a key role in producing sustainable zero carbon power. Our SMRs will enable the production of stable, secure supplies of power for grid scale electricity supply and off-grid energy intensive users. They are faster to build and more cost-efficient than conventional nuclear power stations. The modular design means that 90% of the manufacturing can take place in a factory environment, not subject to the productivity constraints of conventional large nuclear sites such as poor weather. While we await the first firm commitment to deploy an SMR, we continue to work in parallel through the UK generic design assessment (GDA) process, with a view to having the first SMRs on grid in the early 2030s.

Electrification will assist in the decarbonisation of the aviation industry and the technologies we develop here can be leveraged in our Civil Aerospace and Defence applications. We pursue solutions on multiple fronts, where small, all-electric aircraft can offer short journeys, with a more efficient, quieter and zero-emissions power source. As we look to increase the range of the aircraft, hybrid power systems, such as electric and SAF pairings can provide commercially viable alternative solutions to the traditional larger, regional aircraft market. Within Rolls-Royce Electrical we continue to build on existing relationships and create new ones, to collaborate with expert third parties to develop electric solutions as a means of air travel. We also use this engineering capability to support product development in Power Systems, where there is increased demand for hybrid systems which can leverage our electrical engineering capability in Rolls-Royce Electrical.

There was a tightening of the labour market in 2022, where job vacancies were higher, unemployment was lower and the availability of skilled workers was lower. As a result, our New Markets business faced greater challenges in filling some vacancies than our other business. Progress has been slower than anticipated, therefore, but not materially lower to impact our progression against key milestones.

The potential from our New Market products is significant and the technologies we develop in Rolls-Royce SMR and in Rolls-Royce Electrical can have alternative applications.

Financial performance

Underlying revenue of £3m came from Rolls-Royce Electrical sales relating to marine engineering services and propulsion systems. Both Rolls-Royce Electrical and Rolls-Royce SMR are early-stage businesses in their investment phase, with significant future revenue generating potential in the 2030s.

Underlying operating loss of £(132)m increased from the prior year comparative as we increased the pace of investment in both Rolls-Royce SMR and Rolls-Royce Electrical. R&D costs of £108m included £41m on the design development to ready our SMRs to enter the UK GDA process and £67m on electrical propulsion technology.

Operational and strategic progress

Collaboration will play a key role in our Rolls-Royce Electrical journey, and we look to partner with experts across the industry to further advance our technology and explore different avenues for net zero travel. We entered into partnership this year with EVE, an advanced air mobility (AAM) business created by Embraer S.A., to develop propulsion systems for their platform. Together with our existing propulsion partnership, Vertical Aerospace, we are well positioned to deliver differentiating power and propulsion solutions in this new AAM market.

Financial overview

£ million	2022	Organic change [1]	FX	2021	Change	Organic change [1]
Underlying revenue	**3**	**1**	**–**	**2**	**50%**	**50%**
Underlying OE revenue	1	1	–	–	–	–
Underlying services revenue	2	–	–	2	–	–
Underlying gross (loss)/profit	**(1)**	**(2)**	**–**	**1**	**nm**	**nm**
Gross margin %	(33.3)%			50.0%	(83.3)%pt	(83.3)%pt
Commercial and administrative costs	(23)	(20)	–	(3)	667%	667%
Research and development costs	(108)	(40)	–	(68)	59%	59%
Joint ventures and associates	–	–	–	–	–	–
Underlying operating loss	**(132)**	**(62)**	**–**	**(70)**	**89%**	**89%**
Underlying operating margin %						

	2022	2021	Change
Trading cash flow	(57)	(56)	(1)

[1] Organic change is the measure of change at constant translational currency applying full year 2021 average rates to 2022. All underlying income statement commentary is provided on an organic basis unless otherwise stated

In addition to the above, we have entered into an agreement with Hyundai Motor Group to bring all-electric propulsion and hydrogen fuel cell technology to the AAM market. The partnership will leverage our aviation and certification capabilities and Hyundai Motor Group's hydrogen fuel cell technologies and industrialisation capability. The benefits of using a hydrogen fuel cell system in an all-electric aircraft propulsion system is that it is a zero-emission, silent and reliable on-board power source that enables scalability in power offerings as well as long distance flight range. Jointly we will advance this technology into Hyundai's AAM vehicles and complete our all-electric and hybrid-electric power and propulsion system portfolio offerings.

Increased investment in Rolls-Royce Electrical is a key part of our net zero strategy. This year we announced the development of our turbogenerator technology. A new, small engine designed for hybrid-electric application, the turbogenerator, will extend platform range initially based upon SAFs and, at a later date, will be compatible with hydrogen fuel. The technology, currently being developed by experts in Germany, Norway and Hungary, is being part funded by the German Ministry for Economic Affairs and Climate Action.

We have shortlisted three possible sites which will be home to one of our major factories in the production of our SMR components and modules. Planning processes will be initiated to ensure we can work in parallel and construction will take place once certainty on a domestic deployment plan has been secured. In addition to factory locations, four nuclear sites have been identified across England and Wales that could host the first SMR units with sufficient land for around 15GW of SMR deployment across these sites. These are key milestones in the development of our SMR programme and support our ambitions to manufacture the first fully operational SMR in the early 2030s.

Outlook

In Rolls-Royce SMR, regulatory activities such as the GDA, factory development and siting plans will continue simultaneously as the work to secure a firm domestic commitment is secured. For Rolls-Royce Electrical, partnership and commercial opportunities will be developed, as we look to draw upon our own talent and the talent of others to bring our ambition to life.

SUSTAINABILITY

Our sustainability approach ensures we operate our business and deliver our strategy in an ethically, environmentally and socially responsible manner.

2022 HIGHLIGHTS

Achieved second place in Dow Jones Sustainability Index corporate sustainability assessment for our industry

Launched human rights development programme and completed saliency risk assessment

Developed and submitted decarbonisation targets to the Science-Based Targets initiative for validation

OUR SUSTAINABILITY APPROACH

We look to operate and act in an ethically, environmentally and socially responsible manner, by:

Managing and minimising environmental impacts across our value chain	Creating a positive social impact for our people, our partners and communities	Maintaining the highest standards of ethics and compliance
See pages 31 to 36	See pages 37 to 40	See page 41

Underpinned by our values and behaviours

Our sustainability approach sets out the areas where we can make the most material contributions to a sustainable future. As an engineering and technology company operating across critical and hard-to-abate parts of the global economy, including transport, energy and the built environment, mitigating our impact on climate change and decarbonising our product portfolio is the biggest driver for our sustainability approach.

We aim to create shared value for Rolls-Royce and our stakeholders; to us this means creating a positive social impact for our people, our partners and communities local to our operations, whilst managing and minimising environmental impacts across our value chain, and maintaining the highest standards of ethics and compliance.

We use our understanding of the impacts we have as a business, informed by global frameworks such as the United Nations Sustainable Development Goals, to help guide our approach. In addition, we routinely benchmark through selected sustainability and environmental, social, governance (ESG) assessments, such as the Dow Jones Sustainability Index (DJSI) and the CDP. In the 2022 DJSI, we achieved a total score of 71, achieving second place for the aerospace and defence industry. During the year, Power Systems was recognised with a global transition award by a German national newspaper, Handelsblatt, in recognition of the contributions the business is making to a more sustainable future.

Sustainability and climate change is embedded within our global governance framework, risk management system and operating model, including through a suite of global policies, such as Our Code and health, safety & environment policy, and key processes, such as our capital allocation framework and supplier management scorecards. In 2022 we entered into a new £1bn loan facility linked to our performance against key sustainability and environmental metrics. Delivery of our sustainability approach, including execution of policies and progress against our priorities and targets, is overseen by the Safety, Ethics & Sustainability Committee (see page 96) at Board level, and the environment & sustainability committee, which operates as a subset of the Executive Team to monitor progress routinely at management level.

Our sustainability approach and areas of focus are kept under constant review to respond to immediate and emerging trends, such as changes in legislation, as part of a dynamic materiality assessment. This is continuously assessed to ensure we are meeting the expectations of our customers, investors, regulators and our people, and is reviewed by the Safety, Ethics & Sustainability Committee. This also helps to inform our reporting and disclosures.

We seek to engage our people in our sustainability approach to understand their expectations and feedback on our progress, and to empower them to contribute through their individual and team roles. In 2022, we launched dedicated sustainability and climate content hubs as part of our digital learning platform, Leatro (see page 38), and established a communication campaign, 'sustainability & I', focused on showcasing the individual perspectives, drivers and contributions that people across the Group can make to our sustainability approach.

Throughout 2022, we have particularly focused on two areas of evolving global policy and growing strategic significance: continued progress against our decarbonisation strategy, execution of our climate programme and development of science-based targets (see Net Zero and Climate Change pages 31 to 35); and establishment of a global human rights development programme (see Ethics and Compliance section page 41). These activities will continue into 2023.

For more information on our sustainability approach, including our Group policies, materiality assessment, and metrics and targets, see www.rolls-royce.com

NET ZERO AND CLIMATE CHANGE

We aim to play a leading role in the global transition to a low carbon future, through the provision of sustainable power and technology solutions, and are committed to reaching net zero value chain emissions by 2050.

OUR PROGRESS IN 2022

Released *mtu* Series 4000 and 1600 reciprocating engines for use on a range of sustainable fuels in power generation applications

Completed first successful test flight of the Trent 700 powered RAF Voyager aircraft on 100% SAF, in partnership with the UK Ministry of Defence and Royal Airforce

Carried out first ground test of an AE2100 aero engine on green hydrogen

Achieved 61% reduction in facility emissions (scope 1 + 2, excluding product test emissions) from 2014

Mitigating our impact on climate change and decarbonising our product portfolio are intrinsically linked to our business strategy and are the biggest drivers of our sustainability approach.

During 2022, we have concentrated on the development of a climate programme that will ensure we are appropriately responding to the impacts of climate change on our business, including both the risk and opportunity it presents. To support this, a climate steering committee has been established with Executive Team representation, including the Chief Financial Officer, the Chief Technology Officer and the General Counsel. Key outputs from this programme include further work to quantify the potential impact of climate scenarios on our strategic planning and the development of science-based targets to enable us to effectively monitor progress against our decarbonisation goals.

Our decarbonisation strategy summarises our approach to managing climate-related impacts and risk through three interconnected pillars:

1. making our operations net zero carbon;
2. decarbonising complex, critical systems at the heart of global society by:
   a. enabling our products to be used in a way that is compatible with net zero;
   b. pioneering new breakthrough technologies that can accelerate the global energy transition; and
3. creating the necessary enabling environment, with public and policy support, to achieve this ambition.

Through the climate programme and wider activities, we have taken action against each of these elements during the year.

Making our operations net zero carbon

Emissions associated with our office, manufacturing and production activities are a small, but important, step in our journey to a net zero carbon value chain. Reducing the energy needs and climate impacts of our facilities will also help ensure they are more resilient to rising energy prices and energy insecurity.

Our total scope 1 + 2 emissions footprint for 2022 equalled 319 $ktCO_2e$. Of this, 175 $ktCO_2e$ (55%) came from facility emissions and 144 $ktCO_2e$ (45%) from product testing activities [1].

By 2030, our goal is to achieve net zero facility emissions (see page 32). During the year, we made good progress against this, despite the rising costs caused by the volatile energy pricing around the world. This included upgrading lighting systems, heating, ventilation and air conditioning (HVAC) systems and conducting feasibility studies into deployment of technologies such as large scale solar, battery storage and renewable heat networks. During 2022, our Defence site at Bristol, UK became our first production facility to achieve net zero carbon status for operational emissions (excluding emissions from product testing activities). The site utilises a combination of rooftop solar and onsite ground source heat pumps, alongside the procurement of renewable electricity and gas. A small quantity of independently verified carbon offsets (covering <10% of total emissions) were used to achieve net zero carbon status where there is no immediately viable alternative to mitigate residual emissions, such as diesel usage in emergency generators. During the year, we also entered an offtake agreement for the exclusive supply of renewable energy for our Power Systems facility in Friedrichshafen, Germany from two neighbouring solar parks. This supplies around a third of the site's total energy needs.

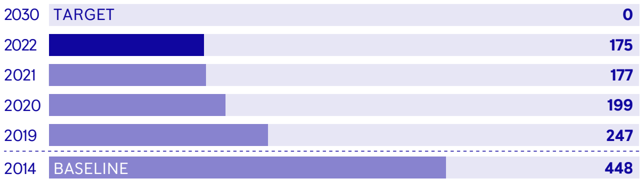
As part of our science-based target setting, we aim to replace our existing facilities-focused goal with a revised target to reduce total scope 1 + 2 emissions by 50% by 2030, from a 2019 baseline [2] (see overleaf). This target will be met primarily through the roadmaps that have been already identified for decarbonising facility emissions but also brings product test emissions into scope for the first time.

We undertake rigorous programmes of product testing as part of our technology development programmes, as well as to support customer deliveries, meet regulatory requirements and for engine certification purposes. This is a critical part of our product safety assurance programme. Emissions associated with product test can be mitigated through a combination of increasingly digital testing, use of sustainable fuels in our test beds and the growth of our low and zero carbon technology portfolio, such as hybrid and fully electric products. In the UK, we are already using a blend of 10% SAF in our Civil Aerospace and Defence testing activities.

[1] This data excludes ITP Aero in line with 2022 financial reporting as it was classified as a discontinued business in 2021
[2] Target awaiting validation from the Science-Based Targets initiative and therefore subject to change

SCOPE 1 + 2 FACILITY EMISSIONS

ABSOLUTE GHG EMISSIONS ($ktCO_2e$)[1,2,3,4]



1 Emissions associated with product test and development, critical to ensuring product safety, are excluded from this target. Statutory GHG emissions data, including emissions from these sources, are detailed on page 200
2 External assurance over scope 1 + 2 GHG data is provided by Bureau Veritas. See page 199 for their sustainability assurance statement
3 Data has been reported in accordance with our basis of reporting, available at www.rolls-royce.com/sustainability
4 ITP Aero is classified as a discontinued business and is therefore excluded from the scope of our target. For the purposes of SECR disclosures, it is included in statutory GHG emissions data up to the date of disposal, as detailed on page 170. Bergen Engines and Civil Nuclear were sold in 2021 and are, therefore, excluded from the scope of our targets. Historical data has been restated to reflect this

By 2030, our goal is to achieve net zero greenhouse gas (GHG) emissions from all energy purchased and consumed in the operation of our buildings, facilities and manufacturing processes (facility emissions, excluding product test). This target is well aligned with the emissions reduction trajectory required to curb global temperature rise to 1.5°C. We are aiming to achieve our goal through on-site renewable energy installations, the procurement of renewable energy and continued implementation of energy efficiency improvements to reduce our overall energy demands and associated costs.

In 2022, the emissions associated with our operations and facilities target was 175 $ktCO_2e$. This is a 2 $ktCO_2e$ reduction (1.1%) from 2021.

As part of our science-based target setting, we aim to replace our existing facilities-focused goal with a revised target to reduce total scope 1 + 2 emissions by 50% by 2030, from a 2019 baseline *, bringing test emissions into the scope of our target for the first time. We will continue to work to target net zero GHG emissions from our operations and facilities within the same timescale.

* Target awaiting validation from the Science-Based Targets initiative and therefore subject to change

Decarbonising complex, critical systems

Achieving net zero carbon will require a wholesale transformation of the systems that make up the backbone of our global economy, including transport, energy and the built environment, some of the very sectors in which reducing emissions is the hardest. To decarbonise complex, critical systems we must continue to act across three areas: developing new low and zero carbon technologies and sustainable solutions; accelerating the availability and affordability of sustainable fuels; and continuing to improve engine efficiency and environmental performance.

To align with global climate goals and meet our own commitments under the UN Race to Zero, all our products must be compatible with net zero carbon operation by 2050 at the latest. This will be achieved by further advancing the efficiency and performance of our engine portfolio and ensuring our products can run on sustainable fuels.

Throughout 2022, and in collaboration with industry partners, we have conducted a series of one-off tests across our portfolio of in-production and in-development engines to demonstrate their readiness for 100% sustainable fuels. This includes the Trent XWB-84 and Trent 900 in Civil Aerospace, the Pearl 700 and the BR725 for business aviation and a successful in-flight test of the Trent 700 powered Royal Airforce Voyager aircraft in Defence. In Power Systems, we announced the release of our *mtu* Series 4000 and Series 1600 reciprocating diesel engines for use with a range of synthetic diesel fuels in power generation applications.

These tests, alongside our use of 10% SAF in our Civil Aerospace and Defence testing facilities in the UK, demonstrate that it is not a technology challenge to increase the uptake of sustainable fuels in transport and power generation applications but one of economics and policy. The cost of sustainable fuels is expected to be potentially significantly higher than today's oil prices and is produced in relatively limited quantities compared to conventional fossil fuels. It is critical, therefore, that we continue to invest in advanced efficiency technologies that can help reduce fuel burn in product operation.

Throughout 2022, we have continued to progress through the design stages of our UltraFan demonstrator package, the next generation of gas turbine technology for aviation, which will offer a 25% reduction in fuel burn compared to the first Trent engines. In our business aviation segment, the Pearl 10X engine has been developed utilising advanced technologies, such as our Advance2 engine core and advanced manufacturing techniques, such as 3D printing, to offer 5% higher efficiency than its predecessor.

Beyond mitigating the emissions associated with the use of today's products, we believe we are well positioned to play a critical role in accelerating the global energy transition through the introduction and scaling of new breakthrough technologies. This includes the development of new low, zero or even net negative products and solutions, such as fuel cells and microgrids for energy storage, hybrid-electric and all-electric technologies for commuter aviation and urban air mobility applications, direct air capture technology, and small modular nuclear reactors for large scale power generation. All of these offer great opportunities in markets or market segments we are not present in today.

Creating an enabling environment

Our ability to deliver on our decarbonisation roadmap hinges on an external environment that enables us to successfully transition to a net zero carbon future and to support others to do the same. We recognise that factors such as the provision and uptake of sustainable fuels or the inclusion of nuclear power in clean energy strategies is outside the immediate control of any one company.

In response, we continue to engage with partners across our value chain, including policy makers, to help create the necessary regulatory landscape and public sentiment. In 2022, this included active participation at the UNFCCC COP27 conference in Egypt; hosting clean technology showcases for political stakeholders in the UK and Europe; and publicly welcoming the announcement of the long-term goal to reach net zero carbon from the International Civil Aviation Organisation (ICAO), the UN body that oversees global aviation.

NON-FINANCIAL INFORMATION STATEMENT

As required by sections 414CA and 414CB of the Companies Act 2006, the non-financial information can be found as follows: Environmental matters, pages 31 to 36 and 200; People, safety, health & wellbeing and social matters, pages 37 to 40; Anti-bribery and corruption, page 41; and Human rights, page 41. Information on the Group's Principal Risks is included on pages 42 to 47, Key Performance Indicators on pages 16 and 17 and our Business Model on pages 14 and 15.

TCFD RECOMMENDATIONS

Through our ongoing climate programme and wider activities during 2022, we have worked to build on and improve our strategic response to climate change and in turn our disclosures against the Taskforce on Climate-related Financial Disclosures (TCFD) framework.

In our 2021 Annual Report, we stated that our climate disclosures were in line with nine of the 11 TCFD recommendations. The two areas we felt our disclosures were inconsistent were strategy part C, related to the assessment of organisational resilience in the face of climate change and metrics and targets, part B, related to the disclosure of scope 3 emissions. A key focus of our climate programme, climate steering committee and Safety, Ethics & Sustainability Committee throughout the year has been in strengthening these two areas. As a result, we have made considerable progress on the integration of climate within our routine strategic and financial planning activities, and in the calculation of scope 3, category 11 use of sold products emissions.

Against the latter, we have disclosed the impact of our scope 3, category 11 use of sold products, calculated in accordance with the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. As our category 11 emissions are most material, comprising >90% of our total emissions footprint, we have concluded this disclosure meets the TCFD recommendation to calculate and disclose appropriate scope 3 emissions sources. Targets for reducing these emissions have been developed and submitted for validation by the Science-Based Targets initiative, and are disclosed as draft.

Against strategy part C, we have sought to build on the work undertaken in 2021 where we had completed a preliminary, largely qualitative, assessment of the impact of climate-related risk under climate scenarios. For 2022, we have substantiated the two climate scenarios we use for strategic planning, one of which explores an accelerated transition pathway linked to global temperature rise of 1.5°C by 2100, the other accelerated physical risk linked to global temperature rise of 3.6°C by 2100, with further quantitative and qualitative inputs. These inputs, on variables such as anticipated carbon prices ($/t) and global GDP, have been taken from external sources, including Oxford Economics and the International Energy Agency, and are then used to model Group-specific assumptions such as demand for aviation and maritime transport. Each business has modelled these variables in detail to understand the extent to which each scenario manifests as a risk and, if so, how material.

In these assessments, eight key risks and two key opportunities relating to climate change have been considered. Each business has modelled the potential impact of each risk and/or opportunity against their strategic and financial plans under each scenario, the outputs of which have then been consolidated and assessed at Group-level for disclosure. This has included consideration of the impact of climate in the preparation of the Going Concern and Viability Statements, as well as in the preparation of our consolidated financial statements. A summary of the consideration of climate within our accounting policies is detailed in note 1 on pages 110 to 112. It is our assessment that we have met the principles of the TCFD recommendations through these activities.

However, as set out elsewhere in this Strategic Report, including the Chair's Statement (see page 4) and the Chief Executive's Review (see page 6), at the start of 2023 we announced the commencement of a strategic review and wider transformation programme. This will include identifying and assessing strategic options, prioritising growth opportunities and assessing current portfolio attractiveness; much of which relates to the decarbonisation of our product portfolio and the wider opportunities the energy transition presents (see Strategy, page 10). The results of this review will include developing a new, granular strategic plan with clearly defined milestones and key performance indicators to enable the measurement of progress. This will be developed throughout the course of 2023. At this time therefore it would be unreasonable to conclude that we have fully considered the impact of climate change within our business strategy while that strategy is under review.

As a result, we believe our 2022 disclosures are consistent with nine of the 11 TCFD recommendations. The two areas where we consider that we are not fully aligned are: strategy, part B, relating to the consideration of the impact of climate in business strategy; and, strategy, part C, relating to the assessment of organisational resilience in the face of climate change.

Playing a key role in the energy transition remains a strategic priority (see Strategy, page 12). Climate – that is both the consideration of the impact of climate on our business, including strategic planning, risk management and governance; and consideration of the impact of our strategic choices on the climate, including carbon emissions – will be a key consideration throughout the strategic review.

For 2022, we have taken the decision to detail our climate-related disclosures in a supplementary Climate Review, available at www.rolls-royce.com. This enables us to disclose further detail on our approach to climate-related governance, strategy, risk management and metrics & targets, supported by case studies and examples of in-year activity, than the Annual Report format allows. A summary of these disclosures, and details of where within the Climate Review further information can be found, is included overleaf. This includes the most material information pertinent to our strategic response to climate change.

For more information on our strategic response to climate change see our Climate Review on www.rolls-royce.com

Governance

See governance chapter of the Climate Review for further detail

A Board oversight

The Board has oversight of climate-related risks and opportunities impacting the Group and all Board Committees have climate-related issues as part of their remit. In particular, the Safety, Ethics & Sustainability Committee has delegated responsibility to review the principal risk relating to climate change. During the year, this Committee was specifically engaged in the development of our proposed science-based targets and reviewed the outputs of climate-related physical risk impact assessments, making recommendations for further modelling. Directors received climate training during the year, covering climate science, risk management and scenarios.

B Management's role

The Executive Team is responsible for managing climate-related risks and opportunities on a day-to-day basis and for delivering the roadmaps to achieve our decarbonisation strategy. The Chief Executive has specific risk ownership of the principal risk related to climate change. The environment & sustainability committee is a sub-committee of the Executive Team and meets regularly to review progress. In addition, a subset of the Executive Team meets on a monthly basis as the climate steering committee to specifically review our climate programme. In addition, we benefit from the expertise of an independent external environmental advisory committee, which reviews and advises management on our sustainability and climate approach.

Strategy

See strategy chapter of the Climate Review for further detail, including description and key data points for each scenario

See risks and opportunities chapter for details of the eight risks assessed

Further work against this recommenda-tion, specifically Strategy B and C, will be considered as part of the strategic review that has been launched. Further information on our strategic review can be found on page 11

A Identification of climate risks and opportunities

The assessment and management of climate-related risk and opportunity is an integral part of our enterprise risk management process. A principal risk related to climate change, specifically the potential of risk to future revenue changes as a result of failure to transition to an inherently lower carbon product portfolio, is specifically noted on our Group risk register. Further details on the climate related principal risk can be found on page 44.

Broader climate-related risks and opportunities can manifest themselves beyond those described in our climate change principal risk and can also act as drivers for other principal risks. For example, extreme weather events disrupting our supply chain (business continuity), carbon taxes reducing the competitiveness of our products (competitive environment), or shifts in consumer preferences reducing the size of the accessible market (market shock).

To reflect this broader impact, we have consolidated a long list of potential identified climate risks into eight key risks. These represent the key hazards that could have a potentially material impact. These are: increased costs due to carbon pricing; reduced revenues due to changing customer demand; increased costs due to commodity price changes; regulatory changes on types of engines; product performance deterioration under changing physical climate; increased investment required in R&T/D; increased capital investment required due to changes in product mix and/or volume; and changes to demand for low carbon products.

Additional opportunities were identified including increased market demand for existing products and opportunities to enter new markets through the development of new low or zero emissions products.

B Consideration of the impact of climate risks and opportunities

The potential impact of climate-related risks and opportunities is quantified as part of our enterprise risk management. This includes consideration of probability and impact against which we define thresholds for what we consider to be substantive. Our tolerance for risk depends on the nature of the risk itself, as well as the potential impact and likelihood of its occurrence. Through our work on climate scenarios in 2022, we have assessed the potential impact of each of the eight key risks relating to climate change identified, seeking to quantify potential impact, understanding the trajectory and timeframe over which we expect the risk to occur and seeking to understand and assess the existing strategic response and controls in place.

C Resilience assessment, including climate-related scenarios

We use climate scenarios to quantify the impact of climate-related risks and thereby assess the viability of our business strategy, decarbonisation plans, our approach to managing climate-related risk and their impact on our financial results. Two scenarios have been developed based on independent external climate scenarios and representative concentration pathways that present plausible levels of global temperature rise and associated policy responses. One scenario explores an accelerated transition pathway linked to global temperature rise of 1.5°C by 2100, the other accelerated physical risk linked to global temperature rise of 3.6°C by 2100.

In 2022, we have sought to further quantify each scenario, using third-party data where relevant, to assess better the potential impact of the eight risks relating to climate change. Both scenarios present risk and opportunity for the Group that is used to inform our strategic planning and decision making. Our assessment concludes that under the 1.5°C scenario, transition risks including increased costs due to carbon pricing; reduced revenues due to changing customer behaviour; increased costs due to commodity pricing; regulatory changes on types of engines; and increased investment required in R&T/D are potentially material. In the 3.6°C scenario physical risks, such as product performance deterioration under a changing climate, are material.

We have then sought to assess the existing strategic response and controls in place to mitigate each risk. From this we have concluded that largely the actual impact of each risk is likely to be low or medium. Where relevant or material, potential impacts have been recognised in the preparation of our consolidated financial statements. Further information on our consideration of climate change can be found in note 1 of the Accounting Policies on page 110 to 112.

Risk management

See risks and opportunities chapter of the Climate Review for further detail

A Processes for identifying and assessing climate-related risks

We continually review emerging climate-related risks as part of our wider emerging risk management processes. Risks are identified across businesses and functions by considering what may prevent us achieving our strategic, operational or compliance objectives. They may be identified through a range of processes, including horizon planning, subject matter expertise (such as that provided by our environmental advisory committee), stakeholder engagement and through climate scenario modelling. Once identified, we assess the risk's likelihood and potential impact, determining whether it may manifest as a threat or an opportunity, reviewing and taking into account current mitigating control activities and identifying where additional action may be needed. Threats are routinely reviewed to determine whether they are within our risk appetite.

During 2022, we also carried out preliminary physical risk impact assessments on selected Company locations and third-party sites, such as key joint ventures and supplier locations. These assessments considered the potential likelihood and impact of weather events such as flooding, severe storms, wildfires and extreme heat based on the central grid reference of the location. Of the 50 sites assessed, eight were identified as presenting a potential high level of risk. There is further work underway to improve the specificity of these hazards and identify mitigating actions as part of our ongoing assessment and response to business continuity risk.

B Processes for managing climate-related risks

Risk owners assess the risk's likelihood and potential impact, taking into account current mitigating control activities and identifying where additional activities may be needed. The Chief Executive is the risk owner for the climate-related principal risk and the Safety, Ethics & Sustainability Committee has delegated oversight.

C Integration of climate-related risk management into enterprise risk management

Climate-related risk identification and assessment is embedded within our wider approach to enterprise risk management. This looks to understand the risks to our objectives and sets common assessment criteria to ensure all risks, including those arising from climate change, are consistently assessed. Further detail on our approach to enterprise risk management can be found on pages 42 to 47.

Metrics & targets

See metrics and targets chapter of the Climate Review for further detail, including calculation method for scope 3 emissions

A Disclosures of metrics used to assess climate risks and opportunities

We monitor selected metrics relevant to our climate change principal risk, specifically the potential of risk to future revenue changes as a result of failure to transition to an inherently lower carbon product portfolio, and to the key risks related to climate change determined to be potentially material. For 2022, this includes assessing the carbon intensity of our product and technology portfolio through metrics such as:

- use of sold products emissions normalised by original equipment revenue (fossil fuel based pathway): 0.015 $MtCO_2e$/ £m OE revenue; and
- percentage of net R&D expenditure allocated to the development of energy transition products and services: 74% (2021: 72%).

B Disclosure of greenhouse gas emissions

We monitor and measure our GHG impacts across relevant categories. For 2022, our emissions were:

- Scope 1: 233 $ktCO_2e$
- Scope 2 (location based): 86 $ktCO_2e$
- Scope 3, category 11 (use of sold products):
  - Fossil fuel based pathway: 87.3 $MtCO_2e$
  - Sustainable fuels based pathway: 70.1 $MtCO_2e$

These emissions have been calculated in accordance with the Greenhouse Gas Protocol. Due to the forward looking nature of scope 3, category 11 emissions calculations in particular, we have reported against two differing projections of sustainable fuels uptake. These act as bookends by calculating emissions against a 100% fossil fuel based pathway out to 2050 and a near 100% sustainable fuel based pathway out to 2050.

We continue to focus on improving the rigour of our emissions calculations and reporting, particularly related to scope 3 emissions. For 2022, we have focused on preparing our scope 3, category 11 (use of sold products) emissions as the most material aspect of our total emissions footprint (>90%). In 2023, we will focus on further scope 3 emissions categories, particularly category 1 purchased goods and services.

C Targets used to manage climate risks and opportunities

Our climate strategy is supported by a suite of short and medium term targets intended to help measure and accelerate progress. This includes targets to mitigate emissions, build strategic resilience and capability development in relation to climate change. Our 2023 targets, which include targets related to the testing of products on 100% sustainable fuels, form part of executive remuneration.

We have made good progress against our existing facility emissions target and broader environmental targets, such as energy and waste reduction, each of which have an inherent climate impact. Since 2014 we have reduced our facility emissions (scope 1 + 2, excluding test) by 61%, and are on track to meet our 2030 goal.

In June 2022, we developed and submitted new science-based decarbonisation targets to the Science-Based Targets initiative for validation. We expect these to be finalised in 2023. Our proposed interim targets include reducing scope 1 + 2 emissions by 50% by 2030, and reducing scope 3, category 11 (use of sold products) emissions, normalised by original equipment revenues, by 55% by 2030 *.

* Targets awaiting validation from the Science-Based Targets initiative and therefore subject to change

RESPONSIBLE CONSUMPTION

Understanding and managing our impacts across our value chain is a key part of being a responsible and resilient business. We seek to manage our environmental impacts and optimise resource efficiency.

OUR PROGRESS IN 2022

- Achieved a recycling and recovery rate above 80% in Power Systems
- Achieved zero waste to landfill status in 80% of our reporting sites
- Introduced sustainability due diligence, including environmental performance assessments, in our supply chain

Reducing waste and maximising resource efficiency helps to mitigate our environmental impacts whilst also delivering cost savings across our operations. As stated in our health, safety & environmental policy, we are committed to reducing the environmental impacts of our business activities. We work in collaboration with partners across our value chain, including suppliers, to help them do the same.

Across our global operational footprint we seek opportunities to reduce our environmental impacts and increase our operational resilience, with a particular focus on optimising energy use; reducing GHG emissions; reducing waste and optimising material efficiency; and reducing water use. Where appropriate, progress against these focus areas is monitored through Group-wide environmental targets.

These Group targets are supported by individual business-level targets as well as specific local targets to respond to particular risks or opportunities. For example, we monitor water consumption and exposure to areas of water-stress and/or high water usage. During 2022, we have continued to progress against these environmental targets, with good performance against our waste reduction and energy reduction targets in particular.

We recognise that it is often those closest to a challenge who can come up with the best solution. We have engaged our people in supporting our environmental targets, generating the small ideas that can make a big difference. In our Civil Aerospace business, for example, a big ideas event was held to help identify and scale employee-led proposals that will help deliver our targets. In total, the campaign generated over 100 submissions that ranged from parts recycling and better waste segregation, to renewable energy installations.

During 2022, we introduced sustainability due diligence, including environmental performance assessments, for our tier 1 supply chain. This will help us to understand better the environmental impacts of our suppliers and identify areas we can work together to reduce environmental impacts, build operational resilience and improve performance. These assessments will also provide greater visibility of scope 3, category 1 purchased goods and services emissions and broader climate impacts on our supply chain.

In addition, during the year we began work to understand better our impacts on biodiversity and nature, driven by emerging policy; this will continue in 2023.

ENERGY CONSUMPTION (MWh/£m)

2025	TARGET	60
2022		76
2021		86
2020		96
2019		76
2014	BASELINE	117

Target:
Reduce total energy consumption, normalised by revenue, by 50% by 2025 [1,2,3,4]

In a period of continued challenges around energy security and rising energy costs, reducing our overall energy demand will help reduce our exposure to energy-related risk, as well as support the delivery of our decarbonisation goals. Our normalised energy consumption in 2022 was 76 MWh/£m. This represents a reduction of 352,579 MWh (25.6%) since 2014. The total amount of energy consumed in the year was 1,025,783 MWh, of which 30.8% came from renewable energy sources, including 0.9% generated from our own on-site clean energy installations.

TOTAL SOLID AND LIQUID WASTE (t/£m)

2025	TARGET	3.31
2022		3.41
2021		3.84
2020		4.40
2019		4.66
2014	BASELINE	3.95

Target:
Reduce total solid and liquid waste production, normalised by revenue, by 25% by 2025 [1,2,3,4]

We continue to focus on opportunities to prevent and minimise waste generation. In 2022, our total normalised solid and liquid waste was 3.41 kilotonnes/£m, a 13% reduction since 2014. The total amount of solid and liquid waste generated in operations was 46.1 kilotonnes, compared to 43.0 in 2021. This includes 16.5 kilotonnes of hazardous, primarily chemical, waste. The overall increase in the volume of waste produced has been driven in part by increased production activities following the impact of COVID-19.

RECYCLING & RECOVERY RATE (%)

2025	TARGET	68
2022		61.4
2021		60.8
2020		59.6
2019	BASELINE	62.7

Target:
Increase the recycling and recovery rate to 68% by 2025 [1,2,3]

Our recycling and recovery rate for 2022 was 61.4%. This represents a 1.3% reduction against the baseline, driven by an increased focus on managing materials consumption efficiency across our production facilities. Our Power Systems business now has a recycling and recovery rate above 80%. During the year, 4.1 kilotonnes of waste were sent to landfill, a 20% reduction since 2014. We continue to work to identify appropriate alternatives to landfill disposal for complex waste streams, such as foundry sand.

1 External assurance over selected sustainability data is provided by Bureau Veritas, see page 199 for their sustainability assurance statement
2 Data has been calculated in accordance with our basis of reporting. This and further data is available at www.rolls-royce.com
3 ITP Aero is classified as a discontinued business and Bergen Engines and Civil Nuclear were sold in 2021 and are, therefore, excluded from the scope of our targets. Historical data has been restated to reflect this
4 Energy and waste data are normalised by Group revenue (£m)

PEOPLE AND CULTURE

Creating a working environment where all colleagues are empowered to be at their best sits at the heart of our approach to people and culture.

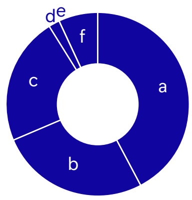
OUR PROGRESS IN 2022

Launched new digital technologies to strengthen our approach to learning and skills development

Our people contributed 48,347 hours in community investment and STEM activities

Our 2022 engagement results keep us on track to achieve our 2023 ambition as we achieved a 75% participation rate and grand mean score of 3.85

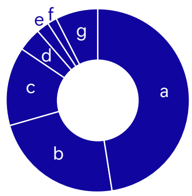
41,800 EMPLOYEES TOTAL (MONTHLY AVERAGE) *



a. Civil Aerospace	**17,700**
b. Defence	**11,000**
c. Power Systems	**9,400**
d. New Markets	**800**
e. Corporate	**100**
f. Discontinued operation (ITP Aero)	**2,800**

* Segments are defined in note 2 on page 125

EMPLOYEES IN 48 COUNTRIES (MONTHLY AVERAGE) *



a. UK	**19,900**
b. Germany	**9,700**
c. US & Canada	**5,700**
d. Spain	**1,800**
e. Italy	**900**
f. Singapore	**700**
g. Rest of world	**3,100**

* Employee headcount data represents permanent employees and excludes contractors

In a year marked by geopolitical and macroeconomic disruption, our work, workplaces and workforce expectations changed significantly. Our people worked with great dedication and adapted to this rapidly changing environment. We sought ways to support and empower our people through this uncertainty, to enable them to be at their best. We did this by prioritising the following areas:

- safety, health and wellbeing of our people;
- creating an environment of inclusion and belonging;
- promoting a learning environment by continuing to directly engage our colleagues with digital content and enhanced learning tools;
- leadership capability;
- listening and engagement – hear what we do well and what areas we need to focus on, and do better; and
- community investment and focus on STEM.

We continued to invest in the infrastructure, tools and systems required to enhance our performance and ways of working. New digital technologies and platforms strengthened our approach to ongoing learning, and skills development. Our investment also enabled us to enhance our leadership capabilities through rolling out our refreshed leadership learning programmes.

Safety, health and wellbeing

A healthy and safe working environment is fundamental to our success as a Group. We work to identify and control preventable incidents and we believe that motivating our colleagues to lead healthy lifestyles and maintain good wellbeing, including mental health, enables them to thrive.

Our industry leading LiveWell programme supports the delivery of our wellbeing strategy, empowering and enabling our colleagues to take personal responsibility for their health and wellbeing. We believe in creating a working environment where our colleagues can be at their best and we provide resources to support healthy bodies, minds and workplaces.

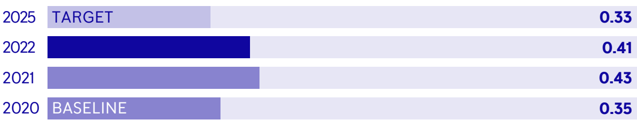
In 2022, we deployed resources to encourage open discussion on mental health. We further developed our global mental health champions, volunteers trained to guide colleagues and provide support on mental health. We also continued our work on menopause, providing support and information to reduce the stigma associated with reproductive health at work. We signed the wellbeing of women Menopause Workplace Pledge, committing to talk openly, positively and respectfully about the menopause.

Our work on wellbeing enabled us to support the development of the Confederation of British Industry's (CBI) Work Health Index (WHI). The WHI enables businesses to benchmark their workplace approach to health and wellbeing against peers. In 2022, our LiveWell programme featured as a case study within the CBI WHI.

Proactive safety behaviour is the foundation of our safety culture and journey to zero harm. In 2021, we introduced a safety index which consists of a composite score of five leading indicators. The indicators measure five key areas: senior leadership safety walks; safety case improvement activity; HSE alert response; close-out of HSE non-conformances; and accountable person engagement. These measurements drive proactive safety behaviour and action, as well as more traditional measures such as injury rates.

In 2022, we achieved our target safety index score of 85%, representing a 15% improvement compared to 2021. The most significant improvement was in the number of safety leadership walks, which increased from 53% in 2021 to 83% in 2022. Visible, engaged leadership is integral to our journey to zero harm strategy and this will continue to be an area of focus in 2023. Our total reportable injury (TRI) rate in 2022 was 0.41 per 100 employees. There was a total of 176 TRIs with 20 incidents resulting in major injuries (including one contractor). This represents a 5% reduction compared to 2021. There were no fatalities.

TRI RATE (PER 100 EMPLOYEES)*



* Our TRI rate shows the Group TRI performance (absolute and rate). External assurance over the TRI data is provided by Bureau Veritas (see page 199)

Diversity and inclusion

We believe that a diverse, equitable and inclusive workplace makes us a stronger company, enables us to hire the best talent, create high performing teams where our colleagues can reach their full potential and be at their best. In 2022, we focused on inclusion and belonging though our 'Being' campaign, where colleagues volunteered to participate in 'people like me' stories, celebrating them as a person and what makes them unique (see page 52).

We accelerated our efforts to attract and retain diverse talent and we embedded new inclusive hiring processes. We delivered our goals through four key pillars: lead, attract, retain, develop.

In 2022, we continued our focus on increasing the diversity of our external hires, 22% of all global hires were female compared with 19% in 2020. Additionally, 17% of hires in the UK and 26% of hires in the US were of ethnic minority backgrounds. We were recognised externally, winning a variety of awards, including first place in the Times Top 100 Engineering Graduate Employers, Best Engineering Employer for both males and females in the Universum Rankings and Best Diversity Initiative in the Engineering Talent Awards.

To support the growth and development of our under-represented populations, we introduced two new learning programmes: Connect & Belong, aimed at ethnically diverse talent; and Thrive, aimed at gender minorities. Both feature internal mentoring and skill development workshops. Forty-eight participants took part in Connect & Belong and 91 participated in our Thrive programme.

We give full and fair consideration to all employment applications from people with disabilities. If an employee becomes disabled whilst working for us we take steps to support their continued working including, wherever possible, making adjustments to ways of working.

While we have work to do to meet our stretching 2025 diversity targets (see page 40), we continue to refresh our approach against our diversity and inclusion pillars, to expand the global reach and impact of programmes, while driving accountability through continued measurement.

Inspiring future talent

We refreshed our approach to early careers attraction this year through embedding inclusive hiring. We also focused on employee advocacy as a powerful tool to reach diverse talent pools. Our approach has centred on creating an authentic narrative, provided through people's stories, utilising social media and digital platforms. Partnerships became a key lever for attracting diverse talent into our internship and graduate roles. We sponsored three

Our inclusion goals

We drive inclusion to unleash the power of our people

Lead
We drive inclusive leadership behaviours and capabilities to create high performing teams

Attract
We promote our inclusive values to enable us to hire the best talent

Engage
We create an inclusive culture in which everyone is actively engaged, belongs and can be at their best

Develop
We support the growth of our learning culture to empower everyone to reach their full potential

undergraduate of the year awards and converted 89% of the finalists into internship offers across our female, social mobility and neurodiversity categories (76% female, 42% ethnicity). We have also grown our i-Accelerator insights programme to support 80 ethnically diverse students across both STEM and business programmes. Through holistically redesigning our end to end early careers approach, enhancing digital engagement and refreshing our assessment methods to focus on values and behaviours the diversity of our intake significantly increased. Our female graduate hires increased globally from 19% in 2021 to 40% in 2022.

In 2022, a new nuclear skills academy was opened in the UK to 200 apprentices as part of our strategy to inspire the next generation of future engineers. Creating and maintaining this pipeline of talent is crucial for industry growth in UK Defence, alongside providing jobs and opportunities for individuals across the UK. Working in partnership with the National Skills Academy for Nuclear (NSAN), Rolls-Royce SMR also developed a nuclear skills programme for colleagues who are new to nuclear within the nuclear industry framework.

Enabling and inspiring our people

We promote a learning environment by continuing to directly engage our colleagues with digital content and enhanced learning tools. These tools enable and empower our people to take ownership of their own learning and development, to support personal growth and high performance.

In 2022, our investment in learning and development was £17.8m (2021: £13.3m), delivering 581,505 hours of formal learning (2021: just over 250,000 hours). This reflects our transition to a new learning culture focused on providing on-demand learning and resources which are fully integrated into the flow of work. Leatro, our digital learning tool, facilitates learning in a style and pace to suit our colleagues learning requirements. Leatro Collections was introduced in 2022 and provides specially curated content for Rolls-Royce, focusing on commercial and technical areas, including digital and electrical skills, as well as enterprise topics such as: sustainability and climate; safety, health and wellbeing; leadership and engagement; and inclusion and diversity. LinkedIn Learning was also launched in 2022, adding over 16,000 new learning resources to our learning portfolio. Our continued focus on Leatro reflects our transition to a new learning culture that is focused on providing on-demand learning and resources which are fully integrated into the flow of work, rather than more traditional methods such as classroom training.

In 2022, Leatro also facilitated our mandatory training which included diversity and inclusion with a specific focus on micro-aggressions and comprised team discussions on real life cases. Of those employees in scope, 94.3% completed the training (2021: 97%) by the year-end deadline, with 99.5% of managers certifying their commitment to adhere to the principles set out in Our Code (2021: 99%) *.

Developing our potential using skills and gigs

In 2022, we have introduced an entirely new approach to learning and skills development called gigs. It uses digital systems and artificial intelligence to create an internal marketplace of bite-sized tasks that support colleagues to drive their own career development.

Our launch featured a pilot for around 500 engineers, a critical area where there is a need for skills to continually develop and grow due to changing technologies and customer requirements. Due to the success experienced by the initial participants around 8,500 people had signed up by year end.

It is driving growth in discretionary effort of people seeking new opportunities to learn and reskill for future technologies such as electrical flight and 6,000 hours of gigs in total have been completed so far. In addition gigs are also helping to drive progression of diverse colleagues. Of people doing a gig, 23% are female and 30% are from an ethnically diverse background. Our journey has received significant external recognition through awards such as a gold medal at the Brandon Hall International awards and winners of the talent management category at the 2022 Personnel Today awards.

Leadership capability

We continued our investment in leadership capability through the roll out of two creative and interactive blended learning programmes, providing critical leadership skills for first and second-line leaders. We also revolutionised our global learning experience by providing highly interactive and experiential programmes that bring subject-matter to life. This includes pre and post-course coaching/mentoring and 24/7 access through mobile devices. These programmes have been recognised externally, achieving a bronze Brandon Hall Award for the Best Unique or Innovative Leadership Programme.

Alongside our formal leadership development programmes, our digital leadership toolkit has been refreshed and updated to enable unlimited access for our leaders. In 2022, utilisation was just over 138,500 learning engagements and total utilisation since its launch in 2020 has reached 323,650.

Employee engagement

We believe that highly engaged colleagues fuel business performance and that engagement is driven by leadership, a clear purpose and an environment where everyone can be at their best. Engagement is a key measure in our annual leadership incentive plans (see page 17). Furthermore we believe that listening to our colleagues provides opportunities to hear about what we do well and what areas we need to focus on and do better.

Gallup became our employee engagement partner in 2019 and we outlined our ambition to achieve a grand mean (overall average) score of 3.97 by the end of 2023. Our 2022 results keep us on track to achieve this ambition as we achieved a 75% participation rate and a grand mean score of 3.85. This meaningful increase of +0.12 since 2021 represents our third consecutive year of sustained improvement (+0.32 since 2019).

We provide a variety of channels for communication and engagement including interactive learning sessions, newsletters and team briefings, as well as digital communication channels such as Yammer. We work closely with colleagues, elected employee representatives and with our employee resource groups (ERGs) to ensure we remain connected with our people. The ERGs are groups of colleagues organised primarily around a specific characteristic or life experience who provide personal and professional support to each other and run events for all to raise awareness of key issues and to help everyone to focus on inclusion.

In 2022, we held multiple leader led sessions with our employees. Topics included our financial results, incentives, pay, wellbeing and inclusion. Our Executive Team also held regular virtual conversations (Teams Talks) where colleagues globally participated in a live Q&A. We also held an in-person Meet the Board event where colleagues participated in a ballot to attend and they engaged in small group discussions with our Board members (see page 51).

Community and STEM outreach

We believe that we have a responsibility to invest in and engage communities, to inspire the next generation, enable opportunities for our people and reflect the diversity of the communities that we operate in, by building a pipeline of future talent.

We work with local partners to identify issues, define objectives and evaluate impacts within a global framework. Together, we develop activities to meet local needs and particularly focus on groups that are disadvantaged by social and economic factors.

In 2022, global community contributions totalled £5.1m (2021: £2.73m), with £2.99m in cash donations, which included our response to the Russia-Ukraine conflict. Funds received as a result of a share forfeiture programme were not spent during 2022 but will be allocated in the future.

Together with our people, we contributed at least £1m to help the people of Ukraine. Contributions included a global matched giving scheme in partnership with Habitat for Humanity. We also matched employee time contributions with our Works Council and made cash and in-kind donations to local agencies supporting refugees arriving in Germany. Our Power Systems business donated gensets to maintain power to hospitals in Ukraine.

Our people remain at the heart of all our programmes and contributed 48,347 hours (2021: 26,427) to community programmes. In 2022, at least 80 teams across the Group completed practical projects in their local communities ranging from improving facilities to maintaining natural environments.

Our non-financial KPIs are on page 17. External assurance over the employee engagement scores is provided by Bureau Veritas. See page 199 for their sustainability assurance statement

* Code certification for Power Systems is scheduled for completion by the end of the first quarter of 2023

The majority of our investment underpins our top priority to support good quality education for all (UNSDG 4). We reached 0.9 million people through our STEM programmes in 2022 and are now 37% towards our target to inspire 25 million of tomorrow's pioneers by 2030. Again, our people power this commitment, inspiring future generations as role models and educators.

Inspiring future generations with STEM
Emerging technologies are at the heart of our STEM outreach activities. At the Big Bang Fair, the UK's largest STEM education event for young people, we connected with over 28,500 individuals in 2022.

Addressing inequalities in STEM
Our programmes aim to remove barriers and enable success for people facing social and economic challenges. Our Unnati programmes (taken from the Hindi word meaning development) in India, help girls and young women studying STEM through school and university by providing targeted support to sustain learning through socioeconomic challenges (see page 55).

High quality teaching in STEM
In the UK, we are nurturing inspiring teachers in partnership with STEM Learning. We provided bursaries to support continuous professional development for 662 STEM teachers in 2022 and invited more than 60,000 teachers to enter the Rolls-Royce Schools Prize for Science and Technology through Project Enthuse.

Ways of working and supporting our colleagues

We believe the future of work is all about balance. In 2022, we continued to support flexible ways of working and we looked at ways to enable better collaboration, innovation and performance. We will continue to assess the effectiveness of our approach and support leaders and teams to work together, to reimagine how we use our physical and digital workspaces in the future, to create a working environment where everyone can be at their best.

We have continued to make changes to our total reward arrangements this year to manage costs and to remove inequalities between employee groups. We took steps to simplify and de-risk the Group's pension arrangements, ensuring that our people have access to good quality retirement plans but with less risk and leverage on our balance sheet. This included:

— the termination and full risk transfer of our main US defined benefit pension plan;

— securing agreement to termination of future accrual to our Canadian defined pension plans; and

— securing agreement with our largest German employee group to transition future build up of retirement benefits onto a defined contribution basis.

We conducted and concluded pay reviews and negotiations with our employees and their representatives (where relevant). We focused on making sure that our pay and benefit arrangements are competitively positioned and sustainable for the future.

Against the backdrop of economic and geopolitical uncertainty, our pay negotiations for several of our bargaining groups were protracted and at times difficult. UK pay agreements were reached with our various bargaining groups, to provide increases of 6.5% in 2022, plus a one-off payment of £1,500, to help towards the cost of living, for most of our employees.

We entered a new multi-year deal in Canada with our largest employee groups that will provide certainty of salaries until 2028. Our largest collectively bargained groups in the US are still within a multi-year deal that will run until 2025.

Our German colleagues are covered by the Metal Tariff arrangements which were reviewed during the year and will provide increases of 5.2% in 2023, followed by 3.3% in 2024, together with one-off payments totalling €3,000 following a three-year freeze on tariff rates. We also make our incentive schemes and share programmes widely available to all colleagues to enhance connection and share in business successes.

During 2022, we experienced industrial action within our Civil Aerospace business in Canada. The matter was resolved with agreements supported by the local workforce. Overall, our approach and ways of working with our employee and trade union representatives has remained collaborative and we will continue to work closely with all colleagues and employee representatives to deliver the productivity and efficiency improvements which are vital for the future competitiveness of our workforce.

Our diversity metrics at 31 December 2022 [1]

Female diversity percentage tracking and 2025 targets

	2021	2022	2025 Target
The Board	38%	33%	40%
Executive Team	9%	18%	33%
ELG	21%	22%	35%
Senior leaders [2]	20%	22%	30%
All employees	17%	18%	25%

Ethnic diversity percentage tracking and 2025 targets for UK and US [3]

	2021	2022	2025 Target
UK ethnicity	10%	11%	14%
US ethnicity	15%	16%	20%

Gender diversity

	Female	Male	Total	Female %
The Board	4	8	12	33%
Executive Team (ET)	2	9	11	18%
ET, Chief Governance Officer and direct reports	19	67	86	22%
Senior leaders [2]	20	70	90	22%
All employees	7,575	34,300	41,875	18%

[1] The data for diversity information is showing permanent employee year-end actuals
[2] Senior leaders are defined in the Companies Act 2006 (those who have responsibility for planning and directing or controlling the activities of the entity or a strategically significant part of it). We define this as the Executive Team and ELG
[3] For ethnicity information we are only able to monitor and track this in the UK and US and therefore this only includes businesses in these locations. The population is only those who have chosen to disclose this information

ETHICS AND COMPLIANCE

We strive to uphold high standards of ethics and compliance in everything we do and are guided by our values to ensure we are always at our best.

OUR PROGRESS IN 2022

- Updated Global Supplier Code of Conduct
- Completed human rights saliency assessment
- Enhanced sustainability assessments in our supply chain
- Improved accessibility to Group policies by embedding them into the digital offering of Our Code

We are committed to maintaining high ethical standards underpinned by our values and behaviours to create a working environment where everyone at Rolls-Royce and those we work with can be at their best. Our code of conduct (Our Code) and associated Group policies form a key part of the Rolls-Royce framework. Together they guide our business decision making to ensure we can be proud of the way we behave and the way we do business.

Our Global Supplier Code of Conduct sets out our minimum ethical expectations on our suppliers. In 2022, this was updated to enhance alignment to the principles in Our Code. All suppliers are contractually required to adhere to this or a mutually agreed alternative.

We actively encourage people to speak up in the event of a question or concern and provide a number of channels to our employees and our stakeholders to enable them to do so, including the Rolls-Royce speak up line. We issue a report to everyone at regular intervals to highlight key statistics and remind them of the importance to speak up. In 2022, the mandatory diversity and inclusion training included a specific section on the importance of speaking up and a reminder of the different speak up channels available to employees.

We have a zero tolerance approach to misconduct of any kind and will take disciplinary action, where appropriate, up to and including dismissal in the event of a breach of Our Code. In 2022, 76 employees (2021: 45) left the business for reasons related to breaches of Our Code. The increase in cases is principally due to improved consistency and accuracy on classification of dismissals.

Anti-bribery and corruption

Our Code and associated anti-bribery and corruption policy clearly set out our commitment to zero tolerance of bribery and corruption in any form. In 2022, we embedded our Group policies into our digital Code to improve accessibility for our employees. We have continued to make improvements on our bribery and corruption risk assessment and controls, following recommendations made by an independent review of our ethics and compliance programme undertaken in 2021. We also continued to improve our compliance programme in Brazil which involved co-operating with the Controller General, Brazil under the terms of a two-year leniency agreement signed in October 2021 relating to historical bribery issues.

Human rights and anti-slavery

As set out in our human rights policy, we are committed to protecting and preserving the internationally recognised human rights of those that may be impacted by our business activities along our value chain.

We operate in accordance with human rights requirements through strict compliance with strategic export laws and sanctions regulations in the countries where we operate. Our due diligence activities are embedded within our ethics, people, export control and procurement programmes. Human rights risks in our value chain are identified and assessed through a range of channels including our speak up line, country and sector risk analysis, screening platforms and self-assessment questionnaires. Potential or actual human rights impacts are addressed using tailored corrective action plans and a series of preventative measures. These activities are overseen by the human rights steering group and the Safety, Ethics & Sustainability Committee (see page 96).

In 2022, we established a human rights development programme to strengthen our due diligence activities in the value chain. This included updating our human rights policy and working with an external specialist to complete a human rights saliency assessment drawing from international standards, stakeholder consultations, and country and sector risk indices. Using an external platform, we evaluated our human rights and sustainability performance and continue to improve our programme based on those recommendations. Specific human rights leaders were appointed at Group and business level to drive implementation of the programme. Furthermore, we continue to enhance our sustainability assessments with our supply chain partners and have set appropriate KPIs to monitor effectiveness.

Find more information on our anti-slavery and human trafficking statement; Group policies and materials stewardship page at www.rolls-royce.com

For more information on our ethics approach see the Safety, Ethics & Sustainability Committee report on page 96 or view 'Sustaining our culture of Integrity' document available at www.rolls-royce.com

PRINCIPAL RISKS

Our risk and internal control system

The Board has established procedures to manage risk and oversee the risk management system (RMS). The Board has also established procedures to determine the nature and extent of the principal and emerging risks the Group is willing to take in order to optimise its commercial opportunities and achieve its long-term strategic objectives.

The Audit Committee reviews the Group's internal financial controls which form a subset of the broader set of controls. Financial reporting controls are identified and subject to periodic review by the Group's internal control team. The Audit Committee, on behalf of the Board, performs an annual review of our RMS and its effectiveness (see page 75). During the year, the Board completed a robust assessment of both our principal and emerging risks. Details of how our principal risks have changed over the year are described below.

Our RMS is designed to identify and manage, rather than eliminate, the risk of failure to achieve business objectives and to provide reasonable, but not absolute, assurance against material misstatement or loss.

How we manage risk

Risks are identified by individuals across all businesses and functions and at many layers of the organisation by considering what could stop us achieving our strategic, operational or compliance objectives or impact the sustainability of our business model.

Risk owners assess the risks, likelihood and impact, taking into account current mitigating control activities, identifying where additional activities may be needed to bring the risk within our risk appetite.

Risk owners consider the effectiveness of current mitigating control activities in their assessment, supported by different assurance providers including internal audit. These considerations are recorded using a variety of systems and tools depending on the risk area. In managing the identified risks, judgement is necessary to evaluate the risks facing the Group in achieving its objectives, determine the risks that are considered acceptable, determine the likelihood of those risks materialising, assess the Group's ability to reduce the impact of risks that do materialise and ensure the costs of operating particular controls are proportionate to the benefit provided.

Risk owners bring the results of their assessment, current risk status and action plans to business, function and other management review forums as often as is required depending on the nature of the risk, for support, challenge and oversight. These forums include the monthly Executive Team and regular Board and Board committee meetings.

At least once a year the Audit Committee, on behalf of the Board conducts a review of the effectiveness of the RMS and where required identifies areas for improvement (more details of this review can be found on page 75). For key compliance and safety risks, the Group has a set of mandatory policies and training which set out the expectations on employees and the controls in place. Every employee is required, annually, to complete training and confirm that they will comply with the mandatory policies. The consequences of non-compliance are addressed via performance management systems that are linked to remuneration.

During 2022, we have continued to focus on improving our internal control environment for financial and non-financial controls and worked to embed these controls into our business processes. We expect this work to continue in 2023. It will be complimented by work to prepare for the changes set out in the BEIS proposals on 'restoring trust in audit and corporate governance'.

Principal risks

Our principal risks are identified and managed in the same way as other risks. Principal risks are owned by at least one member of the Executive Team and subject to a review at an Executive Team meeting at least once each year, before a review by the Board or a Board committee.

We have reviewed our principal risks over the course of the year and have updated them to reflect changes to the external environment and our existing plans. We will continue to monitor our principal risks in light of the strategic review.

Changes in our principal risk levels

We continue to review our principal risks and how we manage them to reflect their evolving nature. We have reviewed our risks in light of changes to the internal and external environment, in particular economic uncertainty, inflation, supply chain disruption and a tightening labour market; the current political situation including the Russia-Ukraine conflict and the subsequent cost and availability of electricity and natural gas and continuing disruptions to global supply chains. Despite the rigorous supply chain management, leaner manufacturing, strategic partnerships, application of contractual pricing protection, utilisation of our hedge book and continued focus on pricing, productivity and costs we believe the risk levels for financial shock, market shock, business continuity and political risk have increased since last year.

Increased risks:

Financial shock

The rapidly changing external environment, in particular rising interest rates, inflation, energy costs and the changing value of sterling have heightened the risk of financial shocks to the Group. As planned, the proceeds of the ITP disposal being used towards repaying the £2bn UKEF loan facility has in part helped to mitigate this risk, as all remaining debt is currently at fixed interest rates.

We use derivative financial instruments to hedge net foreign currency cash flows, which are mainly denominated in US dollar. In 2022, the Board agreed to update our hedging policy, reducing the hedging time horizon from ten to five years which will allow us to react quicker to changes in the external environment.

Market shock

The likelihood of one or more macroeconomic risk occurring has increased over the past 12 months, with economic growth reducing and energy costs, government borrowing and long-term interest rates increasing. The combined effect could be to reduce economic growth and disposable income which in turn could reduce capital investment and the propensity to travel. In addition, high level of debt by national governments, in particular the UK and US, could, in the long run, temper their spending on defence and funding research and technology.

Business continuity
A combination of supply chain constraints, high inflation, slowing economic growth and the potential for energy shortages in Europe means the likelihood of supply shortages, or supplier failure, has increased over the year. We have responded by using rigorous supply chain management, leaner manufacturing, strategic partnerships, application of contractual pricing protection, increasing working capital and reviewing supplier health and where necessary offering support to key partners. For further information on supplier engagement, see our case study on page 50.

Political risk
The Russia-Ukraine conflict has resulted in heightened political risk to the Group. As outlined on page 13, we took the decision to stop doing business in Russia and to reduce the supply of titanium from Russia.

New and retired risks:
In light of our transformation programme outlined on page 8, we have replaced our previous strategic transformation risk with a revised risk relating to the execution of this programme.

Other specific risks
Human capital: our approach to human capital is demonstrated in our 'Being' campaign set out on page 52.

Human trafficking and slavery: our approach is set out under the human rights and anti-slavery section on page 41.

Our current principal risks together with how we manage them, how we assure them (by activities and functions other than internal audit), the oversight provided by the Board and/or Board committees and how the risk levels have changed over the course of the year are set out in the table below.

Emerging risks
We continue to review additional emerging risks that could significantly impact or challenge our current strategy and business model. Any emerging risks identified have been recorded in our RMS and are being managed and monitored alongside our existing risks.

Change in risk level: ↑ Increased <> Static ↓ Decreased + New

HOW WE MANAGE PRINCIPAL RISKS

RISK	CONTROLS	ASSURANCE ACTIVITIES AND PROVIDERS	OVERSIGHT FORUM	BUSINESS MODEL	CHANGE
Safety Failure to: i) meet the expectations of our customers to provide safe products; or ii) create a place to work which minimises the risk of harm to our people, those who work with us, and the environment, would adversely affect our reputation and long-term sustainability.	**Product:** – Our product safety management system includes controls designed to reduce our safety risks as far as is reasonably practicable and to meet or exceed relevant company, legal, regulatory and industry requirements – We verify and approve product design – We test adherence to quality standards during manufacturing – We validate conformance to specification for our own products and those of our suppliers – We mandate safety awareness training – We use engine health monitoring to provide early warning of product issues – We take out relevant and appropriate insurance	**Product:** – Product safety assurance team – Technical product lifecycle audits	– Safety, Ethics & Sustainability Committee – Product safety board	2, 3, 4, 5, 6, 7	<>
	People: – Our HSE management system includes activities and controls designed to reduce our safety risks as far as is reasonably practicable and to meet or exceed relevant company, legal, regulatory and industry requirements – We reinforce our journey to zero harm – We use our crisis management framework	**People:** – Safety case interventions – HSE audit team	– Safety, Ethics & Sustainability Committee	2, 3, 4	<>

Change in risk level: ↑ Increased <> Static ↓ Decreased + New

RISK	CONTROLS	ASSURANCE ACTIVITIES AND PROVIDERS	OVERSIGHT FORUM	BUSINESS MODEL	CHANGE
Business continuity The major disruption of the Group's operations, which results in our failure to meet agreed customer commitments and damages our prospects of winning future orders. Disruption could be caused by a range of events, for example: extreme weather or natural hazards (for example earthquakes, floods) which could increase in severity or frequency given the impact of climate change; political events; financial insolvency of a critical supplier; scarcity of materials; loss of data; fire; or infectious disease. The consequences of these events could have an adverse impact on our people, our internal facilities or our external supply chain.	– We invest in capacity, equipment and facilities, dual sources of supply and in researching alternative materials – We provide supplier finance in partnership with banks to enable our suppliers to access funds at low interest rates – We hold safety stock – We plan and practice IT disaster recovery, business continuity and crisis management exercises – We undertake supplier diligence – We take out relevant and appropriate insurance	– Investment reviews – Supplier strategy and sourcing reviews – Group security and resilience team	– Audit Committee	4, 5, 6, 7	↑
Climate change We have committed to net zero carbon by 2050. The principal risk to meeting these commitments is the need to transition our products and services to a lower carbon economy. Failure to transition from carbon intensive products and services at pace could impact our ability to win future business; achieve operating results; attract and retain talent; secure access to funding; realise future growth opportunities; or force government intervention to limit emissions. In addition, physical risks from extreme weather events (and/or natural hazards) could potentially materialise, which may result in disruption for Rolls-Royce.	– We invest in: i) reducing carbon impact of existing products; and ii) zero carbon technologies to replace our existing products – Performance of climate scenario modelling and physical risk impact assessments – We balance our portfolio of products, customers and revenue streams to reduce our dependence on any one product, customer or carbon emitting fuel source – Communication of the actions we are taking to manage this risk, in order to demonstrate our alignment to societal expectations and global climate goals – In June 2022, we developed and submitted new science-based decarbonisation targets to the Science-Based Targets initiative for validation	– Strategy reviews – Technology reviews – Investment reviews – Group sustain-ability team	– Board and its committees – Executive Team and its committees – Climate steering committee	1, 2, 3, 4, 5, 6, 7	<>

Change in risk level: ↑ Increased <> Static ↓ Decreased + New

RISK	CONTROLS	ASSURANCE ACTIVITIES AND PROVIDERS	OVERSIGHT FORUM	BUSINESS MODEL	CHANGE
Competitive environment **Existing competitors**: the presence of competitors in the majority of our markets means that the Group is susceptible to significant price pressure for original equipment or services and we may have to absorb cost increases caused by high inflation. Our main competitors have access to significant government funding programmes as well as the ability to invest heavily in technology and industrial capability. **Existing products**: failure to achieve cost reduction, contracted technical specification, product (or component) life or falling significantly short of customer expectations, would have potentially significant adverse financial and reputational consequences, including the risk of impairment of the carrying value of the Group's intangible assets and the impact of potential litigation. **New programmes**: failure to deliver an NPI project on time, within budget, to technical specification or falling significantly short of customer expectations would have potentially significant adverse financial and reputational consequences. **Disruptive technologies** (or new entrants with alternative business models): could reduce our ability to sustainably win future business, achieve operating results and realise future growth opportunities.	— We review product lifecycles — We make investment choices to improve the quality, delivery and durability of our existing products and services and to develop new technologies and service offering to differentiate us competitively — We protect our intellectual property (e.g. through patents) — We monitor our performance against plans — We scan the horizon for emerging technology and other competitive threats, including through patent searches — Inclusion of inflation clauses in our contracts to manage cost increases — Investment in R&D opportunities, to support the development of new products or services to protect and sustain our future market	— Strategy reviews — Technology reviews — Investment reviews	— Board — Science & Technology Committee — Investment review committee	1, 2, 3, 4, 5, 6, 7	<>
Compliance Non-compliance by the Group with legislation or other regulatory requirements in the heavily regulated environment in which we operate (for example, export controls; data privacy; use of controlled chemicals and substances; anti-bribery and corruption; human rights; and tax and customs legislation). This could affect our ability to conduct business in certain jurisdictions and would potentially expose the Group to: reputational damage; financial penalties; debarment from government contracts for a period of time; and suspension of export privileges (including export credit financing), each of which could have a material adverse effect.	— We continuously develop and communicate a comprehensive suite of mandatory policies and processes and controls throughout the Group — We undertake third-party due diligence — We encourage, facilitate and investigate speak up cases — We investigate potential regulatory matters — Our financial control framework activities are designed to reduce financial reporting and fraud risks — We classify data to meet internal and external requirements and standards	— Compliance teams — Financial controls team	— Safety, Ethics & Sustainability Committee	2, 3, 4, 5, 6, 7	<>

Change in risk level: ↑ Increased <> Static ↓ Decreased + New

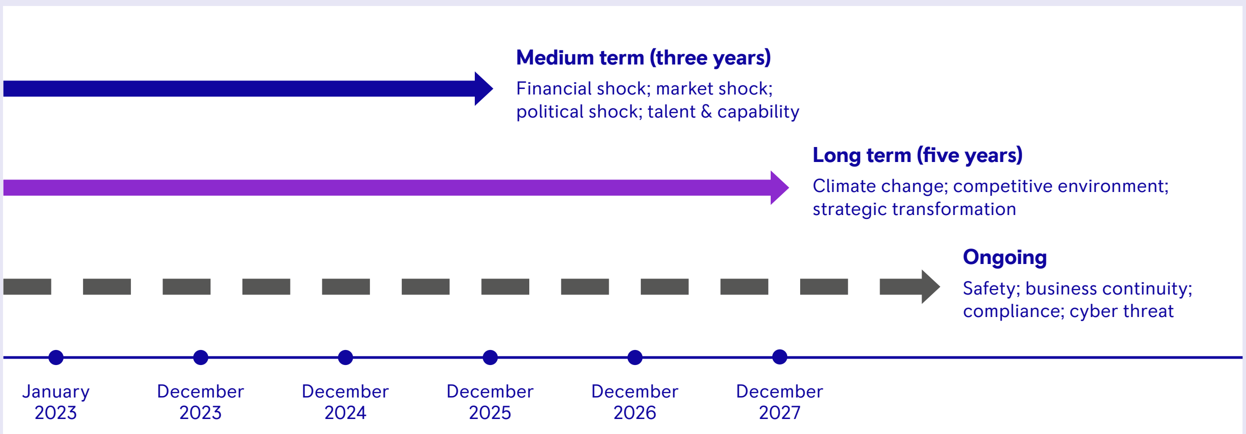
RISK	CONTROLS	ASSURANCE ACTIVITIES AND PROVIDERS	OVERSIGHT FORUM	BUSINESS MODEL	CHANGE
Cyber threat An attempt to cause harm to the Group, its customers, suppliers and partners through the unauthorised access, manipulation, corruption, or destruction of data, systems or products through cyberspace.	– We deploy web gateways, filtering, firewalls, intrusion, advanced persistent threat detectors and integrated reporting – We test software – We use our crisis management framework – Application of our crisis management framework to govern our response to potential cyber security incidents and significant IT disruption	– Group cyber security team and security operations centre	– Audit Committee – Data security sub-committee	2, 3, 4, 6, 7	<>
Financial shock The Group is exposed to a number of financial risks, some of which are of a macroeconomic nature (for example foreign currency, interest rates, high inflation and commodity prices) and some of which are more specific to the Group (for example liquidity and credit risks). Significant extraneous market events could also materially damage the Group's competitiveness and/or creditworthiness and our ability to access funding. This would affect operational results or the outcomes of financial transactions.	– Our financial control framework activities are designed to reduce financial reporting risks – Group strategic planning process – We incorporate trends, demand and other dependencies in our financial forecasts – We analyse currency and credit exposures and include in sourcing and funding decisions – We develop, review and communicate treasury policies that are designed to hedge residual risks using financial derivatives (covering foreign exchange, interest rates and commodity price risk) – We raise finance through debt and equity programmes. All drawn debt is currently set at fixed interest rates	– Strategy reviews – Finance risk committee – Financial controls team	– Audit Committee	1, 7	↑
Market shock The Group is exposed to a number of market risks, some of which are of a macroeconomic nature (e.g. economic growth rates) and some of which are more specific to the Group (for example, reduction in air travel or defence spending, or disruption to other customer operations). A large proportion of our business is reliant on the civil aviation industry, which is cyclical in nature. Demand for our products and services could be adversely affected by factors such as current and predicted air traffic, fuel prices and age/replacement rates of customer fleets.	– We monitor trends, market demand and future market forecasts and make investment choices to maximise the related opportunities – We incorporate trends, demand and other dependencies in our financial forecasts – We balance our portfolio with the sale of original equipment and aftermarket services, providing a broad product range and addressing diverse markets that have differing business cycles – We execute our short, medium and longer-term plans	– Strategy reviews – Technology reviews	– Board	1, 5, 6, 7	↑

Change in risk level: ↑ Increased <> Static ↓ Decreased + New

RISK	CONTROLS	ASSURANCE ACTIVITIES AND PROVIDERS	OVERSIGHT FORUM	BUSINESS MODEL	CHANGE
Political risk Geopolitical factors that lead to an unfavourable business climate and significant tensions between major trading parties or blocs which could impact the Group's operations. Examples include: changes in key political relationships; explicit trade protectionism, differing tax or regulatory regimes, potential for conflict or broader political issues; and heightened political tensions.	— We develop Group and country strategies and consider associated dependencies — We horizon scan for political implications and dependencies — We include diversification considerations in our investment and procurement choices	— Strategy reviews — Technology reviews — Supplier sourcing teams — Government relations teams	— Board	1, 2, 5, 6, 7	↑
Transformation Our transformation programme incorporating a strategic review, is outlined on page 8. Failure to execute the plan underpinning this programme will prevent us from achieving our longer-term ambitions.	— Completing internal and external assessments and benchmarking as part of the strategic review — Financial modelling, scenario planning and sensitivity analysis — Allocating cash and capital in accordance with our revised frameworks	— Strategy and business performance reviews	— Board	1, 2, 3, 4, 5, 6, 7	+
Talent and capability Inability to identify, attract, retain and apply the critical capabilities and skills needed in appropriate numbers to effectively organise, deploy and incentivise our people would threaten the delivery of our strategies.	— We undertake succession planning and monitor the talent pipeline — We survey employee opinion — We develop, implement and review strategic resourcing plans	— People leadership team	— Nominations & Governance Committee	1, 2, 3, 4, 5, 6, 7	<>

With consideration to the nature and potential impact of our principal risks, our associated level of exposure has been assessed, and accordingly our timeline of exposure determined. As per the summary below, each of our principal risks will continue to be monitored and managed in line with this determined timeline.

RISK EXPOSURE OVER A FIVE YEAR PLANNING PERIOD



GOING CONCERN STATEMENT

Overview

In adopting the going concern basis for preparing the consolidated and Company financial statements, the Directors have undertaken a review of the Group's cash flow forecasts and available liquidity, along with consideration of the principal risks and uncertainties over an 18-month period from the date of this report to August 2024. The Directors consider this 18-month period to be appropriate as it includes the maturity of £1bn of the Group's £5.5bn undrawn borrowing facilities in January 2024 and the repayment at maturity of a €550m (£484m) bond in May 2024.

The plans approved by the Board are used as the basis for monitoring the Group's performance, incentivising employees and providing external guidance to shareholders.

The processes for identifying and managing risk are described on pages 42 to 47. As described on those pages, the risk management process and the going concern and viability statements are designed to provide reasonable but not absolute assurance.

Forecasts

Recognising the challenges of reliably estimating and forecasting the impact of external factors on the Group, the Directors have considered two forecasts in the assessment of going concern, along with a likelihood assessment of these forecasts. The base case forecast reflects the Directors current expectations of future trading. A stressed downside forecast has also been modelled, which envisages a 'stressed' or 'downside' situation that is considered severe but plausible.

The Group's base case forecast reflects a steady and ongoing recovery of trading towards pre-pandemic levels, especially in the civil aviation industry. Macro-economic assumptions have been modelled using externally available data based on the most likely forecasts, with inflation at 3%-4%, interest rates at 4%-6% and GDP growth at around 2%. In the base case forecast, Civil Aerospace large engine EFHs are expected to recover to pre-pandemic levels by the end of 2024.

The stressed downside forecast assumes no further recovery in Civil Aerospace large engines, with EFHs modelled at the average fourth quarter 2022 levels throughout the 18-month period to August 2024, reflecting slower GDP growth in this forecast when compared with the base case. It also assumes a more pessimistic view of inflation at around 6% higher than the base case covering a broad range of costs including energy, commodities and jet fuel. Interest rates in the stressed downside are 1%-2% higher than the base case. The stressed downside also considers lower demand and load reduction through our factories, and possible ongoing supply chain challenges.

The future impact of climate change on the Group has been considered through climate scenarios. Key variables include carbon prices based on the IEA Net Zero scenario, which assumes an increase from $46 per tonne of carbon in 2022 to $250 per tonne in 2050, commodity price trends temperature rises and GDP information derived from the Oxford Economics Global Climate Service Net Zero scenario aligned to IPCC SSPI-19. The climate scenarios modelled do not have a material impact on either the base case or downside forecast over the 18-month period to August 2024.

Liquidity and borrowings

The proceeds from the disposal of ITP Aero, which completed on 15 September 2022, were used towards the repayment of a drawn £2bn UKEF loan which was due to mature in August 2025. A new £1bn UKEF facility was entered into in September 2022, which remains undrawn.

At 31 December 2022, the Group had liquidity of £8.1bn including cash and cash equivalents of £2.6bn and undrawn facilities of £5.5bn.

The Group's committed borrowing facilities at 31 December 2022 and 31 August 2024 are set out below. None of the facilities are subject to any financial covenants or rating triggers which could accelerate repayment.

(£m)	31 December 2022	31 August 2024
Issued Bond Notes [1]	3,995	3,511
UKEF £1bn loan (undrawn) [2]	1,000	1,000
UKEF £1bn loan (undrawn) [3]	1,000	1,000
Revolving Credit Facility (undrawn) [4]	2,500	2,500
Bank Loan Facility (undrawn) [5]	1,000	–
Total committed borrowing facilities	**9,495**	**8,011**

1 The value of Issued bond notes reflects the impact of derivatives on repayments of the principal amount of debt. The bonds mature by May 2028
2 The £1,000m UKEF loan matures in March 2026 (currently undrawn)
3 The £1,000m UKEF loan matures in September 2027 (currently undrawn)
4 The £2,500m revolving credit facility matures in April 2025 (currently undrawn)
5 The £1,000m bank loan facility matures in January 2024 (currently undrawn)

Taking into account the maturity of these borrowing facilities, the Group has committed facilities of at least £8.0bn available throughout the period to 31 August 2024.

Conclusion

After reviewing the current liquidity position and the cash flow forecasts modelled under both the base case and stressed downside, the Directors consider that the Group has sufficient liquidity to continue in operational existence for a period of at least 18 months from the date of this report and are therefore satisfied that it is appropriate to adopt the going concern basis of accounting in preparing the consolidated and Company financial statements.

VIABILITY STATEMENT

The viability assessment considers liquidity over a longer period than the going concern assessment. Our downside forecast uses the same assumptions as the going concern assessment for the first 18 months and in 2025 to 2027 assumes a slower recovery than assumed in our base case.

Consistent with previous years, we have assessed our viability over a five-year period which is in line with our five-year planning process. We continue to believe that this is the most appropriate time period to consider as, inevitably, the degree of certainty reduces over any longer period.

We have created severe but plausible scenarios that estimate the potential impact of our principal risks arising over the assessment period (descriptions of our principal risks and the controls in place to mitigate them can be found on pages 43 to 47). The risks chosen and scenarios used are as shown in the table below.

The cash flow impacts of these scenarios were overlaid on the five-year forecast to assess how the Group's liquidity would be affected.

The scenarios assume an appropriate management response to the specific event which could be undertaken and also consider specific activities to improve liquidity such as raising additional funds, reducing expenditure and divesting parts of our business.

Reverse stress testing has also been performed to assess the severity of scenarios that would have to occur to exceed liquidity headroom. The assumptions used in these stress tests were not considered plausible, as shown in the table below.

On the basis described above, the Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the next five years. In making this statement, the Directors have made the following key assumptions:

— the Group is able to refinance maturing debt facilities and drawdown existing available facilities as required. Debt maturities over the assessment period are as follows:
  - £1,000m bank loan facility maturing in 2024 *
  - €550m bond maturing in 2024
  - £2,500m revolving credit facility maturing in 2025 *
  - $1,000m bond maturing in 2025
  - £1,000m UKEF loan maturing in 2026 *
  - £1,000m UKEF loan maturing in 2027 *
  - €750m bond maturing in 2026
  - £375m bond maturing in 2026
  - $1bn bond maturing in 2027
  - £545m bond maturing in 2027;

* Currently undrawn facilities

— the Group has access to global debt markets and expects to be able to refinance these debt facilities on commercially acceptable terms;

— that implausible scenarios do not occur. Implausible scenarios include either multiple risks impacting at the same time or where management actions do not mitigate an individual risk to the degree assumed; and

— that in the event of one or more risks occurring (which has a particularly severe effect on the Group) all potential actions (such as but not limited to restricting capital and other expenditure to only committed and essential levels, reducing or eliminating discretionary spend, reinstating pay deferrals, raising additional funds through debt or equity raises, executing disposals and undertaking further restructuring) would be taken on a timely basis.

The Group believes it has the early warning mechanisms to identify the need for such actions and, as demonstrated by our decisive actions over the course of the pandemic, has the ability to implement them on a timely basis if necessary.

PRINCIPAL RISK	SCENARIO ASSUMPTIONS AND IMPACTS
Safety	Civil Aerospace product safety event resulting in aircraft being grounded, lower engine flying hour revenues, commercial penalties and additional costs (e.g. unplanned shop visits). The grounding time and number of shop visits required to exceed headroom are considered remote.
Business continuity	The loss of a key element of our supply chain resulting in an inability to fulfil Civil Aerospace large engine orders for 12 months. Reverse stress testing would require the time over which orders could not be fulfilled to be extended beyond what we consider plausible.
Climate change	This scenario is described in more detail against strategy part c of our TCFD disclosures as set out on page 34.
Competitive environment	A programme issue on a major programme of the same (proportionate) scale as Trent 1000. The extent to which engine life would need to be impacted to breach headroom is considered remote.
Compliance	A compliance breach resulting in fines (greater than those agreed as part of our DPAs) and loss of new business with governments and state-owned companies. The probability of the size of the fine required to exceed headroom is considered remote.
Cyber threat	A cyber attack resulting in loss and corruption of data and leading to the loss of EFHs. The time period over which EFHs would need to be affected to breach headroom is not considered plausible.
Financial shock	Inability to refinance debt when it matures (in combination with other risks).
Market shock	Captured in our downside forecast (described above).
Political risk	Sanctions imposed between major trading blocs resulting in supply chain disruption and a loss of sales in impacted markets. Reverse stress testing would require sanctions to persist over a period of time which is not considered plausible.

SECTION 172 AND STAKEHOLDER ENGAGEMENT

All of our Directors are briefed on their Companies Act 2006 duties during their induction. Our section 172 (s172) statement below sets out how the Directors have discharged their s172 duty. The Board recognises the responsibility to all our different but interrelated stakeholder groups and wider society. We recognise that effective engagement with a broad range of our stakeholders is essential for the long-term success of the business and we aim to create value for our stakeholders every day by maintaining levels of business conduct that are aligned to our values and our purpose. This section should be read in conjunction with the Board's focus which contains information on the principal decisions made by the Board over the year, see pages 67 and 68.

The likely consequences of any decision in the long term

During the year, the Directors considered the Group's strategic direction. This, in turn, creates long-term value for shareholders, recognising that the longer- term success of our business depends on the effects of our business activities on wider society. In a year marked by external shocks, both geopolitical and macro-economic, the Board discussions focused on the labour environment, implications of supply chain disruption and the impact of the swift withdrawal from Russia, including the longer-term reliance on Russia for key materials such as titanium.

The interests of the Company's employees

The Directors recognise that the success of our business depends on attracting, retaining and motivating talented people. The Directors consider and assess the implications of decisions on our people, where relevant and feasible. The swift withdrawal from Russia resulted in employees being relocated and the Board spoke with impacted colleagues during a site visit to Friedrichshafen, Germany. The Directors seek to ensure that the Company remains a responsible employer, including with respect to pay and benefits, health and safety issues, the workplace environment and engagement with the unions. A case study on our 'Being' campaign can be found on page 52.

The need to foster the Company's business relationships with suppliers, customers and others

Delivering our strategy requires a strong, mutual and beneficial relationship with suppliers, customers, governments and joint venture partners. The Directors receive updates on engagement across the Group at Board meetings. A case study on the impact of the Russia-Ukraine conflict on procurement can be found on page 53.

The impact of the Company's operations on the community and the environment

The Board receives information through reports from the Chief Executive and Group-level reviews on various topics to help the Directors make decisions relating to net zero ambitions and proposals to divest or invest. In addition, initiatives taken during the year, including one-off payments to employees in light of the economic climate, are set out on page 40. A case study on the Unnati STEM programmes in India can be found on page 55.

The desirability of the Company maintaining a reputation for high standards of business conduct

The Board reviews and approves our ethics and compliance frameworks. We updated our human rights policy during 2022. This, in conjunction with the Board monitoring compliance with governance standards, helps to ensure that Board-level decisions and the actions of our subsidiaries promote high standards of business conduct. Our Code of Conduct, supplier code and modern slavery statements ensure high standards are approved and can be found on www.rolls-royce.com.

The need to act fairly between members of the Company

After weighing up all relevant factors, the Directors consider which course of action best enables delivery of our strategy through the long term, taking into consideration the effect on the Group's stakeholders.

EXAMPLES OF ENGAGEMENT WITH OUR KEY STAKEHOLDER GROUPS

PEOPLE

The Board recognises that it is through our people that we fulfil our potential, achieve our vision and execute our strategy.

Board engagement
During 2022, our Employee Champions, Beverly Goulet, Wendy Mars and Lee Hsien Yang, ensured the voice of our people was heard in the boardroom see page 64. The Employee Champions provide regular feedback to the Board on topics of interest and/or concern. This provides a valuable link between our people and the Directors. We believe that these methods of engagement with our people are effective in building and maintaining trust and communication, whilst providing our people with a forum to influence change in relation to matters that affect them.

The Meet the Board event during 2022, enabled around 100 colleagues to ask the Board questions relating to their personal experiences, work life balance and other cultural topics, including imposter syndrome. Feedback from both colleagues and the Board was overwhelmingly positive.

The Employee Champions continue to meet regularly with the employee stakeholder engagement committee, which provides support for their focus on employee engagement. The Employee Champions also met with many of the employee resource groups (ERG) during the year. At the Asia-Pacific ERG there was active discussion on LGBTQ+, as well as debates on whether some cultures were not as open to everyone's differences. Culture was also a key theme at the North American ERG, with discussion on the importance of authentic and inclusive leaders. Feedback from the ERG sessions contributed to positive action being taken, including a dotted-line reporting route for ERGs into the global head of inclusion demonstrating leadership support. In addition, during 2022 there were several in-person and virtual site events, including a site visit to Friedrichshafen, Germany, in September. In addition, Wendy visited Indianapolis, US, to discuss diversity & inclusion with a focus on hybrid working with positive feedback shared on the Group's approach to flexible working. Wendy also visited Washington, UK, where employees discussed innovation and the automation of shop floor processes.

In addition, the Board engaged with CCLA Investment Management on cost of living and mental health. During the year, the Board received updates on ongoing matters with the unions across our operations, together with related strike action in Canada, see page 40. These updates influenced Board discussion and debate. Given the current economic situation with social pressures and cost of living, it was agreed that a one-off payment would be made to employees in some of our larger locations (see page 40).

Many of our people are also our shareholders and we encourage their participation in a variety of share plans.

CUSTOMERS

The Board recognises that the quality of the Group's customer relationships is based on mutual trust as well as our engineering expertise. We recognise that we must retain and strengthen our focus on the transition to a net zero carbon global economy by creating the sustainable power that our customers require. We continue to focus on helping our customers deliver their own sustainability agendas, making products more sustainable, maintaining peace and providing protection for society.

Board engagement
The Board regularly receives operational updates, including customer metrics and feedback, from each of the businesses. During 2022, the Business Presidents presented their updates to the Board. This greatly influences the Board's deliberations and its support for the Executive Team when considering our strategy.

The Chair continued to meet with key customers during the year.

Case study

'Being' campaign

Creating a more inclusive workplace where our people understand how we can all be at our best.

What we did and why we did it

- Insights told us that we needed to do more to be clear on what inclusion means at an individual and team level in our business
- We wanted to deliver a global focus across Rolls-Royce on the inclusive behaviours that we need from all colleagues in order to perform as a business, both today and for the future, ensuring that our people, leaders and teams are at their best
- Inclusion drives performance and innovation, both important for our customers; as well as creating a culture and environment that enables us to attract and retain the best diverse talent in a competitive market
- Our 'Being' campaign was based on the belief that an inclusive workplace starts with how we all treat each other every day

Q1 2022

Initially we sought stakeholder engagement and buy-in from our leaders and influencers.

Q2 2022 and throughout 2022

Our high-profile campaign launched across all channels and workplaces globally, with a consistent use of our new inclusion narrative used throughout.

Including:

- launching our 2022 Group mandatory learning, including a module on micro-aggressions
- a website page to enable colleagues to access many of our communications from their own devices
- a new 'being included' video to engage hearts and minds
- refreshed 'leading inclusively' resources in our digital leadership toolkit to enable self-led learning

Board and committee engagement

- In May, at the Nominations & Governance Committee, a D&I update was provided which covered the refreshed 'leading inclusively' digital toolkit
- The Chief Executive report at the June Board meeting provided an update following the ELG conference, which focused on building upon our 'Being' campaign. The Chief Executive reported to the Board that inclusive leadership was a key theme at the ELG conference
- In November, the Nominations & Governance Committee received an update on our 'Being' campaign. The Chief People Officer confirmed that feedback on the campaign had been extremely positive
- In November, the Nominations & Governance Committee received an update on the inclusion strategy

Storytelling from our people

Storytelling from our people was also a core part of the campaign. We launched the campaign alongside a thought-leader session for our senior leaders on the power of inclusion and an expectation to lead inclusively.

Outcome-led approach

Our goal was to reach everyone, everywhere

Our people and leaders:

- understand and demonstrate the inclusive behaviours we expect of everyone

Our external talent audiences:

- understand how vital inclusion is to us, who we are and what we stand for

Highlights

- A global internal and external campaign that focused attention and action across all business units, regions and sites
- Prominent on our global communications channels and in our workplaces from May 2022
- Built to reach the hard to reach (shop floor) enabling leaders, starting conversations, engaging and changing behaviours
- An increase in our inclusion measure using our engagement survey (powered by Gallup)
- Understood and prioritised by our leaders as part of our ELG conference in June
- Supported by a new global inclusion policy and mandatory learning (microaggressions)
- Sustained later in 2022 by our refreshed inclusion strategy

SUPPLIERS AND PARTNERS

The Group's global supply chain is a vital contribution to its performance, with significant investment in resources to ensure the complex global supply chain is resilient and efficient.

Board engagement
The interests of both our suppliers and partners are regularly considered as part of the Board's discussions on manufacturing strategy and when reviewing specific projects.

The Board supports our Executive Team who work collaboratively with our suppliers and partners to continue to improve operational performance through various means. The Board continued to receive updates from the businesses on supplier performance and supply chain disruption. The Board received an update on the first in-person global supplier conference since the pandemic.

Case study

Impact of the Russia-Ukraine conflict on procurement

Most components which go into an engine are bought from our suppliers. Power Systems has established a worldwide supply chain with 130 main suppliers (direct material) with a spend of approximately €1.4bn during 2022 (equalling 80% of the total direct material spend). This spend is managed by an international team of procurement and supply chain experts, located globally.

Strong risk management system

- Due to rising tensions prior to the conflict starting in 2022, Power Systems' risk management indicated a high risk from Ukraine suppliers and built up second sources for Ukraine-based suppliers
- After qualification of the parts, procurement could guarantee the supply of parts through several independent sources, enabling Power Systems to run the assembly without any interruption during the conflict

Supplier events

- Power Systems hosted two supplier expos during 2022, built around critical importance across the supply chain, possible gas and power shortages, the drive for zero defects and CO_2 reduction. Special focus was given to military rising demands and to securing the supply chain
- At the beginning of 2022, Power Systems held an event to recognise their best suppliers

Collaboration

- To protect the supply chain from unforeseen difficulties, Power Systems require the supply chain to reduce gas dependencies and therefore require regular progress reports to get an overview of existing risk
- A total of 146 European suppliers were contacted regarding potential energy and gas shortages. These included the top 60 suppliers as well as the energy-intensive suppliers. To minimise the risk, further evaluations were made regarding dual sourcing
- Regular management meetings were held with key suppliers to secure the supply chain, strategic partnerships and capacity to cover order increase in Power Systems during 2023

Board engagement

- During March, the Board discussed the direct and indirect impact on the supply chain taking into account the situation in Russia and cost inflation pressure on margins
- During May, the Board discussed scenario planning around targeted sanctions and the proposed impact on non-sanctioned Power Systems customers
- In September, the Board received an update on the strong order position with customers making advance deposit payments to secure orders

Improvement project

- The purpose was to stabilise the supply chain processes. It was a cross-Group effort, including logistics, quality and procurement to make the business more resilient and to focus all suppliers on supply chain resilience
- State-of-the-art software solutions were implemented to allow Power Systems to detect supply chain risks at an early stage. Solutions included real time information for buyers and management, together with an established risk monitoring process

COMMUNITIES

The Board recognises the importance of our communities and understands that everything we do can have an impact on our local and global communities.

Board engagement
The Safety, Ethics & Sustainability Committee received updates during 2022 on community investments during the year. A key focus for 2022 was the Habitat for Humanity campaign to support refugees fleeing the Russia-Ukraine conflict. Information on the Group's commitment and the matching of employee donations can be found on page 39.

In addition, Power Systems donated generators to maintain power to vital facilities. Colleagues in Freidrichshafen, Germany, donated €150,000, through their works council, which Power Systems matched, to support refugees arriving in the Lake Constance region.

GOVERNING BODIES AND REGULATORS

The Board recognises the importance of governments and regulators as stakeholders. Not only are governments across the world customers but they also support the Group's investment in infrastructure and technology.

Board engagement
The Board is updated on the Group's engagement with the tax authorities and the related regulatory landscape is discussed by both the Board and the Audit Committee. In addition, meetings with ministers and senior officials are held, when relevant, throughout the year. The General Counsel provides regular updates to the Board on compliance with regulation and the Safety, Ethics & Sustainability Committee reviews how the business engages with airworthiness regulations, as well as receiving updates on the continuing dialogue and co-operation with prosecutors, regulators and government agencies.

Throughout the year, the Chair attended meetings with UK Government ministers and officials, especially in support of her position as a member of the Prime Minister's Business Council which resulted in a range of discussions on sustainable aviation fuel, skills reform and infrastructure. The Chair also attended a follow-up meeting on the Prime Minister's Business Council with the then BEIS Secretary of State and provided the foreword to a UK Government report from the Regulatory Horizons Council on innovation-friendly regulation. The Chair is also a member of the Prime Minister's Business Council.

INVESTORS

The investor relations team is the key interface between the investment community and the Board, providing frequent dialogue and feedback.

Board engagement
The Chair and members of the Board make themselves available to meet with institutional investors and seek to understand and prioritise the issues that matter most.

Company and Executive Team engagement
In addition, the Chief Executive and Chief Financial Officer, supported by members of the Executive Team and investor relations, interact regularly with investors, most notably after our financial results, capital markets events and site visits and at conferences as well as at key points throughout the year.

The Chief Executive and Chief Financial Officer attended a US roadshow, in which they met many of the large shareholders.

The Chair discussed the Chief Executive's succession with investors.

Case study

Unnati STEM programmes in India

The Hindi word 'Unnati' means development and our Unnati community programmes aim to develop science, technology, engineering and maths (STEM) talent in India and increase diversity in these fields. Working with expert partners, we have identified social and economic barriers that prevent girls and women participating in STEM careers. We have developed a programme to address these barriers.

Developing Unnati Wings4Her

- Identified key societal issues with Charities Aid Foundation, India within the context of the STEM KPI which is to inspire 25 million of tomorrow's pioneers by 2030
- Developed and funded pilot Wings4Her programme with four schools in Delhi during 2021 and 2022
- Group charitable contributions and social sponsorships committee monitored progress
- Pilot programme evaluated in partnership with Charities Aid Foundation, India
- Wings4Her impact assessed against charitable contributions and social sponsorships policy and criteria
- Approved proposal to extend Wings4Her programme to Bangalore in 2023
- Included in the annual review of community engagement by the Safety, Ethics & Sustainability Committee

Social and economic factors

- Unnati Wings4Her was designed to bridge the gap in STEM education to empower girls facing social and economic challenges
- Lack of study support to help girls through the tough level of high-school studies discourages many from continuing with STEM subjects
- Financially disadvantaged families discontinue girls' education or lack resources to prepare them for competitive exams for undergraduate STEM courses
- A lack of awareness of the variety of STEM careers drives the perception that these are unsuitable for girls
- Crucial support from families to pursue STEM career ambitions can be lacking

Interventions and success data

Wings4Her provides targeted support to make STEM studies more equitable. The pilot programme in four government schools in Delhi, working with 100 girls, resulted in 30% of the girls going on to study at under-graduate level, as well as scholarship support for 20 students to further their STEM studies. The programme included:

- career guidance to increase aspiration and enable informed choices;
- workshops for parents to create positive support for their daughters' career ambitions; and
- scholarships for under-graduate study to enable continuing education.

Board and committee engagement

- The Board received an update on progress of the STEM programme more generally
- The Safety, Ethics & Sustainability Committee received an update on the STEM programmes in India, including Wings4Her and scholarships
- The Safety, Ethics & Sustainability Committee discussed the Wings4Her programme in light of the theory of societal change and received updates from the team on how these programmes align with national and governmental initiatives in India

Strategic Report
signed on behalf of the Board

Pamela Coles
Chief Governance Officer

23 February 2023