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We are Ricardo

A global consultancy enabling the clean energy future by delivering strategic, environmental and engineering solutions that intersect the global transport, energy and climate agendas.

We strive to create a safe and sustainable world by enabling our clients to solve the most complex and dynamic challenges.

Our ambition is to become a global leading strategy and engineering consultancy in environmental and energy transition solutions.

While being led by our values:



Create together



Be innovative



Aim high



Be mindful



Highlights

Financial highlights

Order book(1),(2)

£396.5m £474.7m £30.5m

0.3%

Statutory profit before tax(2)

£4.3m

153.8%

Dividend per share

12.7p

6.2%

Revenue(1),(2)

6.6%

Underlying⁽¹⁾ earnings per share(2)

35.9p

7.5%

Underlying(1) cash conversion(2)(3)

118.9%

52.2pp

Underlying⁽¹⁾ profit before tax(2)

9.3%

Statutory earnings per share

1.1p

112 6%

Statutory cash conversion(2)(3)

125.4%

74.7pp

Operational highlights

2,600+

Active consulting projects

75%

Percentage of revenue that supports sustainability and safety

3.81

Employee engagement score

1,800+

Students reached through Ricardo STEM outreach



⁽¹⁾ Please see the glossary on page 224 for a definition of the above terms. These alternative performance measures (APMs) are described further, and where appropriate reconciled to GAAP measures, in Note 2 to the Group financial statements.

⁽²⁾ Excluding the results of Ricardo Software which was classified as a discontinued operation at 30 June 2023.

⁽³⁾ Growth based on prior year restated figure. See Note 37 in the Group Financial Statements.

Our story

Over 100 years of world-changing innovation and ideas

Ricardo has more than a century of engineering experience in improving transport efficiency and over 60 years of leading expertise in delivering environmental and energy solutions. Today, our consulting services and engineering solutions are helping overcome some of the world's most complex strategic and operational challenges.

Founded on principles of sustainability...



In 1915, Harry Ricardo set out on a mission to 'maximise efficiency and eliminate waste'. This mindset continues to motivate and direct the business of Ricardo today.

...that forms the basis for a purpose and culture that our people believe in...



Ricardo is powered by c.3,000 highly capable employees, all of whom are helping to fulfil our vision to create a safer and more sustainable world.

...and shapes our portfolio of services and solutions.



We are a global team of consultants, environmental specialists, engineers and scientists delivering innovative and cross-sector sustainable solutions

Our story continued

Enabling a better energy transition

The shift to clean energy is not only critical to addressing the climate crisis but inevitable. At Ricardo, we're committed to helping clients in nearly every sector navigate this shift by providing expertise and solutions that create clear paths to a sustainable future.

We have a clear ambition that is transforming our business...



We're taking big leaps to transform Ricardo into a world-leading strategy and engineering consultancy in environmental and energy transition solutions.

...while creating lasting value for all our stakeholders...



Through our ambition, we are taking an active role in addressing climate change and better aligning our business to respond to megatrends that are shaping the world.

...and working together towards a better tomorrow.



Building on our legacy of world-leading innovation, our teams are working together to solve complex challenges enabling a sustainable future.

Chair's statement



A year of taking action to achieve our long-term ambitions

Mark Clare | Chair

Dear Shareholders, I am pleased to present to you the Ricardo plc Annual Report and Accounts for the financial year 2023/24. Good progress has been made in the year with the repositioning of our Company to take advantage of the growth opportunities ahead, by focusing on clients, our people and the capabilities necessary for future success. As a result, we are starting to see real momentum in a number of areas and, while there is still work to be done, the board has confidence that we can deliver against our strategic ambitions.

Group performance

The Group saw underlying operating profit from continuing operations grow by 14% from £34.0m to £38.8m, in line with board expectations and on course to achieve our objective of doubling underlying operating profit over the five years to FY 2026/27. The Group's reported operating profit from continuing operations improved from a loss of £1.9m in FY 2022/23 to a profit of £12.8m in FY 2023/24.

After a challenging first half of the year which saw Emerging and Established Automotive and Industrial (A&I) making underlying operating losses, we were pleased to see a return to profit for both in the second half, following the additional restructuring actions taken. Our Defense business had a particularly strong year with an underlying operating profit growth of 82% (constant currency) driven by the ABS/ESC programme. Our Energy and Environment and Rail businesses have both shown good operating profit growth of 11% and 14% (constant currency), respectively.

Total orders received in the year were down (5%) against prior year, which was anticipated after a record order book in FY 2022/23 and the impact of delayed orders in A&I in FY 2023/24.

Cash performance was particularly strong with overall net debt falling in the year from £62.1m to £59.6m, despite having paid out the maximum earn outs for our E3-Modelling SA (E3M) and Aither Pty (Aither) acquisitions

based on their strong performance and the payment of reorganisation costs.

Actioning our ambition

Ricardo has a clear ambition: to become a leading global strategic and engineering consultancy in environmental, energy transition and transport solutions.

It's an ambition which clearly aligns with our Company vision to create a safe and sustainable world. In just over two years since communicating our strategy, we have taken actions to make this a reality and are already seeing good progress. This includes the acquisitions of E3M and Aither in FY 2022/23 where we have seen strong performance in the current financial year; a refocusing on our key client relationships across the Group with much stronger levels of engagement; streamlining operations and support functions to optimise performance and reduce operating costs; and a stronger focus on the commercial disciplines required to win key business opportunities.

Chair's statement continued

The board

There have been a number of changes to the board that we have announced. In May, we said farewell to Laurie Bowen who served nine years on the board and, in July, Jack Boyer stepped down having served nearly six years with the Company. In addition, Bill Spencer will be stepping down after the AGM in November having served over seven years.

We are very grateful to Laurie, Jack and Bill for their significant contributions to the Company and we wish them well for the future.

I am delighted to have welcomed Carol Borg to the board from 1 July and Sian Lloyd Rees who will join the board from 1 October. Their significant combined experience and expertise will be very valuable to the board going forward.

People and culture

The success of our Company continues to be in the hands of our c.3,000 colleagues across the business and significant steps have been taken to ensure communication throughout the organisation is as effective as it can be. There is no doubt that the strength and depth of talent that exists within Ricardo gives us real competitive advantage and management's role is to harness this for the benefit of our clients and ultimately our shareholders.

I was delighted to see a number of colleagues from across the business being recognised externally for their work during the year. In addition, great progress is being made in the hydrogen technology area, with Ricardo being recognised in the IET Excellence and Innovation Future Mobility awards for our propulsion inverter technology, and as a top 10 consultancy for green hydrogen by Reuters Top 100 Innovators in Hydrogen.

Dividend

Given the financial performance of the Company, the board is proposing a final dividend of 8.9p in line with our distribution policy within the range of 2.5-3.0 times cover. Following the interim dividend of 3.8p, this will take the total dividend for the year to 12.7p, a 6.2% increase over the prior year.

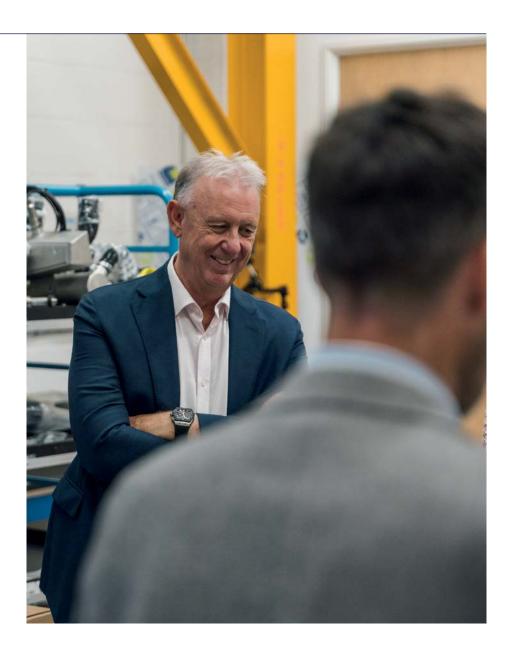
Outlook

As I have already said, good progress has been made in aligning the Company with its strategic plans to meet its long-term ambitions. There is still a considerable way to go and looking ahead the board will continue to focus on performance optimisation; growing our longer-term order book; delivering the benefits of the acquisitions made whilst critically reviewing further opportunities; developing our ESG agenda; and delivering a vision of 'One Ricardo' serving all our stakeholders.

Mark Clare

Chair

10 September 2024



Chief Executive's review



Building One Ricardo to create value and deliver our vision of a safe and sustainable world

Graham Ritchie | Chief Executive Officer

I believe that we are truly unique in the combination of services we provide to support environmental and energy transition across the value chain. No other organisation can deliver what we can, with the deep strategic and engineering expertise across transport, environmental policy and energy infrastructure. This is the capability that binds us together.

Now more than ever, with the world changing rapidly and with a heightened level of urgency towards protecting our planet, Ricardo is becoming ever-more relevant in the services it can deliver to support energy transitions.

As a company, we maintain a strategic focus on three global megatrends, leveraging our position to access and drive long-term sustainable growth in areas encompassing energy decarbonisation, climate change and zero emission propulsion.

We are well placed to extract value in creating solutions for resolving each of these megatrends in ways that are beneficial for all of us.

As I travel to meet clients and colleagues across the world, I am more conscious than ever of the importance of the work that we do and how we are purpose-led in the projects that we work on. Ricardo colleagues, regardless of role or location, are motivated by the meaningful work and impact we deliver every day.

Delivering our full-year commitments

Ricardo's solid performance in FY 2023/24 resulted in the Group trading in line with the board's expectations, delivering underlying operating profit before tax of £30.5m, ahead of the prior year (FY 2022/23: £27.9m on a continuing basis). On a reported basis, the Group delivered a profit before tax of £4.3m (FY 2022/23: loss of £8.0m on a continuing basis).

As a business, we report our performance in two portfolios: our Environmental and Energy Transition portfolio, representing our core consulting capabilities, in which we deliver technical engineering and environmental consulting capabilities that enable the energy transition; and our Established Mobility portfolio that focuses on conventional propulsion engineering design, with niche manufacturing and production assembly.

Clear highlights for the year in our Environmental and Energy Transition portfolio included securing our largest environmentally focused project to date of close to £12m to support a Middle East client in establishing its regional air quality monitoring network.

Additionally, we are delighted to be working as the independent safety assurance expert on the California high-speed rail project, which is a publicly funded 170+ mile high-speed rail system that is due to open in 2030. Both projects demonstrate the clear progress we have made to date in creating operational scale in our chosen markets.

Within our Established Mobility portfolio, the United States Army awarded Ricardo's Defense business an extension agreement of USD\$385m to continue production and delivery of the anti-lock braking system/ electronic stability control (ABS/ESC), with delivery completion in September 2027, which contributed to the Group's overall operating profit.

Chief Executive's review continued

Delivering our full-year commitments continued

Work continues in supporting OEMs with cleaner transport solutions, and an example of this is the contract award that we have secured to design a new large engine concept for an Asia-based OEM. Through the engine design performance improvements that we are making, the client is able to further reduce greenhouse gas emissions and transition to a greener future.

Realising our long-term ambition

Our strategy is clear: we are on a transformation journey to become a global, world-leading strategic and engineering consultancy in environmental and energy transitions. And this has been a year of progress, as we firmly embed our strategy across Ricardo and focus on execution as we accelerate our impact in FY 2024/25.

Through our growth priorities, which include portfolio prioritisation, market expansion and M&A acceleration, we have ensured a structured approach to executing the Group's strategy.

Repositioning our portfolio has been a key focus for the Group, and we have actively continued our work to manage our portfolios through a shift from services to solutions, allowing us to increase our strategic consulting expertise while also investing heavily in our digital transformation. With the launch of Ricardo's digital platform, we are now able to offer scalable and repeatable solutions, specifically leveraging our market-modelling tools and converting these all to digital applications. We have also made great progress in our digital tools to support our technical innovation in hydrogen propulsion advancement and have recently expanded our hydrogen test facilities, which are already fully booked for the next 12 months

Market expansion is crucial to our sales growth, and we are seeing traction in our key markets including North America, where we have established a foothold in rail services through our partnership with Metrolinx in Canada and, as I mentioned, the recent win of the California high-speed railway contract in the USA. We have successfully grown our Environmental and Energy Transition team to support our clients in Europe by establishing the Madrid hub, and we have also developed a pathway in Australia and Asia to align our services and practices through our regional leadership model.

We take a disciplined approach to M&A to accelerate growth in our chosen markets. Our two most recent acquisitions (E3-Modelling and Aither Pty Ltd) have provided the Group with good overall performance, achieving the maximum potential earn out following successful integrations into the Group.

Building One Ricardo

During the year, we have accelerated the consolidation of our enabling functions and right-sized our business operating model to support us in creating 'One Ricardo'.

Through the consolidation process of centralising our functions, we are able to leverage benefits of scale without duplicating effort or constraining investment. The functions have been structured in a way that supports the business today whilst enabling us to scale our functions to support future growth, and also allowing for greater opportunities for our people to grow and develop their potential.

The actions that we have taken have delivered immediate cost benefits within the full year, but more importantly, are already accelerating improvements in operational efficiency and client experience to support our growth ambition.

Acting responsibly

We are committed to making every day in Ricardo a great day through investing in our incredibly talented colleagues and creating a culture that is deeply rooted in being purpose-led.

As we transition the business, it is important to bring our teams along the journey, so it was encouraging to see the number of colleagues who responded to this year's engagement survey, which was up by 11 percentage points to 72%. We received more than 6,900 comments, which is a healthy measure that our colleagues believe that their opinion matters. The engagement score itself was down slightly, reflecting the level of change delivered through the organisation. In response to this, we are already beginning to implement engagement strategies throughout the organisation to optimise and realise the benefits of the changes made.

Being responsible and acting ethically are fundamental to Ricardo. We aim to continue to accelerate our own ESG performance through our sustainability commitments, which include the work that we do in energy transition and net zero pathways for our clients, our investment in our people, and our environmental and governance targets.

The Ricardo mission set out more than 100 years ago was to 'maximise efficiency and eliminate waste' and this remains deeply integrated in our working ethos today and, more than ever, ignites the passion that drives our people and our approach to responsible business.

Gaining good momentum as we look ahead

Ricardo is gaining good momentum to deliver its five-year strategic plan communicated in May 2022. We enter the new fiscal year with a similar order book level to the record one we achieved last year, and, through our solid pipeline visibility, we have good confidence in performance as we enter FY 2024/25.

With our expertise in environmental and energy transition, there is a real opportunity for us to do even more in supporting governments and the private sector in delivering a net zero pathway for future generations.

We also know that for us to be a pivotal part of change, we have to continue to grow and improve our business. By doing so, we can extend our reach, supporting even more clients and ensuring that our teams across the world continue to deliver meaningful work, knowing that the projects are delivering maximum impact.

The more we can do to accelerate our transformation, the more value we can create for all our stakeholders.

Graham Ritchie

Chief Executive Officer

10 September 2024

Who we are

At a glance

Our vision

To create a safe and sustainable world.

Our purpose

Enable our clients to solve the most complex and dynamic challenges.

Trusted the world over

23

Countries with Ricardo operations serving clients worldwide

2,600+

Active client projects

c.3,000

Colleagues

Our business portfolio

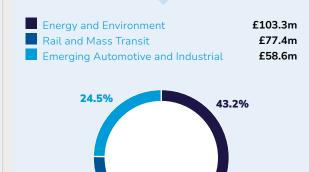
Our operating segments are grouped into two main portfolios:

Environmental and Energy Transition

Revenue

£239,3m

32.3%

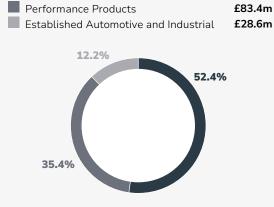


Established Mobility

Revenue

Defense

£235.4m



Markets we serve



Aerospace and defence



Automotive



Industrial and manufacturing



£123.4m

Energy, utilities and waste



Financial services



Government and public sector



Maritime



Rail and mass transit

Business model

How we create value

We are uniquely positioned to provide differentiated value linking environmental policy, transport and energy transition.

Client demand drivers

Our expert capabilities

What we deliver

Our impact

Strategy and planning

Implementation through own operations

Implementation through the supply chain

Engineering services

Our multi-industry knowledge and deep technical expertise uniquely positions us to drive innovative engineering solutions to deliver sustainable outcomes for our transport clients. Electrification and hybrid systems and integration

Sustainable fuels and future internal combustion engines

Hydrogen fuel cells

Rail systems and operations

Assurance and testing

Niche manufacturing and assembly

Strategic consulting and advisory services

Our global advisory and consulting services range from operational improvement, cost reduction and new product introduction to technology strategy and scenario planning.

Policy, regulation, incentives and funding optimisation

Economic, environmental, operation feasibility

Optimised economic, risk, safety and environmental benefits

Optimised procurement for economic and environmental benefit

Environmental consulting services

Through deep and broad expertise, Ricardo develops integrated solutions to complex environmental and sustainability issues.

Water management

Air quality

Corporate sustainability

Energy and decarbonisation

With our unique depth and breadth of engineering, science and economic expertise, we support clients from strategy to implementation to monitoring, to overcome the complexity of energy transition and engineering challenges.

Outlook and opportunities

Global megatrends shaping our business

Ricardo's endurance is, in part, due to our constant monitoring of emerging, long-term trends, allowing us to ensure we're preparing the business to enable our clients to solve their most complex and dynamic challenges.

Global policy and funding for climate change

While a significant proportion of green transition investment comes from the private sector, government policy plays a critical enabling role through instruments such as target setting, regulation, subsidies, tax credits and R&D investment. Governments globally are continuing to roll out policies that advance and enable the financing of green transition.

Beyond green energy and decarbonisation, there is increasing focus, legislation and investment in the conservation, restoration and management of natural and modified ecosystems with initiatives such as the Global Biodiversity Framework and Taskforce on Nature-related Financial Disclosures.

Energy decarbonisation

Developing a pathway from fossil-based energy generation to a low carbon future is a priority issue globally.

In June, the International Energy Agency (IEA) stated that investment in green energy and infrastructure is set to reach \$2 trillion in 2024, with spending on renewable power, grids and storage set to greatly exceed spending on oil, gas and coal. This is partly driven by the falling price of renewable energy, meaning that investment will continue even with fluctuating investment rates.⁽¹⁾

Zero emission transport

Globally, there is a growing demand for zero emission vehicles of all kinds, driven by a mixture of public demand for fossil fuel-free vehicles and governments driving policy change to meet Paris Agreement obligations. There are increasingly stringent targets in major markets for CO_2 and nitrogen oxides, and future bans on the sale of passenger vehicles powered by fossil fuels – such as the EU and UK's 2035 ban. Maritime and aviation sectors are also under pressure to achieve net zero goals.

How we're responding:

- World-leading modelling tools support governments worldwide to make energy, environment and transportation transition decisions for a better world
- Expanding our team of experts on a wide range of climate, societal and ecological areas

How we're responding:

- Supporting national-level clean energy and energy security policy, strategy and implementation plans
- Leading the development of carbon-negative biofuel technology
- Supporting energy generators and distributors with development of clean nationally critical infrastructure, including grid resilience and clean technology integration
- Developing sustainable fuel solutions and technologies for use in maritime, aviation, rail and ground transportation

How we're responding:

- Supporting clients with their electrification journey from hybrid to fully electrified propulsion
- Leading in the development of commercial hydrogen technology for more challenging transport applications, including within the maritime industry
- Supporting the development of renewable aviation fuel
- Partnering with governments around the world in the development of rail projects powered by renewable energy

Strategy

Delivering our ambition

Our strategic ambition is to become a global leading strategy and engineering consultancy in environmental and energy transition solutions...

....by transforming our business using strategic levers...

Portfolio prioritisation

Align our portfolio so it is better able to address global megatrends, while optimising service and profitability

Market expansion

Expand and develop our key market positions through geographic and industry expansion in attractive industries focused on high growth markets

M&A acceleration

Supplement organic growth with rationalised, targeted M&A that accelerates ambition achievement

...while continuously investing in our core enablers...

Client experience

Deliver the best client experience in each of our projects, consistently ensuring that our brand is relevant to our entire client base

Winning teams

Our people plan is developed around trust, accountability, inclusion, learning and mobility. We aspire to build an organisation that attracts, retains, develops and inspires the very best people around the world

Optimised operations

Continuously optimise operations through the improvement of our processes across the whole value chain to ensure that our clients' expectations are consistently met ...and delivering on our own sustainability focus areas.

Our clients

Accelerate clients' sustainability ambitions

Our environment

Positively impacting our planet

Our people and communities

Nurture an environment for everyone to thrive

Our business

Continuously improve ways of working

FY 2022/23

FY 2026/27

Our targets

Portfolio transformation

- Environmental and Energy Transition portfolio
 75% of Group underlying operating profit to deliver a high growth, high margin and less capital-intensive business
- Established Mobility portfolio
 Long-term visibility to support our transformation

Strong financial framework

- · Double underlying operating profit
- Group underlying operating profit % to mid-teens
- Average cash conversion 90%
- 3-4% capex % of revenue
- Dividend cover 2.5-3.0x
- Leverage <1.25x EBITDA

Turning ambition into action through...

innovation.

Working with



Department for Energy Security & Net Zero

Demonstrating the effectiveness of community-scale carbon capture technology for clean energy and national energy security.

To accelerate the commercialisation of low-carbon technologies, systems and business models in power, buildings and industry, while reducing the UK's contribution to climate change, the UK government has established a £1bn Net Zero Innovation Portfolio.

Funded by the Portfolio, Ricardo is leading a consortium with Bluebox Energy and Woodtek Engineering that has designed, installed and is now operating a combined heat and power demonstration plant with a carbon negative footprint that processes biowaste to produce biochar; generate heat and power; and capture carbon dioxide from the exhaust – known as BIOCCUS.

BIOCCUS combines an innovative carbon capture system developed by Ricardo with hot air turbine technology from Bluebox Energy and pyrolysis technology from Woodtek Engineering.

Its innovation lies in the fact that it can capture 90% of the carbon in the biowaste – which would otherwise return to the atmosphere as CO₂ through combustion or degradation – while still producing valuable heat and power outputs. The plant demonstrates not only highly innovative technology but also a realistic carbon negative technology that can significantly contribute to net zero targets because of its applicability to several energy-intensive industry sectors as an on-site generator of heat and power.

Processing 2,600 tonnes of waste wood chip each year, the annual performance for a commercial, single-module system based on 8,000 hours of operation is:

- 540 tonnes of biochar produced
- 2,300 tonnes of food-grade CO₂
- 330 MWh of electricity generated
- 1,200 MWh of heat generated
- 4,100 tonnes of CO₂e captured

With this project, Ricardo is at the forefront of removing carbon dioxide from the atmosphere, providing local industry/businesses with renewable heat and electricity, and delivering national energy security.



Turning ambition into action through...

sustainability.



Developing multi-stack hydrogen fuel cell zero-emission systems for shipping.

Ricardo is working with the sustainable HYdrogen powered Shipping consortium (sHYpS) to design and develop hydrogen fuel cell propulsion technologies to power the next generation of zero-emissions passenger ships, helping to achieve zero-emissions navigation within the industry in line with global regulatory targets.

At the forefront of innovation, the project involves 13 partners in six European countries and will accelerate the adoption of hydrogen as a renewable fuel in the maritime industry. Ricardo's UK-based work has been funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding quarantee.

As experts in hydrogen technology and integration, Ricardo's role includes the specification, design, build and testing of a ~500 kW gross, 375 kW net power fuel-cell module (RFC500) and the design of a 40-foot containerised multi-megawatt power plant that combines the outputs of multiple fuel cell modules, intended to be installed under-deck on passenger ships.

Another key focus has been applying Ricardo's expertise in developing the bespoke, high-power, multi-stack, optimised fuel cell solution to deliver significantly enhanced power density by volume and mass: essential, given the space constraints of a passenger ship and the revenues earned from space on-board.

The project reached a key milestone in March 2024, when Ricardo received Approval in Principle (AiP) from Lloyd's Register, the leading provider of classification and compliance services to the marine and offshore industries, for the design of its cutting-edge multi-megawatt containerised fuel cell power plant solution. The granting of AiP by Lloyd's Register signalled confidence that this technology has the potential to satisfy regulatory requirements and can be used more widely as a solution to support future decarbonisation across the maritime industry.

Ricardo is testing the RFC500 module and now assembling its marine containerisation system in a new, purpose-built fuel cell facilities at our Shoreham Technical Centre.





Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European union or European Climate, Infrastructure and Environment Executive Agency. Neither the European Union nor the granting authority can be held responsible for them. UK participants are supported by UKRI Grants.

The sHYpS project is co-funded by the European Union under Horizon Europe, the European Union's research and innovation programme under Grant Agreement Number 101056940. The consortium of members represents six European countries: Italy, France, Czechia, Germany, Norway and the UK. UK participants are supported by UK RI grant numbers 10038162 (Ricardo UK) and 10039049 (Lloyd's Register). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or Innovate UK. Neither the European Union nor Innovate UK can be held responsible for them.

Turning ambition into action through...

digital.

E3-Modelling was acquired by Ricardo in January 2023, adding world-leading macro energy, economic and environmental modelling capabilities to Ricardo's portfolio.

Since becoming part of Ricardo, the E3-Modelling team has provided valuable input on important global projects, which has included modelling for long-term international energy decarbonisation planning and implementation, empowering clients with essential data, insights and intelligence. The capabilities continue to be pivotal for informing policy development and its performance assessment, as well as supporting private sector investment, critical to the energy transition. The modelling team has expanded by over 25% to address the growing needs of our clients, which include new, long-term modelling projects, particularly for the European Commission.

Our reputation for modelling excellence was further evidenced this year when one of our models was recognised as the leading tool for analysing industrial transformation in a study published by Renewable and Sustainable Energy Reviews. Ranking top out of over 60 models, our model was recognised for its robust alignment with key criteria including industrial/sector representation, technological change, employment and environmental impact.

This year we have also invested in the development of a new software-as-a-service (SaaS) solution, leveraging our world-renowned PRIMES-IEM energy system model.

This innovative subscription-based model offers comprehensive and actionable insight into the electricity market, which can be used to make a wide range of key decisions to support the energy transition.

We continue to advance our modelling capabilities and offerings, ensuring that we meet the evolving needs of our clients and contribute meaningfully to the global energy transition.

Our commitment to excellence and innovation positions us as a trusted partner in delivering high-quality modelling and insights for a sustainable future.



Turning ambition into action through...

people.

We recognise that our vision is achieved through ideas, innovation, expertise and being client-focused, delivered by our people globally.

In the past year, a number of our people and initiatives have been recognised externally for their excellent work. They include Kynan Serné and Steve Blevins, who were both recognised in the prestigious The Manufacturer Top 100 list that celebrates the heroes of UK manufacturing.

Steve Blevins, Head of Engineering, Performance Products, was named in both the Inspiring Leader and the Innovator categories, in recognition for his outstanding technical contribution to the world of motorsport and performance automotive engineering and his exemplary commitment to supporting the business at every level, including beyond his remit of Head of Engineering.

Meanwhile, manufacturing apprentice Kynan Serné was named in the Young Pioneer category, in recognition of his technical contribution to the processes on the Performance Products production line at Ricardo's Shoreham Technical Centre. He was also commended for his dedication to inspiring the next generation of engineering and manufacturing professionals by advocating for apprenticeships and the impact that they can make to the lives of young people.

Other colleague accolades from FY 2023/24 include:

 Dr Temoc Rodriguez, Automotive and Industrial, became a Fellow of the Institution of Engineering and Technology (IET)

- Dr David Carslaw, Energy and Environment, was named in the ENDS Report Power List 2024
- Honor Puciato, Energy and Environment, was selected by the UK government as one of 10 new national aviation ambassadors
- Ricardo was recognised by Reuters in its Top 100 Innovators in Hydrogen for 2023 and as a top-10 consultancy for green hydrogen
- Dr Jessica Bohorquez, Energy and Environment, was selected as a Junior Rapporteur at the World Water Week event in Sweden in August 2023
- Ricardo received the Future Mobility award at the 2023 IET Excellence and Innovation Awards, for our propulsion inverter technology with liquid hydrogen for long-haul mobility



Conversation with the CEO and CFO



Graham RitchieGroup Chief Executive Officer



Judith Cottrell
Chief Financial Officer



GR

A key highlight for me is how we are joining up our proposition and delivering meaningful project work through our collective consulting capabilities.

A case in point is the recent work that we have been doing in positioning Ricardo to drive the maritime sector towards an efficient, sustainable and low-carbon future. Highlights include: our consultancy work to support the International Marine Organisation (IMO) in its emissions position, policy work and future targets; the air quality work in modelling emissions from shipping that we have completed for the UK government and the European Commission, and for ports such as the Port of London Authority; and the engineering work we are completing in the sHYpS consortium in developing hydrogen fuel cells in marine applications.

In short, our teams are creating solutions across the entire ecosystem to support environmental and energy transition through solutions for policy and strategy, environmental monitoring, energy infrastructure, and the green-propulsion transport solutions that few others can match.



This year, it has been great seeing the impact that our focus on operational efficiency and client experience has had across the business. A great example of this is how our newly created global sales enablement team is now delivering consistent bidding processes to improve client delivery. The team has also established standard sales performance reporting, including pipeline management to provide greater visibility and confidence in our order book deliveries

Another example is the introduction of our flexible resourcing model, which is helping to drive profitability, principally within A&I. Finally, we have seen an improvement in cash collections to drive reductions in working capital and increase our ability to reinvest for further growth.

And it has been a real delight to see all the fantastic work that the teams have produced this year – particularly in some of our bigger innovation programmes – in developing new carbon-negative technology and accelerating hydrogen development.



We are two years into the five-year transformation of Ricardo. Do you think we are on target to achieve this strategy?

GR

Unquestionably, yes. We have successfully delivered our short-term commitments and this, in turn, has supported us in building confidence and options for the long term. FY 2023/24 has been a year of significant change to how we operate and how we are structured, but it has also been a year of great progress across our key priorities that support us in accelerating our transformation. Through enhanced digital capabilities, we have launched our modelling tool for the electricity market outlook on Ricardo's own digital platform, which will support us in creating repeatable revenue. In terms of geographic expansion, we have prioritised and aligned ourselves across key markets and, as a result, we are gaining scale and strength in our chosen markets.

Conversation with the CEO and CFO continued

We are two years into the fiveyear transformation of Ricardo. Do you think we are on target to achieve this strategy? continued

With the actions that we have taken in our A&I businesses, we are seeing a change in direction, with a return to profitability in H2. Finally, through the centralisation of our functions, we are creating efficiencies that will enable growth.

Having put the key building blocks in place, we are now well set to accelerate our execution to enable our successful transition.

Absolutely. We have taken bold actions to achieve our ambition and these are set to continue. We are only two years in and thanks to the changes we have made - such as flexible resourcing – we are already delivering improved margins. Expansion of our operations geographically and through the breadth of our offering will also support our ambition. As mentioned by Graham, the launch of our digital offering will support improved margins through repeatable revenue. Importantly, there is real commitment by the board and the Executive Committee to deliver our strategic ambition. And to help ensure this, there will be a continued focus on operational excellence and organisational alignment.

M&A is an accelerator to your organic strategy – what is important for you when considering this approach to growth?

The Company's approach to M&A is to focus investment on highly attractive, environmentally and technologically led areas that support the acceleration of our portfolio capability in attractive growth markets. These commercial characteristics support strong financial attributes of a high growth, high margin and less capital-intensive business. In addition to the commercial and financial attributes, we look for companies that share a culture aligned to Ricardo's with similar purpose-led values. The acquisitions that we have completed in the past 18 months have supported Ricardo in extending its consulting solutions and increasing its digital footprint. In addition, they have enabled further industry and geographic expansion into key markets, already delivering strong profitable growth and potential increased synergies with our existing solutions.

Key to this success is targeted outreach and, in particular, partnering in advance of an acquisition. By developing partnerships, we can ensure we build a strong pipeline and trusting relationships in advance of acquisition, where there is a strong cultural alignment that is deeply rooted in technical expertise and being purpose-led.

How important is One Ricardo to achieving the Company's ambition?

We know that our clients choose Ricardo because of our high integrity and the deep knowledge we bring to solving their complex challenges. As mentioned already, we are unique in our ability to create solutions across the entire ecosystem that support the environmental and energy transition. By combining our solutions, we therefore add more value to our clients and have a bigger impact in driving environmental and energy transition.

We also know that this is one of the key motivators for our teams, applying their expertise to world-leading innovative projects that make a difference. This is truly what binds us all together, regardless of what individuals may do and in which practice they may work. By operating as One Ricardo and bringing these two aspects together, we also create efficiencies in how we operate.

Coming together as a single company, rather than acting independently, has had a significant impact on how we do business and has allowed us to really focus on operational excellence to the benefit of our margins. By introducing a shared operating model and centralising our enabling functions, we can leverage the benefits of scale without duplicating effort, which has afforded us real improvement.

There are also the cultural benefits of One Ricardo – allowing us to celebrate as a single whole rather than as sums of our parts. As an example, in FY 2023/24 following the success of Community Week, we launched our Community Day, which included collecting over 12,800 pieces of litter in our communities around the globe. I will be excited to see more of this in the years ahead.

Anything on the horizon that you are looking forward to?

times ahead.

JC

I continue to be excited by and look forward to fully realising the benefits of the changes we have made so far on our strategic journey. For FY 2024/25 it is all about accelerating the benefits of the change we have started. These include embedding One Ricardo in everything we do, accelerating our geographic expansion, realising the efficiencies of our functional enablers, and continuing to develop strategic partnerships and acquisitions to accelerate our growth. None of this is achievable without the highly talented team we have here in Ricardo. Through its hard work and expert delivery, we can all look forward to exciting

While I am looking forward to continuing to take more big strides towards achieving our ambition – particularly in how we work together to achieve our own goals and those of our clients – I am also excited to see more of the great projects that our teams are working on across the business, from the projects that we deliver to our clients to internal initiatives that improve processes and ways of working. There is a real uniqueness to what we can deliver and achieve at Ricardo, and I am always impressed at the real-world impact that these have in creating a safer and more sustainable world.

Strategic progress and KPIs

Key performance indicators

Our strategic objectives have been selected to support execution of our ambition and ensure we are creating value for stakeholders.

- Enabling meaningful and fulfilling work
- Being a trusted partner to our clients
- Achieving high growth in our chosen markets
- 4 Delivering operational excellence and efficiency
- 5 Investing for growth

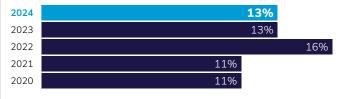
To directly connect our colleagues with the strategy, we have aligned team and individual performance objectives with Ricardo's own strategic objectives.

Measuring our performance

Ricardo's key performance indicators (KPIs) are aligned with our Company's strategic objectives, and are based on financial and non-financial performance.

1 Enabling meaningful and fulfilling work

Voluntary employee turnover



Voluntary attrition has held steady against the prior year, which is down from our 2022 peak.

Why we measure this

Our people enable us to do the great things we do and we want to make sure they are doing meaningful work and remaining engaged.

Further details on our people are given on pages 52-56.

CO, per head



We have seen a decrease in CO₂ emissions in FY 2023/24.

Why we measure this

Based on total Scopes 1, 2 and 3 market-based emissions. This number helps us to understand the emissions we are producing and drive strategy to reduce these.

Further details of our approach to Responsible Business are given on pages 44-74.

2 Being a trusted partner to our clients

Value added turnover per head



FY 2023/24 value added turnover per head has improved marginally on the prior year, with a good longer-term improvement from 2020.

Why we measure this

Value added turnover per head is a measure of the revenue we generate from our own resource divided by the number of heads, including contractors. As such, it is a useful measure of both profitability and efficiency.

Further details of financial performance are given in the CFO report on pages 20-25.

Client engagement



In May 2024, we completed our second annual client satisfaction survey, measuring satisfaction, loyalty and brand awareness. We saw a 4.5% increase in client satisfaction to 88.5% from FY 2022/23 levels. Feedback will be used to develop our client service excellence and capabilities to ensure best practice and continuous improvement.

Why we measure this

Provides rich information about engagement with clients, ensuring that we are providing them with the highest quality service while supporting their goals.

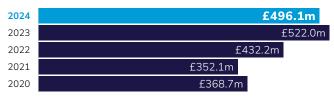
Further details of how we engage our stakeholders are given on pages 42-43.

Strategic progress and KPIs continued

Key performance indicators continued

3 Achieving high growth in our chosen markets

Order intake



FY 2023/24 order book is in line with the prior year.

Why we measure this

Helps to show us performance over time rather than a point-in-time position. Order book continues to be monitored as part of the financial results reported.

4 Delivering operational excellence and efficiency

Underlying operating profit margin



The Group's underlying operating profit margin was 8.2% in FY 2023/24. The increase compared to FY 2022/23 reflects improved margins in our Defense, Established A&I and Rail operating segments, plus leverage of our indirect cost base, offset by reduced margins in our Emerging A&I, EE and PP operating segments.

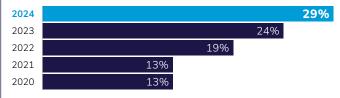
Why we measure this

Measure of how efficiently the business turns revenue into controllable profit.

Further details are given in the CFO's report on pages 20-25.

5 Investing for growth

Return on capital employed



Return on capital employed has continued to trend upwards over the five-year period as our product mix moves, towards our less capital intensive consulting businesses.

Why we measure this

Return on capital employed is a measure of both profitability and capital efficiency. This ratio helps articulate how well we are generating profits from our capital as it is put to use.

Further details are given in the CFO's report on pages 20-25.

Adjusted leverage



We saw net debt drop from £62.1m to £59.6m in FY 2023/24, with adjusted leverage reducing from 1.4x to 1.25x, driven by strong underlying cash conversion, which more than offset restructuring and acquisition related cash outflows.

Why we measure this

Represents a more useful measure of how net debt relates to performance of the business.

Further details are given in the CFO's report on pages 20-25.

Chief Financial Officer's report



A year of positive growth and excellent cash performance

Judith Cottrell | Chief Financial Officer

Good growth in revenue and underlying operating profit. Actions to accelerate the operating model transformation delivered a strong second half profit performance and improving margins. A rigorous focus on working capital has driven strong cash performance, reducing net debt to £59.6m.

Group results

Overall, Ricardo has performed in line with the board's expectations in FY 2023/24, with a strong improvement in underlying operating profit in the second half. Revenue was £474.7m, an increase of 7% on the prior period on a continuing basis, excluding the results of Ricardo Software which was sold in the prior year (9% on a constant currency basis). Underlying operating profit was £38.8m and underlying profit before tax was £30.5m, representing growth of 14% and 9% on the prior period respectively on a continuing basis (17% and 13% on a constant currency basis).

FY 2023/24 saw a strong recovery in profit in the second half, with improved operational efficiencies following the acceleration of our operating model transformation which saw us centralise enabling functions and increase our use of flexible resources. Order intake for the Group was £496.1m, down 5% on the prior year's record order intake (down 3% on a constant currency basis). This primarily reflects the new programme wins in the prior year in Performance Products and the delay of large orders in our A&I businesses.

Reported operating profit from continuing operations, after taking specific adjusting items into consideration, was £12.8m (FY 2022/23: loss £1.9m) and reported profit before tax from continuing operations was £4.3m (FY 2022/23: loss £8.0m). FY 2023/24 reported operating profit included £26.0m of specific adjusting items (profit before tax: £26.2m) predominantly related to the implementation of our strategic priorities of portfolio transition and operational efficiency (FY 2022/23: £35.9m). Further details can be found below and in Note 6 of the Group financial statements.

As a result of the Group's persistent and rigorous focus on working capital management, cash generation for the full year continues to deliver strong returns, delivering net debt at 30 June 2024 of £59.6m, a reduction of £2.5m on the 30 June 2023 position of £62.1m. This was after £15.4m of acquisition-related payments, including earn outs relating to the acquisitions of E3-Modelling SA (E3M) and Aither Pty (Aither), and £6.4m of restructuring costs, including costs incurred in accelerating our operating model transformation, partially offset by a £3.2m cash receipt from the sale and leaseback of a building at the Shoreham Technical Centre, excluding fees.

Underlying cash conversion improved from 66.7% (restated) in FY 2022/23 to 118.9%. Reported cash conversion was 125.4% (FY 2022/23: 50.7% (restated)) after taking into account the cash impact of specific adjusting items.

Chief Financial Officer's report continued

Headline trading performance							
		Underlying ⁽¹⁾			Reported		
				Operating profit/	Profit/(loss)		
	External revenue	Operating profit	Profit before tax	(loss)	before tax		
	£m	£m	£m	£m	£m		
2024							
Continuing operations ⁽²⁾	474.7	38.8	30.5	12.8	4.3		
Less: performance of acquisitions	(12.6)	(2.7)	(2.3)	(0.7)	(0.3)		
Continuing operations – organic ⁽³⁾	462.1	36.1	28.2	12.1	4.0		
2023							
Total	446.0	34.5	28.4	6.0	(0.1)		
Less: discontinued operation	(0.8)	(0.5)	(0.5)	(7.9)	(7.9)		
Continuing operations ⁽²⁾	445.2	34.0	27.9	(1.9)	(8.0)		
Less: performance of acquisitions	(4.8)	(1.1)	(1.1)	4.4	4.4		
Continuing operations – organic ⁽³⁾	440.4	32.9	26.8	2.5	(3.6)		
Growth (%) – Total	6	12	7	113	4,400		
Growth (%) – Continuing operations	7	14	9	774	154		
Growth (%) – Continuing organic	5	10	5	384	211		
Constant currency ⁽⁴⁾ growth (%) – Continuing operations	9	17	13	774	154		

- (1) Underlying measures exclude the impact on statutory measures of specific adjusting items as set out in Note 2 and Note 6 to the Group financial statements. Underlying measures are considered to provide a useful indication of underlying performance and trends over time.
- (2) Growth from continuing operations excludes the results of Ricardo Software, which was sold on 1 August 2022.
- (3) Organic growth excludes the performance of acquisitions (see Note 13 to the Group financial statements) from the results of 2024 and 2023.
- (4) The Group generates revenues and profits in various territories and currencies because of its international footprint. Those results are translated on consolidation at the foreign exchange rates prevailing at the time. Constant currency growth/decline is calculated by translating the result for the prior year using foreign currency exchange rates applicable to the current year. This provides an indication of the growth/decline of the business, excluding the impact of foreign exchange (see Note 2 to the Group financial statements).

FY 2023/24 and FY 2022/23 include the results of E3M and Aither, which were acquired in January 2023 and March 2023 respectively. In the current year, these acquisitions contributed £12.6m of revenue and £2.7m of underlying operating profit. In the prior year, they contributed £4.8m of revenue and £1.1m of underlying operating profit.

In the prior year, Ricardo divested its Software business unit, Ricardo Software, which contributed £0.8m of revenue and £0.5m of underlying operating profit in that year.

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Chief Financial Officer's report continued

Operating segments summary: Order intake and revenue

	2024	2024		2024 2023		3	2023 at constant o	
	Order intake	Revenue	Order intake	Revenue	Order intake	Revenue		
	£m	£m	£m	£m	£m	£m		
EE	116.9	103.3	111.5	88.5	110.1	87.4		
Rail	95.1	77.4	89.2	73.5	86.0	70.8		
A&I – Emerging	52.4	58.6	84.3	82.3	83.0	80.4		
Environmental and Energy Transition	264.4	239.3	285.0	244.3	279.1	238.6		
Defense	125.4	123.4	85.0	88.6	81.3	84.8		
PP	77.1	83.4	115.3	84.7	115.3	84.7		
A&I – Established	29.2	28.6	36.2	27.6	35.6	27.0		
Established Mobility	231.7	235.4	236.5	200.9	232.2	196.5		
Total – continuing operations	496.1	474.7	521.5	445.2	511.3	435.1		
Discontinued operation	_	_	0.5	0.8	0.5	0.8		
Total	496.1	474.7	522.0	446.0	511.8	435.9		

Operating segments summary: Underlying operating profit

	2	2024		2023		023 nt currency
	Underlying operating profit/					
	(loss) £m	(loss) margin %	(loss) £m	(loss) margin %	(loss) £m	(loss) margin %
EE	17.6	17.0	16.0	18.1	15.8	18.1
Rail	8.9	11.5	8.0	10.9	7.8	11.0
A&I – Emerging	3.4	5.8	10.6	12.9	10.6	13.2
Environmental and Energy Transition	29.9	12.5	34.6	14.2	34.2	14.3
Defense	23.5	19.0	13.4	15.1	12.9	15.2
PP	6.7	8.0	9.0	10.6	9.0	10.6
A&I – Established	(3.3)	(11.5)	(5.8)	(21.0)	(5.7)	(21.1)
Established Mobility	26.9	11.4	16.6	8.3	16.2	8.2
Operating segments – continuing operations	56.8	12.0	51.2	11.5	50.4	11.6
Plc costs	(18.0)		(17.2)		(17.2)	
Total – continuing operations	38.8	8.2	34.0	7.6	33.2	7.6
Discontinued operation	_	_	0.5	62.5	0.5	62.5
Total	38.8	8.2	34.5	7.7	33.7	7.7

Chief Financial Officer's report continued

Environmental and Energy Transition portfolio

- Order intake: down 7% (constant currency: down 5%)
- Revenue: down 2% (constant currency: flat)
- Underlying operating profit: down 14% (constant currency: down 13%)
- Underlying operating profit margin: 12.5% (FY 2022/23: 14.3% at constant currency)

Energy and Environment (EE) continued to show good momentum, with overall growth in order intake, revenue and operating profit, boosted by the performance of the acquisitions made in FY 2022/23 and strong demand in policy, strategy and economics, and air quality and environment. Performance was tempered in water advisory services, which was impacted by project disruptions in end markets.

Rail delivered good growth in orders and executed consistently against its order book to deliver strong revenue growth. With increased revenue from recent contracts wins in Australia, Asia and North America and improved operational leverage, underlying operating profit margins improved from 11.0% to 11.5% and underlying operating profit grew by 14% (constant currency).

Order intake, revenue and operating profit declined year-on-year in Emerging A&I due to delays and volatility in order intake as our diversified client base manages the complexities of energy transition. However, we saw profit recovery in the second half of the year, driven by the restructuring initiatives and cost actions which took place. These were focused on accelerating the implementation of its flexible resourcing model, allowing for the business to be more resilient going forward in responding to changes within its end markets.

The Emerging A&I order book remains healthy at £43.3m, albeit lower than in June 2023 (£55.0m). Whilst the business will experience short-term volatility, we remain confident about the long-term growth prospects.

Established Mobility portfolio

- Order intake: down 2% (constant currency: flat)
- Revenue: up 17% (constant currency: up 20%)
- Underlying operating profit: up 62% (constant currency: up 66%)
- Underlying operating profit margin: 11.4% (FY 2022/23: 8.2% at constant currency)

Defense performed very strongly in the period, with significant growth in order intake (up 54% on a constant currency basis), revenue (up 46%) and underlying operating profit (up 82%). Defense delivered 13,100 Anti-lock braking system/electronic stability control (ABS/ESC) kits in FY 2023/24 (FY 2022/23: 8,707 kits). In addition, there was good growth in the Technical Solutions consultancy business, including Field Support Services (the sustainment of ABS/ESC kits in the field).

Performance Products (PP) benefited from £40m of multi-year transmission programme orders in FY 2022/23 and were working these orders in FY 2023/24. As expected, this resulted in lower order intake in FY 2023/24. With lower volumes in powertrain, due to revised client requirements and reduced activity in the transmission business, with two major programmes ramping down and one new programme in ramp-up phase, revenue was down by 2% on prior year.

This resulted in lower underlying operating profit overall, but with a strong profit in the second half, benefiting from a ramp-up to complete client transmission projects.

Order intake in Established A&I was down 18% on prior year on a constant currency basis. Although there were delays in the timing of orders, order intake improved in the second half of the year, which drove overall growth in revenue in the year of 6% on a constant currency basis. Actions taken to accelerate the move to flexible resources and reduce the fixed cost base resulted in the business returning to a small profit position in the second half of the year. The overall underlying operating loss for the year was £3.3m compared to an underlying loss of £5.7m in FY 2022/23, on a constant currency basis.

Cash performance

Net debt decreased £2.5m to £59.6m (FY 2022/23: £62.1m). Underlying cash from operations was an inflow of £63.4m for the year. Within this, underlying net working capital reduced by £8.8m.

In FY 2023/24, the Group paid: £15.4m in respect of acquisition and strategic project-related costs, including a total of £13.7m of acquisition-related and earn out payments to the former owners of E3M and Aither; £6.4m of cash costs in relation to restructuring activities to accelerate our operating model transformation through centralising enabling functions and increasing our use of flexible resources; and £0.5m for external costs incurred for planning activities to implement a new ERP system. Partially offsetting these, the Group received £3.2m for the sale and leaseback of a property at the Shoreham Technical Centre.

Basis of preparation

These consolidated financial statements of the Ricardo plc Group (Group) have been prepared in accordance with UK-adopted international accounting standards. The Group's principal accounting policies are detailed in Note 1 to the Group financial statements. Those accounting policies that have been identified as being particularly sensitive to complex or subjective judgements or estimates are disclosed in Note 1(d) to the Group financial statements.

Reported results represent the Group's overall performance in accordance with IFRS. The Group also uses a number of alternative performance measures (APMs) in addition to those reported under IFRS. Ricardo provides guidance to the investor community based on underlying results.

The underlying results and other APMs may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. Explanations of how they are calculated and how they are reconciled to an IFRS statutory measure are provided in Note 2 to the financial statements.

Underlying results include the benefits of the results of acquisitions and major restructuring programmes but exclude significant costs (such as the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs and other specific adjusting items). Ricardo believes that the underlying results, when considered together with the reported results, provide investors, analysts and other stakeholders with helpful complementary information to better understand the financial performance and position of the Group.

Chief Financial Officer's report continued

Specific adjusting items

As set out in more detail in Note 6, the Group's total underlying profit before tax excludes £26.2m of costs incurred during the period that have been charged to the income statement as specific adjusting items (FY 2022/23: £35.9m). In line with the Group's policy, these items have been recognised as specific adjusting items, due to their nature or significance of their amount, so as to provide further clarity over the financial performance.

	2024 £m	2023 £m
Underlying profit before tax from continuing operations	30.5	27.9
Amortisation of acquired intangibles	(4.8)	(4.6)
Acquisition and strategic project-related costs	(12.2)	(6.2)
Restructuring costs		
– A&I: impairment of non-financial assets	_	(18.7)
– A&I: restructuring costs	(3.4)	(4.7)
– Rail and EE: restructuring costs	(3.3)	(1.5)
– Group: restructuring costs	(1.7)	(0.2)
ERP implementation costs	(0.5)	_
Sale and leaseback costs	(0.3)	_
Total specific adjusting items from continuing operations	(26.2)	(35.9)
Reported (loss)/profit before tax from continuing operations	4.3	(8.0)
Specific adjusting items from discontinued operation		
Disposal of discontinued operation	_	7.4

Amortisation of acquired intangibles was £4.8m in the current year, compared to £4.6m in FY 2022/23.

Acquisition and strategic project-related costs of £12.2m were incurred in the year (FY 2022/23: ± 6.2 m). These included: £5.0m for deferred consideration and £0.5m of integration costs in relation to the acquisition of Aither, acquired in March 2023 (cash cost: £8.3m); £4.1m for deferred consideration and £0.2m of integration costs in respect of the acquisition of E3M, acquired in January 2023 (cash cost: £6.1m, which included £1.3m of payments in relation to items which were accrued for at completion under the completion adjustment mechanism); £0.1m of deferred consideration in relation to the acquisition of Inside Infrastructure Pty (Inside Infrastructure), acquired in March 2022 (cash cost: £0.6m); and £2.3m of external fees in relation to other M&A and strategic projects (cash cost: £0.4m).

The prior year included: £3.2m for deferred consideration and £0.4m of external fees and integration costs for Aither (cash cost: £0.2m); £0.9m for deferred consideration and £0.2m of external fees and integration costs for E3M (cash cost: £0.1m); £0.4m of deferred consideration and £0.4m of integration costs for Inside Infrastructure (cash cost: £0.5m); and £0.7m of other M&A and strategic projects (cash cost: £0.8m).

Restructuring costs

A&I: impairment of non-financial assets: Non-cash goodwill and asset impairment charges of £18.7m were recognised in the prior year within the Established A&I operating segment. As a result of the performance of this segment in the year to 30 June 2023, the impact of economic uncertainty and the continuing technological change in the automotive sector, the future projections and discounted cash flows for the operating segment were reassessed.

The resulting value-in-use did not support the carrying value of the associated assets, resulting in an impairment of all of the goodwill associated with the Established A&I segment (£5.2m), together with £1.8m of intangible assets and £11.7m of property, plant and equipment.

Restructuring costs: As part of the Group's actions to accelerate its operating model transformation, £8.4m of restructuring costs were incurred. The total cash cost of restructuring in the year was £6.4m. These costs have been included within specific adjusting items as they are significant in quantum and would otherwise distort the underlying trading performance of the Group, and included:

A&I: £3.4m, including £1.8m of redundancy costs, £0.4m of external contractor and legal fees directly related to the process, and £1.2m of property exit and asset write down costs. The prior year cost included £2.4m of redundancy costs to right-size the business in response to the impact of the economic uncertainty above, £1.1m of losses on disposal of non-current assets, £0.2m of property exit costs and £1.0m of external fees and contractor costs incurred directly in relation to the transformation activities

Rail and EE: £3.2m of redundancy costs, plus £0.1m of external legal and other fees incurred directly as a result of the process. A charge of £1.5m was recognised in Rail and EE in respect of the restructuring of the senior management structure in the prior year.

Group: £1.0m of redundancy costs, together with £0.7m of external legal and other fees incurred directly as a result of the process. A charge of £0.2m was recognised in Group in the prior year in relation to restructuring of the Group functions.

ERP implementation: Costs of £0.5m were incurred in the year in relation to planning activities to implement a new ERP system. These were classified as a specific adjusting item as they are not reflective of the underlying performance of the business in the period.

Sale and leaseback costs: External fees of £0.3m were incurred in the year in relation to the sale and leaseback of part of the Shoreham Technical Centre. These costs were classified as a specific adjusting item as they are not reflective of the underlying performance of the Group.

Gain on sale of Ricardo Software (recognised within the discontinued operation): In the prior year, a net gain of £7.4m was recognised in relation to the disposal of Ricardo Software, completed on 1 August 2022 (the net cash impact was an inflow of £11.9m). Per the terms of the sale, up to a further £2.4m (\$3.0m) was receivable based on Ricardo Software achieving certain revenue targets in the 12-month period post-sale. These targets were not achieved and no further monies were paid.

Chief Financial Officer's report continued

Research and Development (R&D) and capital investment

The Group continues to invest in R&D and spent £11.3m (FY 2022/23: £14.6m) before government grant income of £1.8m (FY 2022/23: £6.8m). Development costs capitalised in the year were £6.3m (FY 2022/23: £5.4m), reflecting continued investment in electrification, hydrogen and carbon capture (BIOCCUS) solutions within the Emerging A&I segment, together with digital and air quality models and solutions within EE and R&D projects within Defense.

Capital expenditure on property, plant and equipment, excluding right-of-use assets, was £4.1m (FY 2022/23: £6.2m), reflecting targeted investment in our business operations, including hydrogen and electrical capability in the Emerging A&I segment.

Net finance costs

Finance income was £1.1m (FY 2022/23: £1.0m) and finance costs were £9.6m (FY 2022/23: £7.1m) for the year, giving net finance costs of £8.5m (FY 2022/23: £6.1m). The increase in costs reflects an increase in the SONIA interest rate during the current year.

Taxation

The underlying effective tax rate for the year was 26.6% (FY 2022/23: 26.1%). The reported effective tax rate was 81.4% (FY 2022/23: 5,100%). This unusually high reported effective rate in the current and prior year reflected a number of non-deductible or non-taxable specific adjusting items, including impairments and the disposal of the Software business in FY 2022/23.

Earnings per share

Basic earnings per share was 1.1p (FY 2022/23: loss of 8.7p). The Directors consider that underlying earnings per share provides a useful indication of underlying performance and trends over time. Underlying basic earnings per share for the year was 35.9p (FY 2022/23: 33.4p). The calculation of basic earnings per share, with a reconciliation to an underlying basic earnings per share, which excludes the impact (net of tax) of specific adjusting items, is disclosed in Note 7 to the Group financial statements.

Dividend

As set out in more detail in Note 8 to the Group financial statements, the board has declared a final dividend of 8.9p per share (FY 2022/23: 8.61p). The dividend will be paid gross on 22 November 2024 to holders of ordinary shares on the Company's register of members on 1 November 2024.

Goodwill

At 30 June 2024, the Group had total goodwill of £96.0m (FY 2022/23: £96.1m). The carrying value of goodwill is fully supported by the recoverable amounts of all cash-generating units.

Net debt and banking facilities

Net debt at 30 June 2024 comprised cash and cash equivalents, net of any restricted cash, of £47.3m (FY 2022/23: £49.8m), and borrowing and overdrafts, including hire purchase liabilities and net of capitalised debt issuance costs, of £106.9m (FY 2022/23: £111.9m).

The Group funds its operations via a revolving credit facility (RCF) of £150m, with a £50m uncommitted accordion, which provides funding through to August 2026, alongside the Group's uncommitted overdraft facilities of £16.1m. At 30 June 2024, the amount undrawn on the RCF was £47.0m. This, together with the net cash held (net of utilised overdraft) of £43.0m, and £16.1m of unutilised overdraft facilities, provided the Group with total cash and liquidity of £106.1m.

The Group's adjusted leverage ratio (defined as net debt over EBITDA for the last 12 months, excluding the impact of specific adjusting items and IFRS 16 Leases) was 1.25x as at 30 June 2024. The adjusted leverage covenant is a maximum of 3.0x.

The interest cover ratio (defined as EBITDA for the last 12 months, excluding the impact of specific adjusting items and IFRS 16, over net finance costs), was 5.86x at 30 June 2024. The interest cover covenant limit is a minimum of 4.0x.

Further details are provided in Note 23 to the Group financial statements.

Foreign exchange

On consolidation, revenue and costs are translated at the average exchange rates for the year. The Group is exposed to movements in the Pound Sterling exchange rate, principally from work carried out with clients that transact in Euros, US Dollars, Australian Dollars and Chinese Renminbi.

Had the prior year results been translated at current year exchange rates, revenue from continuing operations would have been £10.1m (2.3%) lower, underlying operating profit would have been £0.8m (2.3%) lower and underlying profit before tax would have been £0.8m (2.9%) lower.

Pensions

The Group's defined benefit pension scheme operates within the UK. The fair value of the scheme's assets at the end of the year was £105.4m (FY 2022/23: £104.6m) and the present value of the scheme's obligations was £97.4m (FY 2022/23: £92.0m).

The pre-tax surplus, measured in accordance with IAS 19, at 30 June 2024 was £8.0m (FY 2022/23: £12.6m). This is predominantly due to the experience loss from incorporating the census data from the 5 April 2023 statutory funding valuation into the IAS 19 liability calculations compared to the roll forward of the IAS 19 liabilities from the prior year end, which were themselves rolled forward from the 5 April 2020 census data. The discount rate also reduced during the year, partly due to the impact of moving to the expanded dataset version of the Mercer Yield Curve, which resulted in an increase in the liabilities. Ricardo paid £0.8m of cash contributions into the scheme during the year (FY 2022/23: £1.8m), with the final payment of £0.2m made on 1 November 2023.

Judith Cottrell

Chief Financial Officer

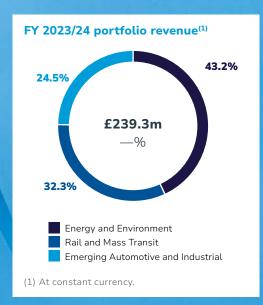
10 September 2024

Business unit overview

Environmental and Energy Transition Portfolio

Providing technical engineering and environmental consulting services that enable the energy transition.

Our Environmental and Energy Transition portfolio business is dedicated to developing innovative solutions that solve our clients' challenges, from insights and strategy building, all the way through to implementation and monitoring. Our teams help clients overcome complex engineering issues associated with the integration of renewables, and play a pivotal role in developing strategies across all modes of transportation to support low carbon transition. Growth in this portfolio is driven by the global need to rapidly transition to a low carbon future and minimise harm to the planet.



Business unit overview continued

Environmental and Energy Transition Portfolio

Our operating segments

Energy and Environment

Rail and Mass Transit

Emerging Automotive and Industrial

Governments, public agencies and businesses around the world trust Ricardo's expertise in solving the most complex environmental challenges. Our clients value our deep understanding of energy and environmental drivers, policy development and technical insights, and our ability to turn challenges into business opportunities.

We support our clients in navigating the rail industry's developmental, operational, commercial and regulatory demands. We work with governments, operators, infrastructure managers and manufacturers to ensure that railways deliver the highest possible value to their clients and to the wider community.

Our strategic and technical experts define future technologies that are innovative and sustainable for all types of emerging applications, from battery to fuel-cell technologies. We deliver solutions comprising energy transition propulsion, driveline and controls design, optimisation and prototype development.

Revenue

£103.3m +18%

Revenue

£77.4m +9%

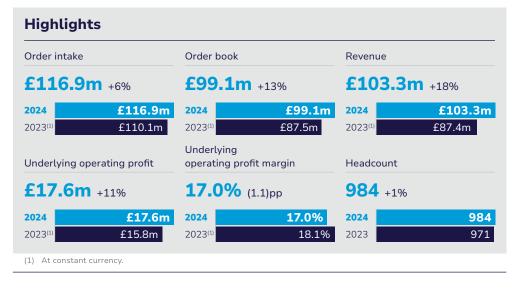
Revenue

£58.6m (27)%

Business unit overview continued

Environmental and Energy Transition Portfolio continued

Energy and Environment



Partner of choice for solving complex environmental challenges through industry-leading analysis, advice and data.

Energy and Environment (EE) works with clients across a wide range of sectors and geographies to deliver robust data-driven solutions to solve complex energy transition and environmental challenges. Ricardo's depth of environmental and energy expertise supports our clients across the value chain, from policy and strategy to implementing impactful solutions. We have focused our portfolio on market-facing solutions that include policy, strategy and economics; air, land and water management; corporate sustainability; and energy infrastructure transition including economic modelling tools.

Competitive strengths

- Expert team of scientists, engineers, economists and data specialists
- Long-standing heritage on delivering policy, analysis and technology to clients
- Global leader in air, land and water quality analysis
- Mainstreaming of digital and data-science capabilities across consultancy projects
- Trusted supplier to governments in tackling climate change
- Growing international consultancy centres in the UK, Europe, Australia and the Middle East



Business unit overview continued

Environmental and Energy Transition Portfolio | Energy and Environment

Growth drivers

- Increasing focus on sustainability in the corporate sector driven by the ESG agenda
- Amplified interest in climate and carbon following COP26
- Innovation in electricity and heat as well as in key technology areas such as hydrogen

Performance

Overall demand for our solutions resulted in growth in order intake of 6% from £110.1m in FY 2022/23 to £116.9m in FY 2023/24, on a constant currency basis.

Headline EE revenue increased by 18% on a constant currency basis, from £87.4m to £103.3m. Excluding Aither and E3M, Ricardo's most recent acquisitions, revenue increased by 10% on an organic basis. The growth has been driven by strong demand across our policy, strategy and economics (PSE), air quality and environment (AQE) and our economic and environmental modelling capabilities.

In PSE we have secured both long-term renewals and new large-scale policy contracts with the European Commission and international governments, delivering advisory services to support major policy development to reduce the impacts of climate change.

The AQE practice secured significant long-term contracts in the Middle East, which included a new contract that represented EE's largest order value to date. In addition to international growth, the AQE team continues to see strong performance in its established markets, with renewals of high-value projects for the UK government and regional authorities.

Since its acquisition in January 2023, there has also been strong demand for the energy, economic and environmental modelling capabilities of E3M. As with PSE, we have seen the renewal of important existing contracts and the winning of new contracts that are helping to expand our service delivery into new areas. We have started to realise our acquisition ambitions, with E3M's modelling capabilities being combined with our PSE, energy decarbonisation and sustainable transport expertise, providing governments with enhanced solutions to their complex environmental challenges. For example, E3M's models were combined with our technical energy consultancy experts to support a national renewable energy programme. One of E3M's macroeconomic models has recently been named as the leading tool for analysing industrial transformation in a new study published in Renewable and Sustainable Energy Reviews, a peer-reviewed scientific iournal.

During the year we consolidated our global water capabilities into a single practice area, which includes Aither, acquired in March 2023. The new combined water practice had a positive first half, securing large-scale orders with new clients in the Middle East and Asia-Pacific. Performance was tempered in the second half because of project disruptions in end markets, specifically the Middle East, impacting EE's overall margins.

Headline underlying operating profit increased from £15.8m in FY 2022/23 to £17.6m, growth of 11% on a constant currency basis. Organic underlying operating profit grew by 1%. Aither and E3M contributed £2.7m of underlying operating profit in FY 2023/24 (FY 2022/23: £1.1m). Headline underlying operating profit margin was 17.0% in FY 2023/24, 1.1pp down on the prior year on a constant currency basis due to investment in organic growth and lower utilisation in the second half in our global water practice due to the project disruptions.

Outlook

Looking ahead, policy insights, economic analysis, strategy development and environmental modelling will continue to be in high demand, which will also lead to follow-on work in our other environmental practices. In addition, investment in our capabilities in energy decarbonisation will open further opportunities to support new and existing clients with the critical needs of the energy infrastructure transition.



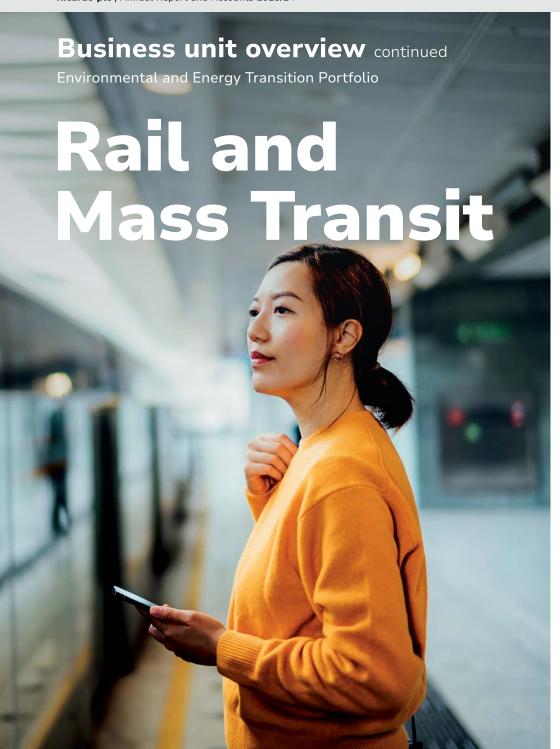
Case study

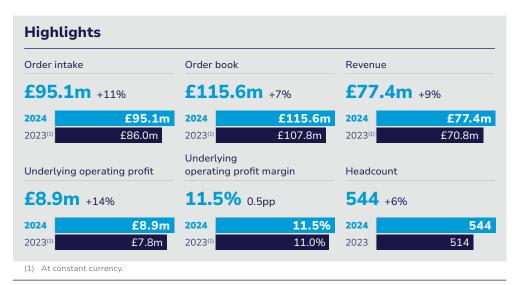
Multi-disciplinary expertise to support decarbonisation of the aviation industry

Ricardo has been appointed by the European Union Aviation Safety Agency (EASA) to support the management of a new Expert Network focused on assessing the climate impacts of non-CO $_2$ emissions generated by the aviation sector.

The initiative is funded by the EU's Horizon Europe programme and is part of a package of 'Climate, Energy and Mobility' research actions that will collectively contribute to the EU's objective to achieve climate neutrality by 2050.

Ricardo experts will establish a network of European and international testing facilities and guide fuel producers in assessing the environmental impacts of their products and in meeting strict eligibility criteria.





We support our clients in navigating the rail industry's developmental, operational, commercial and regulatory demands.

Ricardo's rail experts provide specialist engineering and assurance services to help clients navigate the industry's complex operational, commercial and regulatory demands. Our experts work across a rail project's life cycle to provide rail operators, infrastructure managers and original equipment manufacturers with the highest safety, operational and environmental standards

Our rail expertise includes railway systems engineering, which supports our clients in realising the intended performance of a complete and integrated system; operations and maintenance, which support operators

in optimising day-to-day operations to deliver long-term efficiencies; and rail design and engineering.

Competitive strengths

- Recognised capabilities in systems engineering and independent assurance
- Renowned expertise in industry standards and regulations
- Local project teams ensure strong command of domestic practices and processes
- Diverse service portfolio applicable across all regional markets

Business unit overview continued

Environmental and Energy Transition Portfolio | Rail and Mass Transit

Growth drivers

- Greater demand from governments and industry stakeholders for the rail sector to exploit cleaner energy sources and adopt more sustainable practices
- Increasing demand for digital technologies to maximise capacity and deliver efficiencies
- A complex and evolving regulatory landscape that underpins increased quality and safety requirements, where independent/objective expertise and assurance is critical
- Whole-system engineering and integration demands to realise the full system performance

Performance

FY 2023/24 was a strong year for Rail with order intake of £95.1m, 11% up on the previous year on a constant currency basis. Revenue was £77.4m, a 9% increase on the prior year on a constant currency basis, and operating profit was £8.9m, a 14% increase on a constant currency basis. Revenue increased across all our major operating regions, except for the Middle East. The growth during the year has been driven by successfully securing significant contracts across our key operating regions.

In Australia we secured a wide range of projects, which included a key long-term high-value contract to provide safety oversight of the new fleet for Southeast Queensland as part of the Cross River Rail infrastructure project, in anticipation of the 2032 Olympic Games.

In Asia, we won large-scale projects with Colas Rail, an international leader in rail infrastructure, and Woojin Industrial Systems, both of which are key projects that are supporting us in winning new work in new markets. The positive trajectory in the Asia-Pacific region reflects positive returns on the investment in business development capability made in the previous year.

We saw a decline in the Middle East resulting from the successful completion of large-scale projects during the year. This included our safety assurance support on the Doha Metro, which came to an end following the completion of the 2022 FIFA World Cup.

Our North American business has continued to grow at pace. In Canada, we secured a combination of high-value project renewals with key clients, demonstrating the value being delivered to Ricardo's clients, as well as winning projects with new clients. In the USA we secured our first large-scale project, providing key expertise to the California High Speed Rail project, which in turn has opened additional opportunities in the region.

In the UK and Europe, we successfully grew our partnership with Irish Rail, and we continue to work closely with our long-term national-level rail infrastructure partner, NS, in the Netherlands

Underlying operating profit margin was 11.5% compared to 11.0% in the prior year on a constant currency basis, with the improvement reflecting the combination of good revenue growth, focus on cost control and operational efficiency within the business. Improvements in operational efficiency included actions in the UK, which delivered increased employee project utilisation for the second half of the year, and actions in other territories as part of the Group's operating model transformation programme.

Outlook

Strong demand for Ricardo's core engineering and safety expertise across the global rail sector is complemented by increased demand to support the industry in its adoption of advanced digital technologies and to continue the acceleration of rail sector decarbonisation. The demand for the safe implementation of digital tooling enables Ricardo to utilise its advanced digital development capability and assurance experience to usher in the implementation of new robust tooling. As a result of the need for accelerated decarbonisation, we see growing demand to support industry and operational management through our advisory, sustainability, energy, engineering and modelling expertise to provide robust strategies.



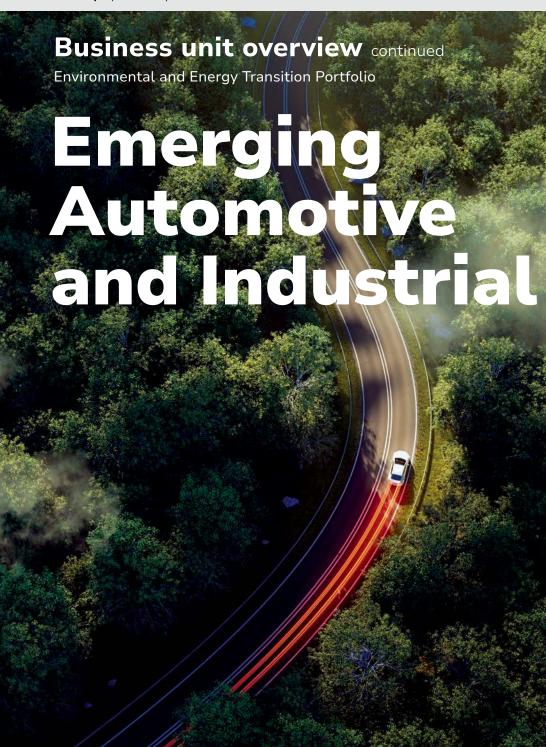
Case study

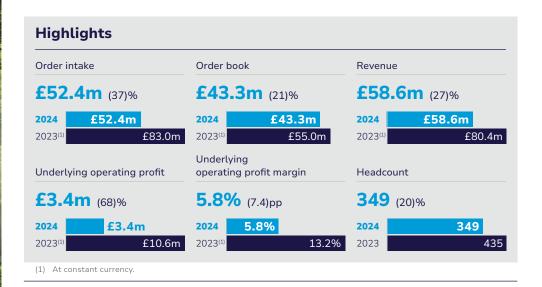
Introduction of new generation high-speed rail fleet

Ricardo has been appointed by the Taiwan High Speed Rail Corporation (THSRC) to perform independent verification and validation (IV&V) services for 12 'New Generation' trainsets for Taiwan's high-speed railway.

Selected for our deep knowledge in rail and client, Ricardo's rail engineering experts are providing oversight throughout the production of the vehicles, verifying that overall build quality complies with the original specifications, and that the client's requirements around safety, functionality, maintainability and quality – all stipulated in the procurement process – have either been met or exceeded. The first vehicles are expected into passenger operation in 2027.

Once installed, passengers will enjoy a more efficient rail system and improved experience.





Working with clients to develop tomorrow's clean and efficient energy and propulsion solutions.

From strategic planning and policy, concept to manufacture, Emerging Automotive and Industrial is a trusted partner for the next generation of sustainable transport and infrastructure solutions. Leveraging expertise in electrification, hybrid technologies and fuel cells, we deliver clean, efficient and integrated propulsion and energy solutions to support our clients in their energy transitions.

Our expertise supports the solution delivery across the value chain from policy, strategy and advisory services to design, engineering, testing and niche production and product launch. We develop strategies for the transport sector which address the biggest challenges of reducing greenhouse gas emissions and we strive to deliver a better world through solutions that take a whole life cycle carbon neutral approach.

Business unit overview continued

Environmental and Energy Transition Portfolio | Emerging Automotive and Industrial

Competitive strengths

- We leverage our technical expertise to de-risk electric vehicle (EV) development, while reducing time, cost and navigating stringent policies
- Specialists in design and integration of fuel cell systems to decarbonise transport sector applications
- Renowned for ingenuity in delivering integrated solutions to accelerate EV adoption
- Technically agnostic to energy transition applications allowing us to identify and implement the right solution to reduce emissions across a wide range of transport and stationary power applications
- Experts in complex integration to support transport decarbonisation

Growth drivers

- A rapid shift to decarbonised, sustainable transport technology
- Bridge solutions to fill the technology gap between internal combustion engines and electric vehicles
- Geopolitical pressures for zero emission output across the transport sector
- Global acceleration to reduce time and cost of new product development
- Digital transformation through industry 4.0, connected intelligence and software development capabilities to unlock new revenue streams

Performance

Emerging Automotive and Industrial (A&I) order intake declined by 37% to £52.4m (FY 2022/23: £83m) on a constant currency basis, and revenue decreased by 27% to £58.6m (FY 2022/23: £80.4m) reflecting global market challenges across the transport sector generally, in respect to timing delays to move to clean energy solutions that has resulted in short-term fluctuations.

Although we are expecting continued market challenges in the near term, we are increasingly well positioned to support the green transitions as regulatory and infrastructure requirements are expedited. Meanwhile, we are securing contracts from other transport industries including marine, aerospace and rail, ensuring confidence in building a robust sales pipeline, driving further growth and diversification. Key contracts awarded in FY 2023/24 include an extension contract to support continued work with the sustainable HYdrogen powered Shipping consortium (sHYpS), to complete the design of a modular, containerised fuel cell-based energy conversion system, intended to accelerate the adoption of hydrogen as a renewable fuel in the maritime industry. Additionally, we have secured a significant contract win, to design an engine variant running on sustainable fuels for a European industrial and marine OEM.

Underlying operating profit at £3.4m was lower than the prior year £10.6m, due to the delays in orders as reported above. As part of Ricardo's operating model transformation programme, we took proactive actions throughout the year to restructure A&I in both its Emerging and Established businesses. Actions included refocusing the service portfolio and accelerating our move to increase our flexible resourcing pool. This has resulted in ensuring that we better manage future order fluctuations as well as delivering improved profitability in the second half of FY 2023/24.

Outlook

Our global focus within Emerging A&I will be to deliver innovative, sustainable technical and engineering solutions to clients across the world and build resilience through continued expansion across all transport sectors.



Case study

Driving hydrogen development

Emerging A&I supported the development and launch of Toyota's hydrogen-powered light commercial vehicle, ensuring the seamless integration of the hydrogen fuel cell, fuel storage system and controls, including design, analysis and validation across all prototype vehicles. Ricardo was chosen by Toyota for its proven experience and capabilities in applying advanced propulsion technologies and its expertise in hydrogen fuel cell integration. While the development of the vehicle is ongoing, the launch was an important step for the project, allowing Toyota to undertake physical test, capability and feasibility studies.

Since the launch, Ricardo has concentrated on delivering the test and analysis stage of the project, including vehicle performance and fuel economy, safety, durability, heating, ventilation and air conditioning; noise, vibration and harshness, braking and ride handling.

Business unit overview continued

Established Mobility Portfolio

Our Established Mobility team's niche specialisms in manufacturing and industrial engineering deliver innovative solutions, from concept right through to production, that solve client challenges.

Driven by increasing demands in continuously improving the performance of traditional transport solutions to reduce the impacts of climate change.



Business unit overview continued

Established Mobility Portfolio continued

Our operating segments

Defense

Performance Products

Established Automotive and Industrial

A trusted engineering services partner for clean, efficient, integrated propulsion and energy systems with a deep legacy in partnering with the US military in the transition of innovative technologies from science to application.

Ricardo specialises in the design, manufacture and assembly of specialised engine and propulsion systems delivered at niche volumes to our clients in the motorsport, high-performance vehicle, defence and aerospace industries.

With over a century of propulsion design and development, we deliver transportation solutions from strategic planning to concept. We work across key transportation industries to bring solutions to market more quickly, enhancing performance.

Revenue

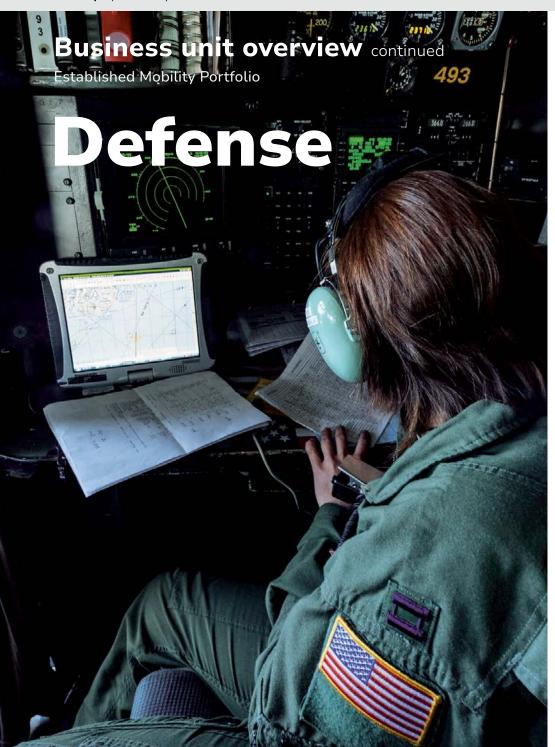
£123.4m +46%

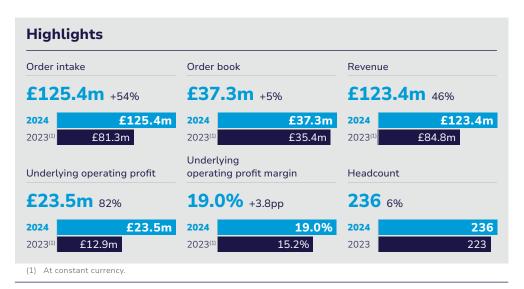
Revenue

£83.4m (2%)

Revenue

£28.6m +6%





Trusted experts in delivering wide-ranging engineering programmes to drive efficiencies while optimising safety.

Defense provides solutions to address the challenges our clients face in the integration of logistics and field support for complex and diverse systems. We specialise in designing vehicle engineering solutions that improve safety, and we have a deep legacy in partnering with the US military to take innovative technologies from science to application.

We also provide niche product and assembly services, adapting commercial industry products to deliver innovative sector applications that protect people and infrastructure.

Competitive strengths

- Leading capability in the design and management of procurement processes for US Department of Defense (DoD)
- Industry expertise across the entire defence system life cycle support and product sustainment
- Experts in defence acquisition strategy, policy and procedure
- A specialist in complex systems, linking all aspects of a complete system of systems

Business unit overview continued

Established Mobility Portfolio | Defense

Growth drivers

- Decarbonisation and net zero planning focus within the US defence sector
- Demand for greater connectivity, communications and transport within the field
- Software-driven solutions to provide functionality and systems integration
- Continued focus on cybersecurity to protect against potential and ever-evolving threats

Performance

Defense's strong growth in orders, revenue and profit and its margin improvement underpinned its full-year performance. Order intake in FY 2023/24 grew by 54% to £125.4m (FY 2022/23: £81.3m) on a constant currency basis.

Revenue significantly increased by 46% to £123.4m (FY 2022/23: £84.8m) on a constant currency basis.

Growth was primarily driven by an extension contract awarded by the US Army, valued at over \$385m, to continue production and delivery of anti-lock braking system/electronic stability control (ABS/ESC) retrofit kits, with an order completion of March 2026 and delivery completion of September 2027. This contract extends the previous three-year base contract by two years and increases the ceiling from \$89m to \$474m. Funding is determined with each delivery order (DO), with the first DO received in September 2023, under the terms of the extended contract, for \$92m (£73m).

In total, we delivered 13,100 ABS/ESC kits in FY 2023/24 compared to 8,707 the previous year. We also received orders for the new HMMWV production and continue to expand our ABS/ESC service parts, while recording several framework purchase agreements with the US Army to support fleet maintenance of the ABS/ESC system.

Additionally, Defense has secured several new and extension projects, including an extension agreement to continue ongoing efforts to expand the development of data management software tools for the US Navy fleet communications systems. Additional funding was secured for the testing and evaluation of wireless communications for the US Army and a contract award for model-based systems engineering to support the US Army with its digital acquisition framework, covering the entire procurement life cycle for their vehicle platforms from concept design and development to production and sustainment through life support.

Underlying operating profit of £23.5m represented a considerable increase of 82% compared to FY 2022/23 of £12.9m, and contributed to the Group's overall profit performance on a constant currency basis.

Outlook

Defense is expected to make further progress in its digital solutions to enable cross-domain operations between advanced platforms in the air, on land and at sea and its predictive maintenance data management software for naval fleet management.

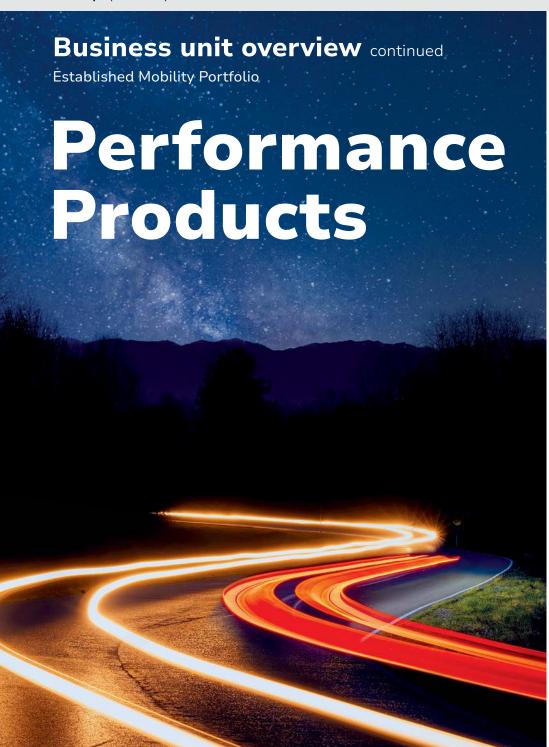
We anticipate continued demand for our broad portfolio of engineering services, products such as ABS/ESC and field support solutions to fulfil the needs of future force design and which spans the entire military vehicle life cycle. Nevertheless, in FY 2024/25, we expect revenues for the ABS/ESC programme to decline as volumes becomes more proportional for the duration of the contract period.

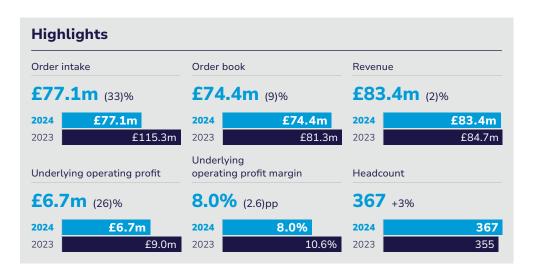


Case study

Enabling wireless communication

Ricardo Defense partnered with the US Army to enhance operational safety and efficiency through the Dismounted Soldier Communication System (DSCS). This innovative solution allows soldiers to safely disembark from their vehicles while maintaining real-time voice communication with the onboard crew during critical recovery operations. The DSCS offers a hands-free, multi-user communication network, advanced noise cancellation, and rapid field-level retrofitting to existing vehicles. Installed in three brigades of M88 vehicles, the DSCS is being used to gather data and soldier feedback, which will be crucial in evaluating and verifying system performance and effectiveness from the soldier's perspective. The DSCS solution has proven its effectiveness in increasing situational awareness and safety, providing the Army with a scalable solution adaptable to multiple vehicle fleets and operational scenarios.





Experts in design, niche-volume manufacture and industrialisation for high-performance and specialised powertrain applications.

Performance Products (PP) specialises in the design, low-volume manufacture and series supply of powertrain and driveline products for high performance and complex established and emerging transport applications. Best known for our world-class engine and transmission products for traditional propulsion systems, our capability has extended to cover the next generation of decarbonised propulsion systems.

We also provide industrialisation consultancy services from concept through to series production. Our clients draw on Ricardo's expertise in low-volume production and in developing low-volume/prototype production to series production and apply it to their own facilities and programmes to successfully introduce new products and improve existing production processes.

Business unit overview continued

Established Mobility Portfolio | Performance Products

Competitive strengths

- Globally recognised for our world-class capability in driveline and powertrain design and supply
- Renowned for our expertise in niche-volume industrial engineering and sustainable supply chains
- Expanding capability in zero-emissions propulsion technology
- In-depth knowledge of hybrid and electrified powertrains/drivetrain developed from top-flight motorsport

Growth drivers

- Performance road vehicles and motorsport remain as relevant as ever for manufacturers and consumers, demonstrating continually increasing power and efficiency in ICE and decarbonised powertrains
- Shorter and leaner development programmes using innovative technologies are driving demand for proven off-theshelf components, and for industrialisation services
- Transport is decarbonising, but differing vehicle and marine-vessel types plus geographic markets are favouring a multitude of powertrain solutions including electrification, fuel cells and carbon neutral combustion
- The defence vehicle sector continues to grow due to overseas material supply issues, and increased expenditure on arms procurement and military R&D

Performance

Order intake in FY 2023/24 was £77.1m, a reduction of 33% on the prior period. The FY 2023/24 order intake included a multi-year contract extension from Bugatti as well as a new multi-year transmission supply programme to Singer, the California-based luxury vehicle design specialist.

Performance Products has seen an effective diversification of its order book during the year, including several new contracts in new market sectors and a major key contract win for a multi-year assembly and production framework agreement in the marine propulsion segment, which will commence production in FY 2027/28. This year saw the commencement of production of the Singer transmission programme for the newly launched DLS-T and CTS platforms and continued deliveries of powertrains to McLaren and drivetrain product to Bugatti, Porsche and Aston Martin.

Revenue in FY 2023/24 was £83.4m, which was 2% lower than the prior year (FY 2022/23: £84.7m), due largely to two key transmission programmes ending. Nevertheless, revenue continues to generate from the programmes detailed above, ongoing supply agreements in defence and aerospace and a strong underlying performance in motorsport, including a presence in Formula 1, World Rally, Formula E and endurance motorsport.

Underlying profit was £6.7m, a reduction of 26% compared to the prior period, due to the lower revenue, mix of transmissions sold and inflationary pressures on input and operating costs. Underlying operating profit margin was 8.0%, compared to 10.6% in the prior period.

Significant market sector and geographic expansion has been initiated within FY 2023/24, including the establishment of a Japanese office and the development of Ricardo's Detroit facility to support future manufacturing programmes.

Outlook

In FY 2024/25, Performance Products will continue to develop its portfolio of existing powertrain (engine) and driveline (transmission) products. Additionally, we are seeing demand in programmes that support the transition to net zero propulsion, including electric drive units, industrial engineering services focused on niche volume production, and concept work around fuel cells, battery systems and electric machines.

Whilst the new opportunities are creating good growth for the future, we expect a reduction in revenue in FY 2024/25 as we conclude several existing programmes and commence development of production facilities to allow for the launch of new programmes.



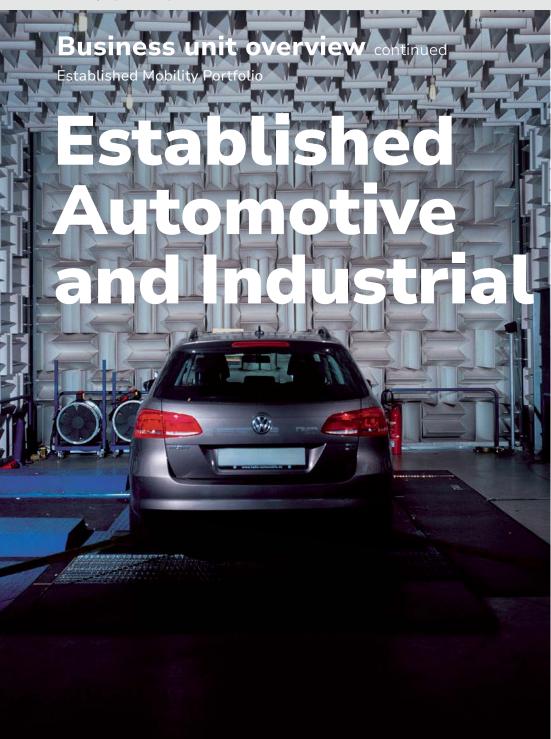
Case study

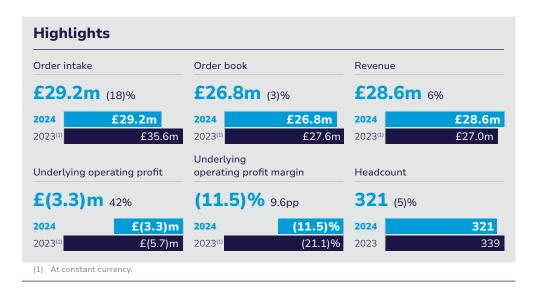
High-performance battery

PP, alongside the electrification team in A&I, launched its flexible battery module, in collaboration with its battery cell partners, InoBat, which is tailored for low-volume performance automotive and specialised vehicle applications.

The new battery module concept, which utilises InoBat pouch cells, offers OEMs in this space a cost-effective, flexible and efficient solution to the development of bespoke battery packs for their high-performance and specialised product portfolio. The modular design is scalable and customisable to meet the requirements of vehicle platforms with complex performance, efficiency and packaging requirements, such as supercar, motorsport, performance motorcycle, marine and other equally demanding applications.

This product represents Ricardo's end-to-end capability in the design, assembly and industrialisation of battery technology for niche applications.





Trusted global engineering services partner for clean and efficient integrated propulsion and energy systems.

With over a century of propulsion design and development, we are a trusted global engineering services partner for clean and efficient integrated propulsion and energy systems.

Established Automotive and Industrial is a trusted partner for original equipment manufacturers (OEMs) and tier-one suppliers across the transportation industry, including land, air and sea. We work across key transportation industries to bring solutions to market more quickly, while also enhancing performance.

Established Automotive and Industrial is working to decarbonise current technologies through efficiency improvements, while helping global clients with bridging technologies to support the shift to fully decarbonised transport solutions and the achievement of a cleaner and greener future.

Business unit overview continued

Established Mobility Portfolio | Established Automotive and Industrial

Competitive strengths

- Over a century of transport engineering experience
- Renowned for our innovative applications to enable efficient design and validation of propulsion systems
- Industry experts in systems optimisation and integration from vehicle design through to production

Growth drivers

- A rapid shift to decarbonised, sustainable transport technology
- Bridge solutions to fill the technology gap between internal combustion engines and battery electric vehicles
- Global acceleration to reduce time and cost of new product development

Performance

Established Automotive and Industrial order intake was £29.2m in FY 2023/24, a decrease of 18% on a constant currency basis, because of project delays, which created some variability in the timing of deliveries.

Revenue at £28.6m was up 6% (FY 2022/23: £27.0m) on a constant currency basis, driven by increased orders in the second half which were driven by the increased demand for the hybridisation of engines and improved efficiency of current propulsion engines, while demand for full electrification continues to evolve and market demand catches up with development. Recent wins include the design of a high-efficiency aviation powertrain, which includes the engine design and the development and hybridisation of the powertrain for a world-leading aerospace manufacturer.

We also secured a contract to complete the initial phase of a large marine outboard-motor design and development programme for a major marine OEM.

Underlying operating loss was £3.3m, an improvement of 42% compared to FY 2022/23 on a constant currency basis. Despite the loss for FY 2023/24, we saw good profit recovery in the second half as a result of improved revenue and the Group's accelerated transformation programme. As part of the restructuring programme, we have been constantly vigilant in controlling expenditure, implementing measures that support improved working capital and the short to mid-term business through further optimisation of the flexible resourcing model.

Through our simplified leadership structure, our flexible resourcing model and the execution of further efficiencies to our operating model, we are able to respond more rapidly to our clients' changing requirements and ensure persistent future financial performance in line with our strategic ambition.

Outlook

We are seeing further programmes in key industries including defence, aerospace and marine for clean propulsion integrated systems that will support our clients in their transition to a cleaner and greener future.



Case study

Developing a next-gen motorcycle family

The Established A&I team worked closely with the Italian motorcycle brand, Ducati, on the design and development of three new Scrambler motorcycles, Icon, Full Throttle and Night Shift – all of which built on Ducati's legacy and reputation for performance, quality and aesthetic.

Ricardo supported Ducati proto assembly and testing, production phase validation activities, conducted on a test track and on the road. The project team were able to deliver the project at pace to very short timescales and deliver more efficient product improvement thanks to their commitment to work closely with the customer and make product adjustments.

Though the two companies have a long and established relationship, this project represented the first time Ricardo has delivered for Ducati with an on-road motorcycle.

Stakeholder engagement

Conversations are held with key stakeholders throughout the year promoting an open feedback culture on a variety of themes across the business. Stakeholder engagement takes place across various management levels of both Group and Business Unit. The board is regularly informed of these activities and invited to attend sessions where deemed necessary.

Clients

Link to ESG: 🚫 🙎 🤼







People

development.

Link to ESG:

We provide a safe working environment and regularly engage with

our people and provide opportunities for progression and personal







Ricardo is a client-centric organisation that places the needs and objectives of its client base at the heart of the sustainable solutions it creates.

What is important to our stakeholders

- Innovative and sustainable solutions to solve problems and unlock opportunities
- A seamless experience so clients can focus on what they do best
- A reliable partner to build a more sustainable and socially responsible future
- An unrivalled choice of products and services at the cutting edge of technology

How we engage

- Our continuous Voice of the Customer (VOC) programme to gather client feedback including successes and areas of improvement in our project delivery
- · Informal feedback is gathered through regular client meetings, which take place both with Group executive team members and field-based teams
- Annual client survey used to better understand our clients' needs in order to build better experiences and positive business outcomes

How the board engages

• The board ensures that it continuously monitors performance through regular reviews with the Chief Executive Officer and Managing Directors of the various Business Units, who present the VOC and client surveys and the Group-client satisfaction survey, and address any actionable outcomes

Outcomes of engagement

In June 2024, we completed our second annual client survey. We saw an 8.5% increase in client satisfaction to 88.5% from FY 2022/23, with 93% saying they would use Ricardo for future projects. We received comments from 30% of our clients (+11%), which we will use to develop our client experience and capabilities to ensure best practice and continuous improvement.

What is important to our stakeholders

- High-performance, purpose-led culture
- · Diversity and inclusion
- · Wellbeing and mental health
- Training and career development
- Responsive leadership
- Positive environmental performance

How we engage

- · Regular live CEO Townhalls, with Q&A
- Annual global employee engagement survey
- · Affinity group meet-ups, providing a space for underrepresented groups to connect and support each other and share their views with the business
- Ad hoc emails on organisation updates, and 'always-on' communication provided through 'The Hub', our Company intranet

How the board engages

- Regular engagement with our people and teams across our sites through regular 'Meet the board' lunches and dinners
- Welcoming a wide range of employees to give presentations at board
- Malin Persson, board Workforce Engagement Director, maintains regular engagement with colleagues, including hosting Listening Sessions when on site to gather first-hand feedback

Outcomes of engagement

Our Group engagement score for 2024 was 3.81 out of 5, a slight decrease from the previous year's score. We received a 72% response rate, an 9% increase year-on-year, and will be using the feedback from comments and ratings to improve culture, engagement and way of working across the business. Further feedback is gathered through our CEO Q&A sessions that take place across our sites annually and various listening forums – including our Diversity, Equity and Inclusion (DEI) Council, affinity groups, works councils and union representation to allow our people to have a voice and share ideas.

Stakeholder engagement continued







As a global company with operations in over 23 countries, we play an active role in helping our local communities thrive by contributing both socially and economically. We operate in a responsible and sustainable way by always aligning our decisions and actions according to our values and our responsible business commitments.

What is important to our stakeholders

- Providing support to our local communities
- · Providing opportunities for STEM activities
- · Providing educational initiatives to young people
- Limiting environmental impact in operations

How we engage

- Ricardo engages with, a range of community groups in many of, the communities we operate in
- Community Week 2023 and Community Day 2024 both gave the opportunity for our people to engage and give back to our communities

How the board engages

- The board is provided with regular updates on initiatives and activities across countries and sites and their impacts on our wider community through the Responsible Business Committee
- Considers the Group's net zero ambitions and its wider responsible business strategy and how these can be an integral part of the Group's long-term sustainable success

Outcomes of engagement

- We have engaged with over 1,800 young people globally regarding
- We have reduced our Scope 1 and 2 emissions by 42.8% since 2019

Shareholders

Link to ESG: 🚫 🙎 🦰











Suppliers and partners

Link to ESG: 🙎





Ricardo has a global network of suppliers and partners. We actively engage with our suppliers to ensure that our supply chain is competitive and reflects the Group's values, that supply chain disruption is minimised or avoided, and that we have trusted relationships to ensure our operational success.

What is important to our stakeholders

- Ease of doing business
- Positive environmental and social impact, operating to high ethical standards

How we engage

• We complete new supplier questionnaires to assess their risk against a number of variables, and to ensure that they meet our Sustainable Procurement Policy, Human Rights Policy and Supplier Code of Conduct

How the board engages

- Reviews suppliers and supply chain risks and opportunities through operating segment reviews and strategy day sessions
- Reviews strategic partnership arrangements to ensure that they are aligned to our overall strategy
- With the Responsible Business Committee, reviewed sustainable procurement to improve transparency in the supply chain

Outcomes of engagement

- 90% of suppliers were assessed against our supplier questionnaire
- We work with our supply chain partners to ensure that we are creating innovative approaches that improve on-time delivery and our ESG credentials in reducing our Scope 3 carbon emissions and waste

key factor in achieving our ambitions. We seek long-term relationships based on transparency, honesty and clarity - all of which are critical for building trust. We are committed to delivering honest value to our shareholders in a transparent manner. Our shareholders are concerned with various issues, and need to understand how we are impacted by such matters but more importantly how we responded.

Engagement with and receiving the support of our shareholders is a

What is important to our stakeholders

- · Conflicts and geopolitical events
- · Impact of global economic forces
- Growth within the relevant market sectors
- · Sustainable growth and returns
- · Understanding the business growth strategy
- Transparency on corporate governance
- ESG

How we engage

- We communicate our financial results through webinars, management presentations and Annual General Meeting
- Management regularly meet with current and prospective investors, including hosting at our sites, to communicate key messages and
- · Any notable changes to the board or the Company are shared through RNS and hosted long-term at ricardo.com
- Management regularly attend investor conferences throughout the year to communicate key messages

How the board engages

- Regular reviews of shareholder interactions, including feedback by the Chair, Executive Directors and the Group Director of Communications, and feedback from the Group's brokers
- The board attends the Annual General Meeting where our shareholders are invited to submit questions on various governance matters

Outcomes of engagement

- We have participated in several investment conferences to engage with potential and existing investors both in the UK and the USA
- We have held a live presentation session for private investors with our CEO and CFO
- We have held a series of investor meetings covering our major shareholders

Responsible business

Focus on what matters

In 1915, Ricardo was set on a mission to 'maximise efficiency and eliminate waste'.

This mission has remained core to how we operate and, more than ever, informs the products and services that we provide to clients around the globe, ignites the passion that drives our people, and our approach to responsible business.







Responsible business continued

Focus on what matters

Our responsible business framework focuses on the outcomes we impact, enable or influence through our work and our operations, helping us to measure and adjust our behaviour to the long-term benefits of our clients, planet, people, communities and business.

Our responsible business framework covers a broad range of environmental, social and governance (ESG) topics as they relate to Ricardo and to our clients, and links directly to the United Nations' Sustainable Development Goals (SDGs), industry standards, frameworks and legislation, including Global Reporting Initiatives, International Sustainability Standards Board, and CDP.

See page 59 for more on our governance structure.



Responsible business continued

Focus on what matters continued

Our sustainability framework

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Clients

Working alongside our clients to accelerate the transition to a sustainable future.

Consulting revenue from projects related to climate change, environmental or safety revenue. Services related to climate change, environmental and safety

Commitment

Delivering 75% underlying operating profit to the business through the Environmental and Energy Transition portfolio

2029 75% 80% of revenue

FY 2026/27 53% 75% of underlying

Target measure

operating Group profit



Environmental

Positively impact the planet by upholding the ethos of eliminating waste and driving efficiency in everything we do.

Reduce Scope 1 and 2 emissions. Target aligned to 1.5°C average global temperature rise – market based	FY 2030/31	42.8%	46.2% reduction from FY 2019/20 baseline
Maximise procurement of renewable electricity in markets we operate and manufacture	2030	81%	90% of total electricity
Reduce water intensity (per employee) from 2022 baseline	2030	16%	30% reduction
		· ·	

Achievement date Progress



People

Nurture a workplace where everyone can do their best, while supporting the communities where we operate.

Employee engagement score of 4.0 Over 80% response rate to employee survey	2027 2027	3.81 72%	Score of >4.0 80% response rate
Improved gender diversity of new hires	2029	39% 61%	40:60 F/M of new talent
Zero reportable accidents annually	Each year	1	0
Employee voluntary turnover below 15%	2027	13%	<15%



Governance

Continuously improving our ways of working; ensuring the highest ethical standards across every level of our business and supply chain. All existing and new suppliers risk assessed against our Supplier Code of Conduct and due diligence process





Responsible business continued



We know that the biggest contribution we can make to the planet is through the work we do with our clients. We want to be the partner and champion of our clients and their sustainability goals, and see their sustainability success as part of how we achieve our ambition to continue to be an industry leader of sustainable solutions.

Delivering sustainability-focused work connects directly to our strategic ambition to be a world-leading strategy and engineering consultancy in environmental and energy transition – and our related Environmental and Energy Transition portfolio transformation target of delivering 75% operating profit to the business through the delivery of high growth, high margin and less capital intensive business by FY 2026/27. Currently, this part of the business is providing 53% of operating profit. Meanwhile in FY 2023/24. Ricardo R&D spend for climate change and environment was 51%.

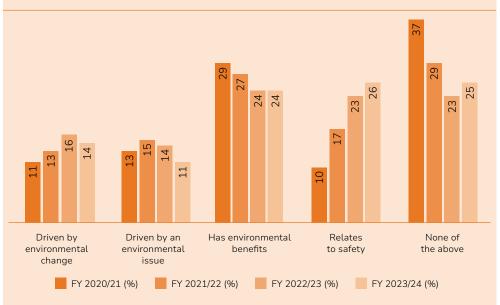
To achieve both these ambitions, we constantly monitor global megatrends to ensure we're prepared to support clients with relevant solutions that accelerate decarbonisation. We're also committed to not only advising clients, but supporting implementation and monitoring.

Climate change, environmental and safety revenue

Ricardo is in a unique position to provide a broad range of end-to-end solutions that support client climate adaption, environmental improvement and safety performance. From analysis and advisory, design, implementation, to ongoing support, while also being in the position to develop world-changing engineering solutions that also address the climate crisis.

We are able to analyse revenue streams from across our business units to assess how strongly they are driven by climate change, environmental change or issues, and safety. In FY 2023/24, such projects have made up 75% of revenue. See the graph on the right for more details.

Climate change, environmental and safety revenue



To help us better understand our business and how it is changing in line with our vision and ambition, over the past four years we have been analysing revenue streams across our business units on how they related to climate change, environmental and safety. Looking at this data side-by-side, we can see trends of increased interest in safety solutions, as the result of increased demand for our ABS/ESC programme and steady demand for environmental-focused consulting services and engineering solutions. Whereas remaining revenue, driven by revenue unrelated to these areas, has been trending downward since FY 2020/21.

Responsible business continued



We recognise the importance of minimising the environmental harm caused by our business. As part of this, we monitor a range of environmental metrics including our GHG emissions, energy and water use, and waste production across all our sites, so that we can identify improvement opportunities and ensure legislative compliance.

Carbon reduction

Reducing our emissions is an essential part of our overarching responsible business strategy. To support this, Ricardo measures and discloses elements of its impact on the environment by GHG emissions inventory reporting, with a baseline year of FY 2019/20 for Scope 1 and 2, and FY 2021/22 for Scope 3.

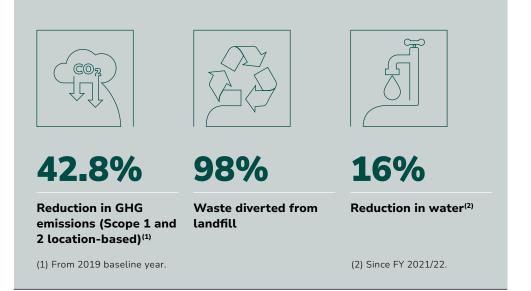
As part of our journey to net zero, Ricardo adopted Science Based Targets initiative (SBTi) targets in FY 2019/20, committing to:

- Reduce Scope 1 and 2 emissions 46.2% by FY 2030/31 – aligned to 1.5°C average global temperature rise
- Reduce absolute Scope 3 emissions 27.5% by FY 2030/31 – aligned to well below 2°C temperature rise

Since FY 2019/20, we have reduced our Scope 1 and 2 emissions by 42.8% through adoption of renewable energy and migration to a digital-first approach.

In FY 2023/24 we saw an 11% year-on-year reduction in Scope 3 emissions. However, since we first calculated Scope 3 emissions in FY 2021/22 there has been vast improvement in the ability to measure and calculate these emissions, which, coupled with an increased volume of products sold by Ricardo, has resulted in higher Scope 3 emissions since our baseline year.

During FY 2024/25 we will adjust our baseline year for all scopes using FY 2024/25 data, and use this to update our targets and initiatives in line with the 2025 net zero goal set out in the UN Paris Agreement.



Responsible business continued

Environment

Carbon reduction continued

As a result of the improved ability to calculate emissions, SBTi adjusted their Scope 3 emission grading system, resulting in over 200 companies – including Ricardo – having their Scope 3 Science Based Targets removed. Irrespective of this, there is no change in Ricardo's resolution to continually reduce our energy consumption and GHG emissions, and we intend to re-confirm our SBTi targets once trends and measurement capabilities at SBTi have stabilised.

For more information on GHG emissions, please see page 61.

Reward incentives

As of FY 2023/24, Ricardo senior management have had a reward incentive on reducing GHG emissions added to their long-term incentive scheme (LTIP), helping to integrate responsible business practices and sustainable thinking into every part of the business. The structure of the LTIP, which allocates 10% of the award on an ESG metric, was approved as part of the Directors' Remuneration policy at the AGM in November 2023. To ensure that this incentive is both fair and stretching, the Remuneration Committee will be reviewing the approach to this measure during the course of FY 2024/25. More details can be found on page 103.

Site environmental certification

Thirty-nine Ricardo sites, including all manufacturing sites, and 95% of colleagues are certified under ISO 14001 – Environmental management systems. All remaining colleagues and sites are managed with ISO 14001 processes which call for continuous improvement of environmental performance.

This helps us to identify and action environmental initiatives for our specific sites, while giving clients assurance of their supply chain.

Air pollution

In 2023, our Energy and Environment business unit initiated The Air Pollution Footprint Partnership to help organisations understand and reduce their air pollution emissions, with the support of our partners, the Clean Air Fund and Impact on Urban Health. Through this initiative, Ricardo has been analysing its own air pollution metrics using the test air pollution emission reporting tools to estimate and report on our air pollutant emissions at our key UK testing and manufacturing site, parallel to our GHG emissions.

Through this initiative, we gain transparency to the type of toxins our operations are producing and from what activity. The chart to the right demonstrates what we measure relevant to our operations, under transport, heat and power, and non-road transport machinery by vehicle type, fuel types and consumption volumes.

The output provides Ricardo with the volume of NOx (nitrogen oxide), PM_{10} and $PM_{2.5}$ (Particulate Matter) toxic pollutants which are detrimental to good health. Having learned that our air pollution is localised to our main manufacturing and testing site, we are now reviewing the extent of the potential impact and ways to make improvements.

Transport

covering fuel consumption (litres), distance (km) and transport type, including fleet (own/leased) and staff vehicles (such as cars, buses, motorcycles) across all fuel types (diesel, petrol, BEV); powertrain technology, including conventional, HEV, BEV; and travel

Heat and power

from boilers, furnaces and related to electricity use, covering fuel group and type – gases (natural gas, biogas, LPG), liquids (kerosene, petrol, biofuels), solid (coal, coke, biomass), electricity; fuel consumption – kWh. MJ. tonnes. m³, litres

Non-road mobile machinery

covering engineering, construction and materials handling equipment, including machinery type, automotive engine test beds; fuel type – diesel, petrol, HVO etc; and fuel consumption (calculated from fuel use, annual energy use or from machines' net power rating and load factor)

NO emissions (kg) PM₁₀ and PM₂₅ emissions (kg)⁽¹⁾ 7.48 562,46 3% 27.95 3.536.21 11% 54% 4.52 2.065.38 31% 206.14 428.66 Own/leased vehicles Other business travel Combustion fuels Testing fuels

(1) Results for PM_{10} and PM_{25} emissions are identical in this case.

Next steps

Assessment showed the areas where Ricardo has the highest air pollution, which was focused to manufacturing and test locations and business travel. Ricardo continues to participate in the pilot, and as we continue to gather data and information we will begin to take affirmative actions to air pollution emissions wherever possible.

Responsible business continued

Environment continued



Spotlight

Conversations on water

Water is a critical component of life, but its increasing scarcity means that it is fast becoming one of the biggest risks to the global economy. This is where water policy can come in. Listen to Ricardo water policy experts Jessica Bohorquez and Ryan Gormly speak about the vital importance of robust water policy and the intricacy behind its development in Jessica's podcast: Our Water Connection.



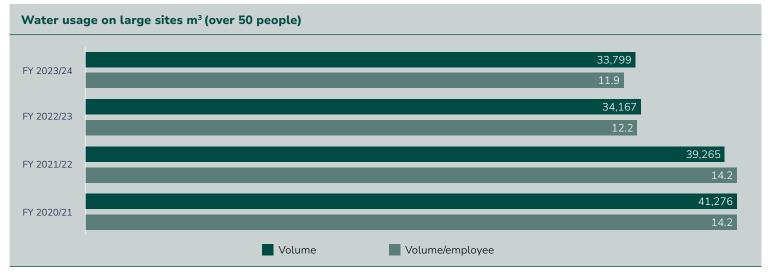
Listen to the Open Water Connection podcast

Resource efficiency

Water management

We have a limited use of water across Ricardo and seek to reduce its use in our manufacturing processes and test facilities in the UK and US. Overall, we have achieved a year-on-year reduction in water use since FY 2020/21.

Our testing and manufacturing processes consume water, however many systems run alongside recirculation or filtration systems to prolong and reduce water consumptions. A centrifuge system has been added to our Stream Finishing process at our Midlands Technical Centre, saving 151,000 litres of waste water annually, eradicating the waste stream in its entirety.



Renewable energy use

In FY 2023/24, Ricardo saw a 10% overall decrease in renewable energy use, resulting from higher production levels at sites where we are unable procure 100% renewable energy. This is the case for sites in the US, where the States in which we operate draw their energy from several renewable and non-renewable sources, and therefore we are unable to claim 100% renewable energy use. Despite this, we have seen annual year-on-year reductions in electricity use per employee, with a 6% reduction between FY 2022/23 and FY 2023/24.

	Renewable electricity percentage used per financial year	Non-renewable electricity percentage used per financial year	Electricity used per employee for the financial year kWh
2023/24	81%	19%	3,868
2022/23	91%	9%	4,922
2021/22	89%	11%	4,923
2020/21	91%	9%	5,412

Responsible business continued

Environment continued

Resource efficiency continued

Waste management

We measure the amount of waste we create so that we can continue to reduce and responsibly dispose of it. We have full transparency of where waste is disposed with maximum avoidance to landfill. For FY 2023/24, 76% of waste was recycled and only 2% of waste went direct to landfill.

All hazardous substances are collected from our sites, removed, and correctly controlled and managed by approved specialist waste companies adhering to environmental legislation. A specialist broker now manages waste from both UK manufacturing sites – Shoreham Technical Centre and Midland Technical Centre – supporting our overall waste management responsibilities.

This year, we also enhanced our metal recycling capability, with all test product transmissions, engines where possible, plus machine scrap is 100% recycled.

		FY 2023/24			FY 2022/23	
Waste stream	Sum of quantity kg	% of total waste	kg per employee	Sum of quantity kg	% of total waste	kg per employee
Electronic waste	4,089	0.6%	1	5,215	0.8%	2
Food waste to recycling (composting or anaerobic digestion)	4,326	0.7%	2	17,086	2.6%	6
General waste to landfill	13,550	2.1%	5	65,670	9.9%	23
General waste to recycling	310,478	48.0%	109	260,532	39.5%	89
General waste to incineration	139,296	22.0%	49	190,570	28.9%	65
Hazardous waste	170,603	26.6%	60	121,304	18.4%	42
Grand total – Ongoing operations	642,342		226	660,377		227
Waste processing						
Amount of waste recycled	485,095	76%	171	390,137	59%	134
Amount of waste converted to energy (EfW)	144,992	23%	51	204,570	31%	70
Exceptional item – Demolition waste	612,000				·	

Note

- Electronic, food and general waste is from our offices and due to the reduction in office sites and occupancy there has been a decrease, reflected in the reduction in volume to landfill. Our method of estimating office waste has changed from allocated employee headcount to office occupancy
- Waste to incineration has decreased due to additional waste being put into recycling streams
- Hazardous waste has increased due to manufacturing productivity and disposal of asbestos from the one-off demolition waste. This resulted from the demolition of several end-of-life buildings, some of which contained asbestos, which has cleared an area for the construction of a proposed test facility
- Hazardous waste is categorised as oil sludge, batteries, and asbestos



Case study

Understanding our Scope 3 commuter emissions

To ensure we have a more accurate understanding of our Scope 3 emissions, since FY 2022/23 we have run an employee commuter survey. Approximately 82% of employees completed the FY 2023/24 survey, which asked team members to identify the modes of transport they use to commute to a Ricardo office, the distance involved and the frequency, with the data being used to assess emissions by mode, location, headcount and business unit.

From this year's results we learned that emissions for commuters to city centre offices and those with good rail links had much lower emissions per head. While commuters at some of our largest sites, with headcounts above 300 – such as Shoreham Technical Centre and Midland Technical Centre – use higher-emission transport modes with more frequency, when factoring in headcount, they have a lower intensity of emissions than some of our sites with smaller headcounts, as the result of limited public or sustainable transport options available.

Responsible business continued



At Ricardo we know that the success of our business is, quite simply, down to our people. We are committed to building an inclusive, engaging workplace that provides colleagues with meaningful and fulfilling work and the opportunity to develop their careers and thrive.

Culture and engagement

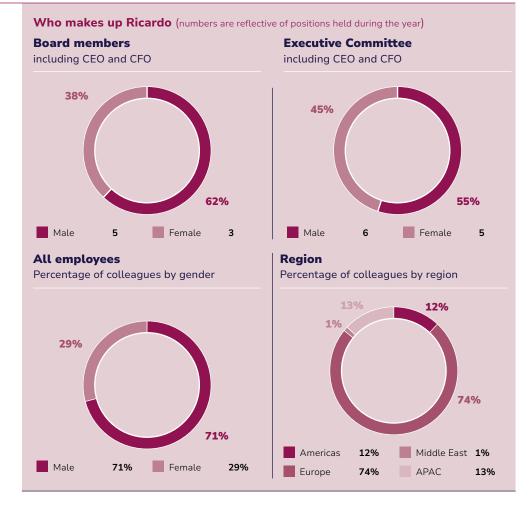
We recognise that to achieve our ambition, we must continue to improve collaboration across functions and build on our One Ricardo culture. Throughout FY 2023/24, we have continued to break down silos and are seeing an increasing number of projects come to life that are the result of teamwork across our business units and functions.

Vision and values

In everything we do, we are led by our vision to create a safe and sustainable world, and our values: Create Together, Be Innovative, Aim High and Be Mindful. It's not just how we approach our tasks but also a reflection of how we behave and what we consider important.

We continue to celebrate how our people put our values into action through the monthly CEO Awards, our annual Leading Lights awards.





Responsible business continued

People

Culture and engagement continued **Building One Ricardo culture**

Throughout the year, the Group and local sites have held a number of activities to build a unified culture at Ricardo:

- Community Day (read more on page 57)
- Global Diversity, Equity and Inclusion (DEI) celebrations including Pride, International Woman's Day and Mental Wellness Day
- Local sport days and seasonal celebrations
- Monthly CEO awards
- Annual Leading Lights awards

In FY 2024/25 we look forward to hosting our first Ricardo Day, a day of reflection on One Ricardo and a celebration of the efforts made by our people.

Communicating to our teams

Ensuring that our people have an appropriate understanding of business activity and strategy is important to Ricardo's success and employee engagement. We use several communication streams to keep our people informed on activity and performance. At a Group level this includes CEO Townhalls, weekly newsletters, an active intranet – known as 'The Hub', and emails with the most important updates. At a team level, we encourage managers to have regular team and one-on-one meetings.

Gathering colleague feedback

Our annual employee engagement survey is a formal feedback mechanism we use to understand how Ricardo is performing with regard to culture and engagement, and to provide our people with the opportunity to freely express their views freely. Results and comments from the survey are used by leadership to make improvements to how we work with our people.

Overall, we saw a slight decrease in our engagement score in FY 2023/24 from 4.0 to 3.81 year-on-year, which comes against the backdrop of many changes occurring across the business in the previous 12 months. At the same time, we had our highest response rate to date at 72%, a 11% increase on FY 2022/23, and received more than 6,900 comments – a 40% increase from the prior year – which we see as a reflection of colleagues' belief that their opinion matters.

Top three areas where we are performing well:

- I know what is expected of me at work
- My supervisor, or someone at work, seems to care about me as a person
- At work my opinions count

Following the survey, colleagues were communicated the results via global Townhalls, team meetings, email and intranet. Leadership are using this feedback to develop engagement action plans for teams, sites and the wider Company to be implemented throughout the year.

Outside of the Employee Survey, colleagues are able to provide informal feedback on an ad hoc basis via Teams and The Hub.



Case study

Bring your daughter to work

In March, to celebrate International Women's Day, Ricardo's Shoreham site hosted a 'Bring your daughter to work' day for young female relatives and friends of employees across the business.

In total, 20 aspiring female engineers, aged between 7 and 16, took part in a packed day of activities, which included building a mini race car and marble obstacle course; designing and building clay model cars to test aerodynamics in a mini wind tunnel – aimed at encouraging creative problem-solving; a site tour, highlighting many of the different aspects of engineering; and one-on-one time with their sponsors to get an insight into their specific job role.

The activities aimed to create an environment where the girls could work together as a team whilst also have fun and understand the principles of engineering across a variety of areas.

Responsible business continued

Donortable

People continued

Health, safety and wellbeing

Ricardo places the utmost importance on the health and safety of our employees, contractors and visitors. This year, we continued to strengthen our safety culture through comprehensive training, rigorous safety protocols, and proactive risk management.

Our ISO 45001 certification encompasses 39 sites and covers 95% of our site-based employees. The remaining employees and sites are managed through the ISO 45001 process to ensure comprehensive health and safety management.

Reportable accidents

We achieved a notable 75% decrease in RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reportable incidents compared to the previous year. This improvement reflects our focused efforts on hazard prevention and heightened safety awareness.

	Reportable	
	accidents	
	Number	
2023/24	1	
2022/23	4	
2021/22	1	
2020/21	1	
2019/20	1	

Based on current definitions of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

Following the accident that occurred this year, an investigation into the cause was undertaken, allowing us to identify future mitigation measures to minimise the chances of this accident reoccurring. This accident did not result in life-changing injuries or a fatality.

Promoting employee wellbeing

In addition to taking care of our employees' physical health and safety, across Ricardo we want to make sure we are providing opportunities for colleagues to access mental health services should they experience any concerns, through our free and anonymous Employee Assistance Programme, open to them and their immediate family.

Across the business we encourage social wellbeing with site-relevant social engagement teams who organise regular team activities and seasonal or cultural events best suited to a country's or office's interests. There are also a number of opportunities and avenues for colleagues to participate in community volunteering opportunities (read more on page 57).

Attraction, capability and reward People attraction

This year, we have made significant strides in enhancing our talent attraction initiatives, ensuring we continue to draw the brightest minds to our organisation.

Strategic workforce planning: Through our rigorous annual workforce planning process we now align our hiring plans with our business goals, ensuring that all future hiring requirements are anticipated with proactive strategies and timelines to meet those needs.

Technology integration: By leveraging technology partnerships, we have improved our ability to identify and engage with top candidates. By using these tools (and their built-in AI capability) we have been able to efficiently screen CVs and talent pools to required skill sets, reducing time-to-hire and ensuring a better fit.

Early careers partnerships and online campaigns: Strengthening our relationships with top universities has allowed us to tap into a pool of emerging talent. Through our work placement programmes and campus recruitment drives, we have successfully recruited fresh graduates who bring new perspectives and energy to our team. We have extended our online presence and range through our partnerships with organisations to improve our reach and recruitment of candidates from various backgrounds, enhancing diversity and fostering an inclusive work environment.

Learning and development

To support our clients and engage our colleagues we understand that continuous learning is core to our success. We encourage both on-the-job learning and participation in internal and external courses and participation at relevant industry courses. Across the business, colleagues can commit up to 5% of their time to learning, helping to expand their knowledge and keep abreast of changes within our industry, which can then be applied to client work.

As part of this learning organisation mindset, this year we launched LinkedIn Learning to all our people across the organisation so that they have sustained access to self-paced learning across a broad range of topics that interest them and support their career development.

Since introducing LinkedIn Learning in April, over 50% of the Ricardo employees have activated their accounts, engaging in over 1,200 courses; and over 25% have registered their career goals.

In FY 2024/25, our focus is on the continued development of our people managers with the launch of our first global management development programmes aimed at developing first-time line managers by providing them with learning resources and connecting them with more experienced managers who can provide quidance and support.

Feedback and objective setting

Managers are expected to give regular feedback to their team members throughout the year on their performance, providing the opportunity to align their activity with business objectives and personal development.

In FY 2023/24 colleagues across the Company had their objectives aligned with the strategic objectives of the business (see KPIs – page 18). This is intended to align colleague activity and success more clearly with that of the Company.

Global mobility

Ricardo designed and implemented the Global Mobility Framework and its associated policies, which provide an overview on how we manage and encourage international working within the Ricardo Group. A robust Global Mobility Framework, with a strategy closely aligned to the overall Group strategy, supports talent, the workforce and our clients.

There are many variables which are taken into account for each international movement and the aim is to be consistent, fair and equitable within the framework of provision, thus allowing our employees to achieve their career objectives and goals. The Global Mobility Framework is designed to be market competitive and legally compliant. Our overall reward systems are continually reviewed for legal compliance and equity, respecting regional nuances.

Responsible business continued

People continued



Case study

Global mobility spotlight

We have a large pool of topic specialists at Ricardo to support our global client base. This provides the dual benefit of having our clients supported by subject matter experts and exposing our people to a range of projects around the world at any one time. It also gives the opportunity for some of our people to relocate to provide dedicated support.

Daniela Phillips is one such expert who recently relocated to California, USA to lend her certification experience to the California High Speed Rail project, as part of a larger team of Ricardo experts who have established in the state.

"It was a big decision to move and be away from family, friends, and cat, but I knew what a once-in-a-lifetime opportunity it was to work on the first US high speed rail project. My role on the project is the Systems Certification Manager and on a day-to-day basis I am providing advice and support to construction packages, the Authority and internal teams and liaising with the Federal Railroad Administration (FRA). A lot of what I do is about building confidence in our assurance work and has meant I have had to get to grips with US railway legislation pretty quickly! It was really key for me to be here in person at the start of our work to meet the key people involved and build a relationship with them."

Attraction, capability and reward continued

Reward and recognition

Ricardo has continued to embed its international employee recognition awards including monthly CEO Awards and annual Leading Lights awards. This year, we launched an internal tool called Thank You! on the Ricardo intranet, which allows colleagues to quickly thank their team members for their contributions. When a thank you is sent, a note is also shared with the relevant manager, so they're also aware of the recognition their direct report is receiving.

In January, Ricardo returned to merit-based salary reviews, completing a consolidated, centrally led global salary review cycle. Ricardo continues to monitor its reward systems and benefits to make sure total reward remains in line with local markets. Pay principles have also been reviewed for legal compliance.

Embracing DEI

As an international business working on a broad range of matters, Ricardo recognises the need for not only a workforce that reflects the communities we operate in, but the benefit that diversity of thought, background and skill brings to our business; and for creating an environment that is inclusive and equitable to all who work here.

DEI is led by General Counsel, Harpreet Sagoo, who has been leading a number of discovery sessions across the business to better understand what diversity, equity and inclusion (DEI) means across the business and established an internal benchmark.

Findings from these sessions will help to form the development of a DEI Action Plan that will begin its rollout in FY 2024/25, supporting talent attraction and the development of Ricardo culture.

Read the interview with DEI Chair, Harpreet Sagoo, on page 56.

Gender diversity

We are committed to improving gender diversity at all levels of the organisation, from graduates to Executive and board level. Across the Ricardo Group, in the last 12 months 39% of new joiners at all levels – an increase of 3% – have been female, helping to increase representation by women in our workforce to 29% female, a slight increase from FY 2022/23. Gender representation at an executive level has improved to 45% in FY 2023/24 up from 27% in FY 2021/22, and we achieved our board gender diversity goals in July 2024 with the appointment of Carol Borg.

Reducing our gender pay gap

We have seen positive trends in reducing our gender pay gap in those parts of the business we have been reporting on for the last seven reporting cycles. Our figures have held steady in FY 2023/24, either sitting beneath or on par with the UK median of 14.9% in favour of males, according to the Office for National Statistics in 2022. However, we recognise that no amount of gap is appropriate and continue taking steps to make this a reality.

Responsible business continued

People continued



Accelerating our DEI ambition

Interview with Harpreet Sagoo, General Counsel and DEI Chair on where DEI is heading at Ricardo

Why is DEI important to Ricardo?

Ricardo wants everyone it engages with to feel valued, respected and a part of the company story. To do this it is essential to have a safe environment where individuals are happy to challenge and provide a different perspective. This accelerates our growth culture. The same thought process, same experience, same ideas creates a stagnant environment. That is not Ricardo! Having a clear commitment to DEI where we can attract the best and retain the best is core to our success. DEI is not just important – it is critical!

What was your impression of DEI activity across Ricardo?

As part of my interview process, I raised DEI and representation as a topic. I was impressed that our CEO was open about the fact we needed to do more. Each business unit was addressing DEI in silos, but it was important to elevate this to Group level. Upon joining, I was impressed with the different employee-led affinity groups that were active across the business. There is a sincere interest across all levels of the business to improve DEI and give it the prominence it needs. This is not a tick box exercise for Ricardo, or a nice to have, it is an integral part of our growth journey.

You have been holding a number of discovery sessions to understand DEI at Ricardo. Why did you want to undertake these sessions and what did you learn?

You need to listen, which is difficult for lawyers! It is important to evaluate where you are, to map out how you get to your final destination. I have been meeting regularly with the affinity groups, and it has been invaluable for putting together our DEI Action Plan and commitment from Ricardo to our teams. These sessions allowed me to build relationships and create a safe environment for feedback. I am very appreciative for the support I have received from our CEO and board on this journey.

What are some clear areas of focus for you?

Transparency is key. I am focused on ensuring that DEI has board, Executive and SLT visibility by elevating the work undertaken by the affinity groups. We are currently working on concluding our Action Plan, with each affinity group focused on one deliverable to help us move the dial. In addition, we are launching a new Code of Conduct which ties DEI into our values. There is a lot for us to do, but I feel empowered, energised and supported by Ricardo to make a difference. I want to conclude by saying a massive thank you to all the DEI Chairs who have been instrumental to get Ricardo to this point. Thank you.

Responsible business continued

People continued



Case study

Global Community Day

In May 2024, Ricardo held its first global Community Day to encourage more colleagues to connect with each other globally across all locations and contribute to their local communities.

As part of the Community Day we encouraged colleagues to step out into their communities and support the local environment by litter picking, helping to clean up local areas and reduce waste that could make its way into waterways, and be eaten by pets or wildlife. We also asked our colleagues to count their steps while collecting litter and encouraged them to say 'Thank You' to their team members using the new internal Thank You! channel.

As a thank you to our teams for getting involved, Ricardo also made donations to the local charities the team chose and contributed too during the day. Overall, we collected over 12,800 pieces of litter, which exceeded our target of 1,000 pieces, walked over 870,000 steps, the equivalent of 696km, and sent over 175 Thank You messages.

STEM and the community

12+

£97,000

1,800

Charities supported

Donations in FY 2023/24

Young people engaged

As a company of engineers, scientists and specialist technology experts, Ricardo has always been a strong supporter of STEM, engaging with local communities and charity work. Our commitment was embedded through a centrally funded social value STEM programme launched early in 2023 which we continue with, expanding the work with our partners into FY 2024/25 and beyond. These activities support our Social Value team with their work, demonstrating our commitment to society often required by our clients.

We actively manage our employee STEM volunteering programme which provides all Ricardo employees with the opportunity to volunteer during the year, which boosts team engagement, health and wellbeing, while positively impacting society.

During the last year Ricardo colleagues have engaged with 1,800 students across the England, Scotland and the USA to inspire and demystify careers in STEM. This has taken place through different STEM initiatives with our partners, including supporting school challenges for students to participate in, and present their final design products to a panel of judges. We also conduct careers talks and provide presentations on various topics such as engineering, air pollution, climate change, water scarcity and other important environmental issues.

We have provided week-long work experience placements and supported many school career fairs. We support our other STEM partners with mentoring students through other activities, which includes post-graduates and young people venturing into their careers.

The funding donated was for our STEM partners, and other charities our employees have supported, which we have fund-matched against the money they raised.

A key element of our community engagement is inspiring the future green workforce and encouraging social transport to overcome disparity in the STEM sector. We are setting out to inspire the next generation of problem-solvers from all backgrounds into careers in the clean energy, environment and sustainability sector and support young people's knowledge of topical issues in the sector

We partnered with seven STEM charity organisations in 2023 and have worked with them during this year. We will be continuing our work to support STEM charities and are looking for additional partners in other locations where we operate, such as the Netherlands. Middle East and China.

In addition to STEM activities, Ricardo has donated over £97,000 to STEM, environmental, health and emergency response charities in FY 2023/24 (FY 2022/23: £16,069).

Responsible business continued

People continued



Educating on climate change and its solutions

Over the past year, Ricardo UK teams have been volunteering with EDT by bringing climate change education and supporting STEM at schools across the UK. Ricardo team members spoke with around 280 students on the phenomenon of global warming, how our daily activities impact the world, utilising carbon footprints as an environmental indicator, and the potential for carbon capture. As part of the sessions, pupils were then given the chance to plan and create models for an eco garden, with the aim of reducing their respective carbon footprints and improving the atmosphere.







Hands-on STEM experience

During the course of many weeks, Ricardo team members Canessa Hunter and Sarah Keegan volunteered by taking time to teach fourth graders in Detroit, USA about STEM through the SAE Foundation. Working with young girls and boys between 9 and 10 years old at Emerson Elementary School, the pair applied their skills, experience and education to teach the children about STEM while building a gravity cruiser as part of SAE's A World In Motion® (AWIM®) Gravity Cruiser Challenge. To nurture trust and their passion, the pair committed to answer all questions asked by the students and made sure they could attend every session. By the end of eight weeks, the children had learned more about STEM, as well as the importance of teamwork and compromise. After weeks of preparation, during their final session the children had an opportunity to test their gravity cruisers against their classmates, adjusting their vehicles throughout to improve performance and to see who could take home the first-place prize.





Encouraging STEM in Australia

Jessica Bohorquez and Jorge Martin Gistau participated in a Superstars of STEM Career Panel at Brighton Secondary School in Adelaide where they shared their experiences as STEM professionals, and answered questions on work environments and necessary educational and practical advice to pursue their STEM interests in these areas. In addition to the panel, Jessica collaborated with the School of Architecture and Civil Engineering at the University of Adelaide, delivering an interactive workshop to Year 11 and Year 12 students. The 'Aqualibrium' activity was created to enhance students' understanding of critical issues in water management and engineering, working with students to design their own water network, introducing students to design thinking, iterations, and the importance of infrastructure resilience. Both activities underscored Ricardo's essential role in inspiring the next generation of STEM professionals. By sharing real-world experiences and engaging students in practical workshops, Jessica and Jorge demonstrated the exciting possibilities within STEM careers.

Other STEM and charity partners















Responsible business continued



Governance

Building the foundations of a strong responsible business framework with robust governance structure.

Governance structure

While everyone at Ricardo is responsible for helping us achieve our sustainability goals, it is the Responsible Business Committee (RBC) who steers Ricardo's efforts in environmental. social and governance issues. Made up of the board's Chair and Non-Executive Directors, CEO, CFO and the Sustainability team, decisions made by the RBC are shared throughout the executive and the business units for implementation across the business.

Key elements of our responsible business process include:

- Monthly Executive meetings with our CEO and senior leadership team
- The ESG transformation workstream, which meets every two weeks

Part of the RBC's remit is contributing to the development and review – annual, or more frequently if legislation dictates change – of relevant Company-wide policies.

In the past year, the RBC have contributed to a new Anti-Bribery, Fraud and Corruption Policy, and updated the Code of Conduct, Supplier Code of Conduct, Human Rights Policy, Speak Up Policy and the DEI Policy Statement.

Leveraging Ricardo's internal specialist teams, the RBC makes in-depth analytical reviews of pending, developing and international regulations to provide a three to five-year view on impending changes for risk management, decision making and reporting. This provides our stakeholders with increased transparency regarding our risk decisions through the early adoption of reporting standards, and the opportunity to report our involvement publicly. The RBC reinforces the accountability and responsibility we all share, to ensure that the highest standards are adhered to in everything we do internally and for externally for the business and our stakeholders

For more information on the RBC see page 97.



Case study **2econd Chance**



2econd Chance is a not-for-profit, community interest company that collects and refurbishes unwanted hardware, and provides opportunity for NEET (not in employment, education or training) adults and young people aged 16-25 with an EHCP (Education Health Care Plan). This helps to 'bridge the digital divide' by aiding digital inclusion, helping get people into work. It supports Ricardo to manage its environmental footprint and minimise its e-waste equipment, giving a second life to machines, and building further social value. This programme supports our compliance to ISO 27001 – International Standard for Information Security Management.

"Through our partnership, we have transformed corporate generosity into community empowerment. This support has enabled us to provide accredited and informal training for individuals with disabilities and those furthest from the job market. equipping them with valuable skills. To date, Ricardo has donated over 200 devices, which has facilitated approximately 260 hours of valuable training, and we have been able to donate 33 refurbished computers back into the community, providing people with access to essential technology for online learning and job searching."

Charlotte Solomon – Director, 2econd Chance

Responsible business continued

Governance

Our ratings and engagement with international bodies

We proactively engage with investor rating agencies such as, but not limited to: ISS, CDP, Sustainalytics, and FTSE Russell. Ecovadis awarded our Rail business in the Netherlands a Platinum Award and our A&I UK business Silver Award status for 2023. We await this year's updates.

Ricardo's ESG framework is set against GRI (Global Reporting Initiative) and as ISSB (International Sustainability Standards Board) evolves further with additional standards, we will adapt this further as part of the overarching framework, having already incorporated IFRS S1 and IFRS S2. We remain committed to reporting annually to CDP (Carbon Disclosure Project). mandatory reporting to TCFD (Task Force on Climate-related Financial Disclosures) and GHG emissions regulations. As a signatory to the United Nations Global Compact (UNGC), the world's largest corporate responsibility initiative, we remain committed to the 10 Principles. Our Communication on Progress (COP) report is submitted annually to the UNGC.

Sustainable procurement

Our supplier partnerships are built on business integrity and transparency, and our suppliers are equally accountable and responsible for due diligence of their own value supply chains, and all activities throughout our operations. In FY 2023/24, we completed a due diligence process for 90% of our suppliers, who were assessed against various risk categories including country and regions within, human rights risk levels, political or corruption concerns, with the support of Nexis and Dun & Bradstreet.

As a global consultancy, the majority of our suppliers provide business services rather than manufacturing, but we expect all our employees and external stakeholders to respect individuals with dignity, and to not breach this per our terms of business, our Code of Conduct, Supplier Code of Conduct, Human Rights and Anti-Bribery and Corruption policies. We have related policies which can be viewed on www.ricardo.com. These are linked to our internal policies and processes, including sustainable procurement processes and risk assessment supplier evaluation questionnaires for new and existing suppliers. We require information and details related to all core sustainable activities: waste and pollution, climate risks, carbon reduction targets, energy saving and renewables, working conditions, supply chain transparency, modern slavery due diligence and relevant accreditation standards.

Modern slavery

We consider the risks of all forms of modern slavery throughout our global operations. Modern slavery legislation exists in many countries including the UK, Australia and the USA, being three of the large operational regions for Ricardo Group. Therefore, as part of our supplier procurement due diligence process, modern slavery risk assessments are a mandatory requirement for all suppliers, even if the threshold of the individual national obligations does not legally impact a supplier's business.

Risks are prevalent in all countries, and we sometimes consider a smaller business partner more at risk than those who are large corporate businesses. We identify those who need support to help assess and mitigate their own risks. We continue to raise awareness, educating our teams and suppliers with this ongoing journey of complex issues and due diligence. We continue to engage with organisations such as the UNGC, to share best practice with other organisations to keep aware of wider issues that may impact Ricardo. These matters are fluid and high risk, therefore consistent monitoring is required to ensure the highest level of compliance. Ricardo encourages open, honest, two-way communication throughout the organisation to ensure issues of concern are raised, and addressed.

Whistleblowing

We provide an anonymous ethics hotline, Navex, hosted outside of the Ricardo internal network to give confidentiality and protection to those 'speaking out'. This service is open to all employees, clients and suppliers.

Ethics

We consider ethical conduct to be integral to our business and its success. In the past year, led by the Responsible Business Committee, Ricardo has updated its Code of Conduct, Supplier Code of Conduct, Human Rights Policy, Speak Up Policy, DEI Policy and introduced a new Anti-Bribery and Corruption Policy. We adhere to security standards to safeguard sensitive information. Our Information Security Policy is instrumental in fostering trust with clients, suppliers and employees.

Data responsibility

Ricardo maintains a robust information security programme that includes mandatory training for all employees, upon hire and annually thereafter, covering essential topics such as data protection, cybersecurity best practices, and incident response. Our information security programme is aligned with industry best practices and certified to ISO/IEC 27001 and Cyber Essentials standards.

Senior leadership oversees the information security management system (ISMS) through annual reviews assessing performance, risk, operations and incidents. Key performance indicators are tracked to identify improvements. Data, information security and privacy reports are submitted to the Audit Committee every six months, with findings presented to the board annually.



Global Slavery Index I Walk Free



Global: Global Slavery Index 2023 finds limited progress to eradicating modern slavery & forced labour – Business & Human Rights Resource Centre (business-humanrights.org)



2023 Corruption Perceptions Index: Explore the... – Transparency.org

Responsible business continued

Greenhouse gas emissions

The table below and supporting methodology and assumptions summarise the Streamlined Energy and Carbon Reporting (SECR) disclosure in line with the requirements of The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. In support of our ambition to achieve our SBTi targets, we are increasing the breadth of KPI reporting as shown below.

Metrics and targets

		FY 2023/24	FY 2022/23	FY 2021/22	FY 2019/20 baseline
Emissions – tCO ₂ e		0_0,	1 1 2022/20	2021,22	Suscine
	Gas (methane-based) usage	1,775	1,563	1,599	
	Diesel usage	574	502	762	
Scope 1	Gasoline usage	318	477	495	
Scope 1	Other emissions	58	303	966	
	Total	2,725	2,845	3,822	4,343
<u> </u>	Location-based	2,777	2,764	3,292	4,981
Scope 2	Market-based	914	637	618	2,016
T-+-1 (C 11 2)	Location-based	5,502	5,609	7,114	9,324
Total (Scopes 1 and 2)	Market-based	3,639	3,482	4,440	6,359
	Category 1 (including Category 8) – Purchased goods and services	124,699	141,204	85,306	*
	Category 2 – Capital goods	649	4,936	4,430	*
	Category 3 – Fuel and energy-related activities	195	216	276	
	Category 4 – Upstream transportation and distribution	340	361	206	*
	Category 5 – Waste	36	113	144	*
	Category 5 – Waste – exceptional item – demolition at Shoreham Technical Centre	13	*	×	*
	Category 6 – Business travel (all modes)	2,448	3,018	2,462	*
	Category 7 – Employee commuting	2,018	1,737	2,902	
Scope 3	Category 9 – Downstream transportation and distribution	92	163	89	
	Category 11 – Use of sold product (weight apportioned basis – GHG Protocol)	4,925	4,894	4,600	*
	Category 11 – Use of sold product (whole vehicle weight method – SBTi)	35,172	35,736	32,461	
	Category 12 – End of life of sold products	517	435	285	*
	Category 13 – Downstream leased assets, location-based	61	65	46	*
	Scope 3 total – GHG basis	135,994	157,142	100,746	*
	Scope 3 total – SBTi basis	166,241	187,984	128,607	*
	Total – Location-based (Scopes 1, 2, 3) GHG Protocol basis	141,496	162,751	107,860	13,291
	Total – Market-based (Scopes 1, 2, 3) GHG Protocol basis	139,633	160,624	105,186	10,326

- (*) No data
- Scope 1, 2 and Scope 3 categories 1, 2, 3 and 13 have all been verified to 'Reasonable Assurance'
- Scope 3 Categories 4, 5, 6, 7, 8, 9, 11 and 12 have been verified to 'Limited Assurance'

Responsible business continued

Greenhouse gas emissions continued

Metrics and targets	continued	FY 2023/24	FY 2022/23	FY 2021/22	FY 2019/20 baseline
Intensity measures -	- GHG basis (tCO ₂ e per employee)				
	Location-based	1.94	2.00	2.57	3.05
Total (Scopes 1 and 2)	Market-based	1.28	1.24	1.61	2.08
Scope 3	GHG Protocol basis	47.91	56.10	36.40	*
Total (Cooper 1 2 2)	Location-based	49.85	58.10	38.97	*
Total (Scopes 1, 2, 3)	Market-based	49.19	57.34	38.00	×
(tCO ₂ e per £m reven	ue)				
T : 1/C	Location-based	11.59	12.58	18.37	24.49
Total (Scopes 1 and 2)	Market-based	7.67	7.81	11.46	18.07
Scope 3	GHG Protocol basis	286.48	352.34	260.12	*
T . I (C	Location-based	298.07	364.91	278.49	*
Total (Scopes 1, 2, 3)	Market-based	294.15	360.14	271.59	*
Electricity consumpt	ion (MWh)				
	Electricity consumed (all sources)	10,980	12,021	15,369	17,455
	Renewable electricity consumed	8,894	10,901	13,601	12,973
	Non-renewable electricity used	2,086	1,120	1,768	4,482
	Percentage of renewable electricity used	81%	91%	89%	74%
SECR (UK Streamlin	ed Energy and Carbon Reporting)				
	UK Scope 1 tCO₂e	2,342	2,333	3,430	2,496
	UK Scope 2 – Location-based tCO ₂ e	1,931	2,078	2,605	3,065
	UK Scope 2 – Market-based tCO ₂ e	138	12	26	166
	UK Scope 1 + Scope 2 tCO ₂ e location-based	4,273	4,411	6,035	5,562
	UK Scope 1 + Scope 2 tCO ₂ e market-based	2,480	2,344	3,455	2,662
	Energy consumption (million kWh)	16	19	26	17
ntensity measures (tCO ₂ e per UK employee)				
	Scope 1	1.40	1.40	2.07	1.50
	Scope 2 Location-based	1.15	1.25	1.57	1.84
	Scope 2 Market-based	0.08	0.01	0.02	0.10
	Scope 1 + Scope 2 Location-based	2.55	2.64	3.64	3.34
	Scope 1 + Scope 2 Market-based	1.48	1.41	2.08	1.60

- (*) No data
- Scope 1, 2 and Scope 3 categories 1, 2, 3 and 13 have all been verified to 'Reasonable Assurance'
- Scope 3 Categories 4, 5, 6, 7, 8, 9, 11 and 12 have been verified to 'Limited Assurance'

Responsible business continued

Greenhouse gas emissions continued

Greenhouse gas emissions continued

Carbon accounting methodology and notes

- The operational control test is applied to determine if an emission is within Scope 1 or Scope 2
- The inventory has been compiled according to the GHG Protocol and internal procedures with
 the exception that individual gases are not reported. Our GHG emissions for FY 2023/24 have
 been verified by LRQA in accordance with ISO 14064–3:2019, 'Specification with guidance for
 validation and verification of greenhouse-gas assertions'
- The base year is FY 2019/20, as this is the first year where Scope 1 and Scope 2 data was verified. The Scope 3 base year is FY 2021/22. Some data includes estimates, which may be updated at a later time when more accurate data are available
- Our enhanced quality assurance processes for data have identified a number of data improvements which have resulted in updated estimates the most significant of this was under-reporting of gas use at our Shoreham Technical Centre caused by a malfunctioning meter and this has resulted in a 52% increase in Scope 1 emissions, but is less than a 1% increase in the Group's total emissions for FY 2023/24 (market-based GHG protocol basis). The related totals and intensity metrics have been restated for FY 2021/22 and FY 2022/23, but these have not been verified by LRQA
- Large improvements have been made to our emissions calculation methodology during the FY 2023/24 reporting cycle, including:
- Employee commuting: the return rate increased to 82% from 73% for site-based employees
- Re-evaluation of the vehicle mileage used in the lifetime of the engines we produce. This was
 based on a sample of over 2,800 vehicles in the US and UK. As a result, the average mileage
 has reduced by 45%. We have restated all previous years based on this, which reduces the
 Group's whole carbon emissions by 2.5% and 13.5% on a market-based GHG protocol basis
 and market-based SBTi basis respectively and the same has not been verified by LRQA
- Change to the estimating method for waste in our office-only sites where we moved to
 occupancy from capacity, as several buildings are under utilised this has resulted in a 68%
 reduction in ongoing waste emissions from FY 2022/23 to FY 2023/24, and a di minimis
 change to Group emissions
- In FY 2023/24 a greater proportion of business travel was calculated on an activity basis rather than spend basis
- Emission factors used for fuels, transmission and distribution and electricity are based on the
 most appropriate open-source data by location. For example, BEIS/Defra conversion factors
 are used for the UK, US EPA for the US and the most recent confirmed IEA factors for the
 majority of other locations. Electricity emissions factors used for market-based calculations
 where renewable electricity is procured are 0kgCO₂e/kWh. Location-based factors are
 applied elsewhere

- Scope 3 emissions factors for Categories 1, 2, 4, 5, 8 and 9 are based upon finance data using
 Defra for UK and EU-based entities, and Quantis for other entities. Scope 3, Category 7 is based
 on an annual employee commuting survey; Defra and US EPA emission factors are used for
 this. Category 11 is based on published WLTP emissions for each engine variant, and estimated
 vehicle use over 10 years. Category 12 emissions are estimated based on volumes of engines,
 transmissions and ABS kits sold. End of life emissions are estimated on material type and
 weight using Defra and Ecoinvent emission factors
- Our waste reporting shows an exceptional item in FY 2023/24, where there was significant demolition of old and unfit buildings at the Shoreham Technical Centre
- Most of the air, rail and hotel emissions are calculated by FCM using bespoke factors that
 take airline and aircraft type. This methodology follows those outlined by Thrust Carbon. The
 remaining elements of Category 6 are calculated based on cost using the Defra and Quantis
 factors as above
- Other Scope 1 emissions include refrigerants used to recharge cooling and air conditioning plants, fire extinguishants such as FM200 and sulphur hexafluoride (SF_e) associated with switchgear. These vary from year to year depending on the number and type of fire events and maintenance activities
- SECR: Our UK operations are our biggest consumer of electricity, which is our only UK Scope 2
 emission source, where we directly procure electricity from renewable sources for our largest
 sites
- We have no Scope 3 emissions in Categories 10 (processing of sold product), 14 (franchises) or 15 (investments). Category 8 emissions (upstream leased assets) are included within our Category 1 reporting if applicable
- Our triggers for base year recalculation would be an acquisition or disposal which changed headcount by +/- 20%; this did not occur in the current or previous year. The combined effect of the acquisitions was below the threshold
- Revenue-based intensity metrics rely on the financially audited information and the KPMG audit opinion

Responsible business continued

Task Force on Climate-related Financial Disclosures

Background and approach

Ricardo operates a three-year cycle for major TCFD reviews and annual minor updates in the interim. The prior full cycle update was in 2023. The current review and update were used to capture pertinent changes such as legislation, guidance and the latest climate-related disclosure standards (IFRS S2), in addition to changes to Ricardo's global footprint, products, supply chain or specific geopolitical issues that have emerged that would drive sourcing, transportation or manufacturing locations creating the need to take on board major revisions to strategy, risk or production location. The corporate Group Risk Register was updated and subsequently the Executive Committee validated and signed off on the update.

For the board and the Audit Committee, inputs from our in-house experts and an update to the prior horizon scanning were used. This allowed adjustments and amendments in ratings to be derived. In addition, our materiality assessment process was updated to quantify the risks and opportunities that climate change presents to Ricardo in terms of financial magnitude and likelihood.

TCFD compliance summary

In accordance with the requirements of LR 9.8.67R and the Companies Act 2006, as amended by the Companies (Strategic Report) (Climate-related Financial Disclosure) Regulation 2022, Ricardo's climate-related disclosures are consistent with all the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

Topic	Disclosure	Annual Report reference	FY 2023/24 updates	Planned updates for FY 2024/25
Governance	 a) Describe the board's oversight of climate-related risks and opportunities 	See page 65 and page 59	Formally held two RBC meetings, with two further planned after publishing this Annual Report. Both meetings contained	Hold three RBC meetings, 11 Executive Committee meetings and >20 ESG/GHG Transformation
	b) Describe management's role in assessing and	Page 65	GHG and climate-related topics related to risk, location,	Workstream meetings in FY 2024/25
	managing climate-related risks and opportunities		products and setting KPIs for GHG-related incentives for management	GHG and climate change to feature as an agenda item in each ESG Forum and RBC meeting
Strategy	 a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term 	Pages 66-68	relevance to Ricardo in 2024. Integrated and aligned the TCFD risks and materiality thresholds with the Group Risk Register and reviewed holistically the climate-related risks with the RBC, the Audit Committee and the Executive Committee	Plan FY 2024/25 minor update
	 b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning 	Pages 69-72		Plan FY 2024/25 minor update
	c) Describe the resilience of the organisation's Page 73	 Conducted financial quantification of climate-related risks and opportunities impact on Ricardo's operating profit 	Formalise BIA assessments and embed the	
	strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	, and the second	 Conducted formal reviews of the 60 global Ricardo locations, identifying and prioritising the four properties with the highest risk of Business Impact Analysis (BIA) due to climate-related disruption such as floods, wildfire, hurricane, rain or other acute event. Responses will be included in the FY 2025/26 Business Plan 	outcomes into the planning for business continuity

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

TCFD compliance summary continued

Topic	Disclosure	Annual Report reference	FY 2023/24 updates	Planned updates for FY 2024/25
Risk management	a) Describe the organisation's processes for identifying and assessing climate-related risks	Page 74	Reassessed the materiality of climate-related risks using the principal risk register thresholds	Plan FY 2024/25 minor update
	b) Describe the organisation's processes for managing climate-related risks	Page 74	Identified additional business resiliency measure to adapt to the identified climate-related risks	Continue to implement mitigation controls to manage risks as needed
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management	Page 74	Considered the materiality of climate-related risks within the context of the principal risk register and the designated risk of climate change	Plan FY 2024/25 minor update
Metrics and targets	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Page 74	Refined Scope 1 and 2 measurement methodology which highlighted irregular operating GHG measurement equipment, allowing opportunity for restatement	Restate Scope 3 emissions in light of improved data. Develop a plan for re-submission of SBTi 2030 short-term targets and for 2050 long-term
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 emissions, and the related risks.	Page 74	Reviewed Scope 3 measurement approaches highlighting opportunities for greater accuracy of measurement and a real	targets reflecting the categories measured and the precision of the measurements (page 49)
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Page 74	reduction of gross CO ₂ emissions	

Governance

Board's oversight of climate-related risks and opportunities

The Ricardo plc board has ultimate responsibility for risk management including risks and opportunities related to climate change. The board is also responsible for reviewing and directing the strategic approach on products, capital allocation and decisions related to investment. Support and advice to the board is provided by the ESG Forum, the RBC and the Audit Committee. The ESG Forum is responsible for ensuring the Company's approach to climate-related risks and opportunities is appropriate, fit for purpose, and that metrics and targets are in place and reported annually. The ESG Forum oversees measurement of and progress against these targets via a monthly report to the Executive Committee and twice per year through the RBC. Progress against KPIs for the compensation-linked GHG reductions are part of the reviews, together with a feed into the Remuneration Committee.

Risk management responsibilities are conducted through the Audit Committee who review the principal risks twice a year formally and on an ongoing basis. All department and business unit risks are assessed as part of this half-year process (see page 74 for fuller description). The ESG Forum supports the risk management process by reviewing and providing detailed updates of specific aspects of the risk portfolio. The membership of both the ESG Forum and Audit Committee are Executive Committee and Senior Leadership Team members.

Management's role in assessing and managing climate-related risks and opportunities

As set out on page 75, each business unit, and each of the enabling functions (HR, finance etc.) maintains its own risk register. The unit/function lead is responsible for ensuring this is done in a timely and comprehensive manner. Climate-related risks and opportunities are considered, and the Group Risk Register reflects those risks and opportunities most material to Ricardo.

Each business area develops a strategy, and from this strategy the budget is set to run projects to mitigate climate-related risks and grasp opportunities occurring over the short term (up to five years). These are reviewed and blended with the core enabling functions' budgets and requirements (Facility Operations, QSHE, HR) and used to prepare a comprehensive five-year plan. Longer-term risks and opportunities such as shifting weather patterns, and large, structural shifts in the markets in which Ricardo operates – particularly regarding fossil fuel use and the emergence of new technologies – are considered by the RBC as part of the annual TCFD refresh process. Any substantial changes in these risks and opportunities which might impact the current five-year plan are escalated to the board.

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

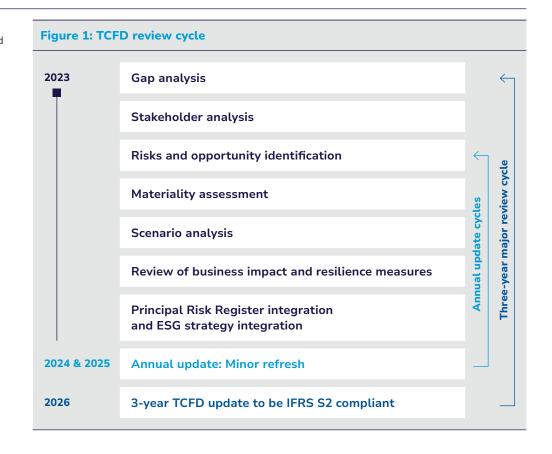
Strategy

Figure 1 (right) outlines the process undertaken in 2023 and the updates made in FY 2023/24 and the planned updates for FY 2024/25, when risks and opportunities will be reviewed again as part of our annual process. Ricardo aims to achieve full compliance with IFRS S2 as part of our major three-year updates in FY 2025/26

Identification of climate-related risks and opportunities

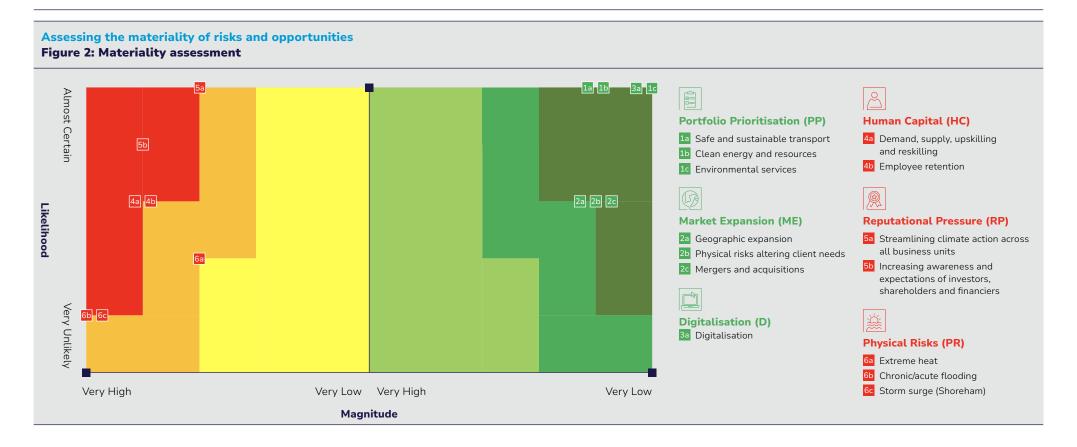
In 2023, the physical (acute and chronic) and transitional (regulatory, technological, market, legal and reputational) risks and opportunities attributed to climate change were assessed. Ricardo identified the six most material risk and opportunity issue groups as detailed in Figure 2 on page 67. Opportunities were assessed relating to Ricardo's capability to grow environmental consulting, service ever broader climate needs, maintain integrity of analysis and results, and develop new tools in a timely fashion.

In 2024, as part of the annual review, the risks and opportunities were reviewed, and it was concluded that there were no significant changes to the risks and opportunities identified in 2023. We updated our financial materiality assessment, in line with our Group risk management process, to reassess the individual risks and opportunities. The materiality of the individual risks and opportunities were assessed based on the magnitude (the financial significance or business impact level of a particular issue, risk or opportunity on Ricardo) from a scale of very low to very high and the likelihood of the risk/opportunity occurring from a scale of very unlikely to almost certain. The materiality assessment was conducted using the five-year timeline in line with the Group's strategic view and viability statement. Additionally, as part of this year's annual update we conducted financial quantification of the risk and opportunity issue groups and its impact on Ricardo's operating profit in the medium term (2030) and long term (2050) using a worst-case scenario RCP 8.5, as detailed on page 68.



Responsible business continued

Task Force on Climate-related Financial Disclosures continued



Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Identification of climate-related risks and opportunities continued

The definitions of the issue groups, the associated individual risks and opportunities and the potential impact on Ricardo's operating profit term are detailed below:

Table 1: Climate-related risks and opportunities

Climate/risk issue group potential impact on Ricardo's operating profit under RCP 8.5 (world of extreme climate change)

(low: 0-3%, medium: 3-6%, high: >6%)

			(low: 0-3%, medium: 3-6%, high: >6%)	
Issue groups	Definition	Risks or opportunities	2030	2050
Physical risks to Ricardo's operations and assets	Physical climatic changes reducing function of Ricardo facilities, locations, supply chain and human capital. Physical risks identified include: flooding (related to	Extreme heat (Risk) — Australia, southern Europe, Middle East.	Low	Medium
	either storm surges or sea level rise), extreme heat and cold, storms, drought. Ricardo has the ambition to maximise growth in the UK and EU market and to grow in the Middle East and South Africa. Assessing the physical risks in these geographies will be key to Ricardo's success.	Chronic/acute flooding (Risk) — Coastal locations — California, Shanghai, Shoreham, Prague (river).	Low	Low
	33 .p,	Storm surge (Risk) – Shoreham, Shanghai.	Low	Low
Human capital	Ricardo's ability to retain, reskill and recruit the human capital required to meet opportunity growth targets.	Demand, supply, upskilling and reskilling (Risk) – Worldwide.	Low	Medium
		Employee retention (Risk) – USA, Europe, Middle East.	Low	Low
Reputational pressures from stakeholders	Increasing pressure to act on climate change, leading to potential reputational risks.	Streamlining climate action across all business units (Risk) – Worldwide.	Medium	High
		Increasing awareness and expectations of investors, shareholders and financiers (Risk) – UK dominant but worldwide from fund managers.	Medium	High
Portfolio prioritisation	Growth in Ricardo's and energy transition offering e.g. safe and sustainable transport, clean energy, environmental services, and clean energy and resources.	Clean energy and resources (Opportunity) – Europe, UK, USA.	High	High
		Environmental services offering (Opportunity) – Middle East, Africa, USA, Europe.	High	High
		Safe and sustainable transport (Opportunity) – Developed nations, worldwide.	High	High
Market expansion	Ricardo's growth into new geographical and industrial markets, supported by M&As and partnerships.	Geographic expansion (Opportunity) – USA, Australia, Middle East.	Medium	High
		Physical risks altering client needs (Opportunity) – USA, Australia, Middle East, Europe.	High	High
		Mergers and acquisitions (Opportunity) – USA, Middle East, Australia.	Medium	High
Digitalisation	Ricardo's digital solutions can support with the energy and environmental transition.	Digitalisation (Opportunity) – Worldwide.	Medium	High

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

Supported by our in-house climate risk expertise in CE&ES, Ricardo undertook a climate scenario analysis (pages 70-72) to examine business impacts over a range of time horizons to understand the materiality of the risks and opportunities identified. To allow for an assessment of the impact of the most material issue groups over a range of potential futures, Ricardo chose a best case (well below 2°C) scenario for transition and physical risks and opportunities (IEA Net Zero Emissions by 2050 and IPCC RCP 2.6), and a worst case/business-as-usual scenario (>4°C and 2.6°C) for each respectively (IEA Stated Policies Scenario and IPCC RCP 8.5). These scenarios were also selected because they are scientifically recognised and robust and are widely used for TCFD reporting and are regularly updated. The locations in the table 1 on page 68 analysis and the associated business units were considered during our analysis.

During our analysis Ricardo considered three time frames: 2030, 2050 and out to 2100 as detailed in the table below. These time frames are linked to Ricardo's strategic business planning – i.e. five-years for the short time frame to align with Ricardo's five-year business cycle.

Table 2: Time frames considered

Time frame	Short	Medium	Long
	2024-2030	2030-2050	2050+

Climate change impact on assets and operations

With the extensive global footprint of Ricardo, we need to be aware of the impacts of climate change, both at a macro level causing shifts in supply chain robustness, employee location of work and opportunity location, including emerging geographies with market opportunities, and also at local level for extreme climatic events (flood, hurricane, heatwave, wildfires).

Managing the impacts of climate-related risks to physical assets

To ensure we are a resilient organisation fit for the future, several aspects are considered when locating or expanding business to manage our climate-related risks and opportunities. As most leases are of a three-to-ten-year horizon, this span is considered when siting premises or investing in assets in a location

Long-term asset investment and resilience planning

For more permanent assets – such as dedicated test facilities or installed machining/assembly capability – the three-to-ten-year time horizon is supplemented by a review of the extended time horizon aligned with typical amortisation periods of buildings and test equipment. This process guides our assessment of emerging risks and opportunities together with identifying the appropriate actions to strengthen business resilience.

Transitioning products and services towards zero carbon

Our strategy of fossil-free fuels used for transport at point of use is well established. This has been reflected in the phase down of facilities related to traditional fossil fuels through age-out, assigning capital to zero carbon facilities and products. The established sector (fossil fuel) facilities have a planned age-out and retirement to minimise these risks. Ricardo's main risks are now concentrated in managing the expansion and growth, rather than acute and transitional impacts on the historical business practices and product range. All recent test facility capital investments have been focused on zero carbon transport – such as the electric drive research facility and hydrogen test capability for fuel cells and internal combustion engines. The transition that has already happened is demonstrated in the revenue attributed to climate change, environmental and safety revenue (page 47). Portfolio prioritisation and physical risks to operations and assets: ICE test-bed infrastructure at the Shoreham Technical Centre only.

People and market expansion in environmental consulting

With regard to market expansion and human capital growth in environmental consulting, headcount is planned to continue, reflecting interest and capabilities in these areas. Growth will be boosted by expanded presence in Australia, the US and Europe for low carbon mass transit. Continued environmental acquisitions of premium consulting practices. As a consultancy, most facilities are leased (apart from two sites) and the minimal capital investment needed allows Ricardo to remain highly responsive in terms of product offerings and locations served.

The table on the following page details the issue groups, the scenario impact rating (high, medium and low) over the time horizons identified above and the potential risk and opportunity mitigation/adaption and resiliency measures.

This table on page 70 presents the transition risks and opportunities under two transition scenarios, 'Net Zero by 2050 (NZE)' and 'Stated Policies (STEPS)', the potential impact to our business, and our corresponding current and future business resiliency measures. The business impact has been scored high, medium, and low for each risk and opportunity (refer to the table key).



Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning continued

Table 3: Business impact of climate-related risks and opportunities on Ricardo rating

still occurring, particularly in emerging markets and economies.

Portfolio prioritisation (Opportunity)

NZE			Impact on Ricardo	Business resiliency measures
Short	Medium	Long	Short term: Strategy implementation and policy development support for both governments and private sector. Some implementation solutions for easy-to-mitigate sectors.	 Refocus EET strategy: Implement and evolve long-term resiliency measures for the next 10-15 years
6	6	6	Medium term: Opportunity ramps up as heavy industries are expected to decarbonise by 2050, and the desire for ongoing implementation support is required.	 Develop skilled workforce: Train employees to innovate and reduce costs in low/zero carbon technologies
			Long term: Opportunities tail off as targets are met. Lighter-touch ongoing strategy support, but focus continues with implementation support.	Engage with industry groups: Actively participate in sustainability standards bodies to stay competitive
STEPS			Short term: Same as current day trends in strategy implementation and policy development support for both governments and private sector.	 Track competitors: Monitor competitors and allocate capital strategically to maintain skills and recruitment
Short	Medium Lo	Long	g ''	
6	6	6	Medium term: Increase in opportunities compared to short term but significantly less than under NZE.	 Plan for post-2050: Explore future offerings based on hydrogen adoption, BEV uptake and infrastructure development
			Long term: Opportunities continue to increase due to delayed climate action. This is done under extreme time pressure and increased costs to industry, increasing financial risks of companies, particularly SMEs.	 Adapt to geopolitical changes: Prepare for challenges in resource access by diversifying supply chains and technologies

Market expansion (Opportunity)

market expansion (Opportunity)						
NZE			Impact on Ricardo	Business resiliency measures		
Short 6	Medium	Long	Short term: Significant opportunities for Ricardo to support decarbonisation at a global scale in multiple emerging sectors. This will first occur in the advanced economies in which Ricardo sits.	Physical risk responses – majority of growth initiatives can be remote, reducing the vulnerability to risk. Key is continued investment in digital tool set development		
	6	6	Medium term: The size of this opportunity will depend on Ricardo's service offering of implementation. There may be an opportunity to also support emerging economies with technology feasibility studies.	Hire locally for at-risk countries (physical risk), establish connections, ensure network resiliency to allow transferability of tasks		
				Financial and insurance sector access – recruitment and value propositions		
			Long term: Post 2050, the size of the opportunity will reduce in scale as climate targets are met. Opportunities will be around the maintenance and efficiency of systems and technologies implemented.	 Ricardo should track market and service growth rates and compare its own figures against this. Ricardo must actively engage with key industry groups and sustainability standards bodies to drive legislative standards and promote adoption rates for technologies 		
STEPS Short term: Less opportunities for Ricardo to support decarbonisation at a global scale. Opportunity				It is too premature to begin assessing in detail what Ricardo's offering in this area should look like		
Short	Medium	Long	will likely sit in portfolio prioritisation. Medium term: Opportunities for Ricardo to support emerging markets (geographically and industry) will likely increase as 2050 approaches and delayed climate action kicks in. This will likely be led by the private sector driven by consumers and investors.	beyond 2050. This will be very scenario dependent. Ricardo should continue monitoring global progress against climate targets to understand which direction of travel industry and government will take – depending upon fossil versus renewable energy costs and infrastructure development for zero carbon energy		
4	6	6				
			Long term: The opportunity for Ricardo will likely continue increasing after 2050 as decarbonisation is			

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning continued

Digitalisation (Opportunity)

NZE			Impact on Ricardo	Business resiliency measures
Short	Medium	Long	There is little direct evidence within the scenarios selected on the attribution of emission reductions to digital solutions. However, it could be assumed that global trends and the shifts to automated	Digital knowledge transfer, training and experiential growth for staff. Increased M&A activity with consideration for how acquisitions will be accretive in the digital sector
6	6	6	services will drive efficiency gains and will continue to contribute towards climate-related solutions. Ricardo already integrates some digital solutions into its current products and services. This can be expected to increase in the future to support the Company's climate-related services and is already	 Integrate the IT systems of the Group, meeting security and isolation requirements but building resiliency and availability
STEPS			occurring to some extent with digital prototyping in Automotive and Industrial and automation in Rail.	 Ricardo will continue to consider how digitalisation can be integrated into the solutions it provides, as it is demonstrated in Ricardo's strategy. Partnerships will support this and fill the gap in the Company's current digital capabilities
Short	Medium	Long		Tracking the revenue and efficiencies from digital solutions
6	6	6		Increased support for digital tools, investment in tools
0	3	J		Risk around being able to act fast enough – competitor – loss of potential business

Human capital (Risk)

NZE			Impact on Ricardo	Business resiliency measures
Short	Medium	Long	The opportunities for Ricardo under this scenario are high in scale and level of impact. Therefore,	Ensure Ricardo's compensations are competitive with other rivals in the sector
_3	_2	_1	the growth rates and development necessary to take advantage of these are large. Ricardo will be operating in a competing market and therefore scaling for growth will be difficult.	Continued investment in training, recruitment and providing growth opportunities
STEPS			Ricardo will still face challenges in scaling for growth, however the scale of the associated	 Increase investment in the career development and retention of junior employees. The market is currently under-saturated in the skills and expertise required for the climate transition
Short	Medium	Long	opportunities is lower and therefore this challenge will be less than under the NZE. This will become a more 'business as usual' challenge.	Ensure HR and team leaders are consistently engaging with employees on career and life satisfaction. Policies such as flexible working, volunteering, personal development and socials all
-3	-1	-1		encourage employee wellbeing
				Better IT infrastructure, resiliency and security-conscious global availability

Reputational pressure coming from stakeholder (Risk)

NZE			Impact on Ricardo	Business resiliency measures
Short	Medium	Long	Political and regulatory pressures will increase in the short to medium term as decarbonisation	Competitor awareness – to ensure Ricardo remains appropriately positioned
-3	-2	-2	progress must be made.	Carry out current growth strategy, prioritising the energy and environment transition, implement corporate strategy with majority of growth and capital allocation in the appropriate segments
STEPS	5		Pressures are likely to still increase from current day and so the impact may not be dissimilar to	Ricardo should continue impairing elements of declining business units to reduce the risk, and
Short	Medium	Long	under the NZE. Over the past few years, Ricardo has made significant progress around prioritising	remain vigilant in the transition to zero carbon fuels
-3	-2	-2	its portfolio to be focused on the future around the energy and environment transition. This consists of having targets to increase the proportion of revenue in this area, compared to the established mobility side of the business which is associated with more reputational risk.	 Ricardo should continue to prioritise the performance of the energy and environment transition, in both the quality of work delivered to clients also in the quality of reporting and climate action of Ricardo itself

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning continued

This table presents the physical risks under two climate scenarios, IPCC SSP1-RCP2.6 and IPCC SSP5-RCP8.5, the potential impact to our business, and our current and future business resiliency measures. The business impact has been scored high, medium and low for each risk and opportunity (refer to table key) on page 69.

Physical risks (Risk)

RCP 2.	6		Impact on Ricardo	Business resiliency measures
Short	Medium	Long	Global temperature increases but is limited to below 2°C. Physical impacts of climate change increase from current day but catastrophic impact is narrowly avoided.	Becoming a larger and more global player will enable more support for employees with adaptation (financial strength enabling investment)
-1 RCP 8.	-1 5	-1	Global temperature rises to 5°C, leading to catastrophic impacts at a global scale. Some regions will	Careful consideration of the location of new technical centres and potential relocation of existing technical centres. Conscious assessment of climate risk versus capital allocation
Short	Medium	Long	become uninhabitable, and others will experience positive impacts e.g. growing season extensions. The overall impact is very negative, and society falls into a disruptive state.	 Continuous encouragement of flexible working where possible and exploration of new ways of working such as work patterns that avoid the hottest period of the year in Ricardo's most vulnerable locations
				Investment in building facilities such as efficient air conditioning and flood defence mechanisms where necessary
				HR policies, business continuity plan, flood analysis at Shoreham to be conducted
				Care when bidding for projects in extreme climate zones (Australia, Africa, Middle East and some regions of Europe and the USA) – extreme caution and consideration for impacts of heat on human health of employees

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Strategy continued

Resilience of the strategy, considering different climate-related scenarios, including a 2°C or lower scenario

We understand the risks, opportunities and appropriate responses. For physical risk, Ricardo demonstrates strong adaptive capabilities with minimal fixed investment, a mobile workforce, and a flexible global footprint. Business Impact Analysis showed only two sites would be materially impacted by acute weather events, focusing on quantifying probabilities and adapting. The remaining sites use hybrid/remote work and cloud-based processes to minimise disruption from climate issues.

Climate Transition Plan developments

Our plan to develop a Climate Transition Plan in line with the TPT (Transition Plan Taskforce) as detailed below. Ricardo has operated at the forefront of emissions reduction for 40 years. This vantage point has allowed transition starting close to 20 years ago with investment in zero-carbon skills, products and facilities. As part of the journey, Ricardo acquired a major environmental consultancy, allowing the growth in policy, strategy, technology, economic analysis and product development to both address climate change and to assist clients in adaption.

Climate Transition Plan

By 2026, Ricardo intends to pull these foundation elements together and publish a Climate Transition Plan in line with the TPT as part of the planned Sustainability Report. By expanding the space and content outside of the constraints of an annual report, we will demonstrate a robust Climate Transition Plan further integrating environmental sustainability into the core strategy of Ricardo.

Ricardo has several elements for a Climate Transition Plan developed and in place in line with the TPT. These include:

Figure 3: Approach to developing a Climate Transition Plan

Ambition

1. Foundations

Throughout its 100+ year history, Ricardo has focused on improving efficiency and minimising waste. The Company has pioneered technologies to reduce emissions and achieved 90% adoption of renewable energy for Scope 2, significantly cutting emissions from fossil fuel testing for Scope 1 and 2 to just 3-4% of total emissions. Ricardo has set GHG emissions targets through to 2030, with a 2025 deadline to establish 2050 long-term goals, aligned with short-term SBTi objectives. As part of the TCFD update and three-year review cycle, Ricardo collaborates with CE&ES for regulatory reviews to ensure compliance with current and upcoming regulations.

Action

2. Implementation strategy

Capital allocation decisions at Ricardo are driven in part by their GHG impact. To support this priority, Ricardo funds a dedicated Sustainability enabling function, covering staffing and operational costs. Additionally, all business units and related enabling functions contribute personnel to advance our mission of GHG reduction, efficiency improvement and waste minimisation. We have also developed advanced modelling tools to estimate the GHG impact of R&D activities and client programme onboarding, ensuring that sustainability is a key consideration in every project we undertake.

3. Engagement strategy

RBC working groups and the SLT/ all-hands meetings are used to engage and communicate activities related to GHG and waste reduction. The Annual Report details activities together with sharing data with reporting frameworks and rating agencies, clients, prospective employees, investors and value chain, and communities.

Accountability

4. Metrics and targets

GHG emissions are accurately measured and significantly enhanced since 2019 – our first year of collecting data. The data set continues to improve, and we are adding more Scope 3 categories to the reasonable assurance level. These results are included in the attestation table (pages 61-62) together with risks and opportunities shown in alignment with IFRS S2 – climate standard.

5. Governance

Ricardo exhibits good control on strategy and decision making with climate impact core to decisions on product development, capital allocation and growth initiatives. Governance structure from Chair and NEDs through the Executive Committee and then the SLT and working groups. Bi-directional communications are integral to this process.

Responsible business continued

Task Force on Climate-related Financial Disclosures continued

Risk management

Identification and assessment of climate-related risks

This year, Ricardo reassessed the materiality of climate-related risks as detailed on page 67. We integrate climate change risks into our Group risk management, annual budgeting and monthly ESG Forum meetings. In 2023, we conducted a detailed review of climate-related risks, refreshed in 2024 with insights from our 2023 TCFD assessment. A panel of climate specialists, ESG leaders and the Executive Committee provided comprehensive input. The summary is detailed on page 77. In July 2024, we formally re-rated our principal risks, including climate-related risks.

Managing climate-related risks

As part of this year's annual TCFD update, Ricardo identified additional business resiliency measures to adapt to the identified climate-related risks. Business units and functions evaluated the impact of climate issues on their strategy and operations. Mitigating controls will be implemented as needed. Risks are reviewed continuously, with each climate-related risk having a designated owner and leadership oversight.

Processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management

The process for managing climate-related risks is integrated into our Group risk management process. One of the designated principal risks is climate change. This is detailed on page 75 of this report and is managed by the board, the ESG Forum, business units and enabling functions. Risk-taking and management occurs through the Audit Committee. Success in achievements is managed through the ESG Forum and is fed back into the RBC for main board review.

Metrics and targets

Metrics used to assess climate-related risks and opportunities

GHG and ESG metrics reporting

Ricardo records GHG data and other ESG metrics in the FigBytes aggregation system. This includes fuel consumption for powertrain development, water, waste, utilities and HVAC discharges. These metrics are summarised on pages 61-62 with absolute and intensity measures for the past three years.

Commitment to emissions reductions

As a values-led organisation, we are committed to reducing emissions under our control (Scopes 1 and 2) and through our operations (Scope 3).

Linking compensation to GHG emissions

In FY 2022/23, we studied various methodologies linking compensation to GHG emissions, which were implemented in FY 2023/24. Senior management now has variable compensation based on GHG reduction as part of a long-term incentive scheme (page 103).

Focus on Scope 3 emissions

Scope 1 and 2 emissions are now less than 2% of our total, and we are focused on reducing Scope 3 emissions.

GHG intensity KPI

Ricardo is committed to and has enacted a KPI related to long term incentives for senior management. Details are disclosed on page 49.

Scope 1, 2 and, if appropriate, Scope 3 greenhouse gas emissions and the related risks

Scope 1, 2 and relevant categories for Scope 3 are disclosed on pages 61-62 along with restatements and methodology notes. Scope 1, 2 and 3 (category 1, 2, 3 and 13) have been verified to 'Reasonable assurance' and Scope 3 (categories 4, 5, 6, 7, 8, 9, 11 and 12 have been verified by LRQA to 'Limited Assurance'. There are risks in the method of data collection and conversion from cost-based invoices using emissions factors and consideration is being given to changing methodology to reach true CO_2 footprint (mass and materials) more accurately for some categories of S3C1. The FigBytes data aggregation platform has enhanced efficiency of data collection and allowed all locations to be measured and assessed for anomalous or missing data.

Targets to manage climate-related risks and opportunities

Ricardo has set the following targets:

- Reduce Scope 1 and 2 emissions by 46.2% by FY 2030/31, aligned with a 1.5°C global temperature rise
- Increase renewable electricity sourcing from 74% in FY 2019/20 to 90% by FY 2025/26
- Reduce absolute Scope 3 emissions by 27.5% by FY 2030/31, aligned with well below a 2°C temperature rise

Sustainable procurement remains a core focus to ensure compliance with principles, policies and supply chain legislation. We use the Group Risk Register framework to assess and manage risks, including climate-related ones, within our risk appetite. Regular reports are provided to the Responsible Business Committee on ESG ratings, carbon emissions and capital investments. The board approved an updated risk appetite statement aligned with the new risk management framework. By FY 2025/26, all non-financial GHG and ESG metrics will be captured in FigBytes. We use comprehensive reporting dashboards for real-time progress and data tracking.

Risk management and internal control

In common with all businesses, the Group faces risks and uncertainties on an ongoing basis. Effective risk management is required to support the achievement of the Group's strategic and business objectives. Our risk management framework is aligned to ISO 31000 and includes an ongoing formal process for identifying, assessing and responding to risk.

Governance

Ricardo operates both a bottom-up and top-down approach to the identification, ownership and management of risks.

Our strategy is designed to optimise our business model and take risk, with the required controls, on an informed basis. Responsibility for this operates at all levels throughout the Group.

Governance structure The board takes overall responsibility, determining the nature and extent of the principal risks it is willing to take in achieving our strategic objectives, and overseeing the Group's risk governance structure and internal control framework. Each year, the board carries out a robust assessment of the principal risks facing the Group, including those emerging, that would threaten its business model, future performance, solvency or liquidity. This report describes Board those risks and how they are being managed or mitigated. The Executive Committee regularly reviews the Group Risk Register prior to submission **Executive** to the board and individual members own specific risks which are updated at least quarterly. Business unit and functional leadership are **Business units** responsible for the management of risk and and functions for compiling and maintaining their own risk registers. These are submitted quarterly and aggregated to form the basis of the Group Risk Register.

Risk management process

The risk management processes updated during 2023 have remained consistent through 2024, providing dynamic risk assessments to support decision-making for business unit, functional and executive management. Our risk management processes require identified risks throughout the Group to be owned by a named individual.

They must review them regularly and consider related emerging risks. Risk identification is embedded within other processes, including strategy, project management, bid approvals and other operational activities.

Risks are identified and reviewed at a business unit and functional level on a consistent basis, before being submitted through the Group's review process.

Risks are reviewed by all business areas on a quarterly basis and measured against a defined set of likelihood and impact criteria. The likely time frame within which the impact of these risks might be felt (risk velocity) is also assessed. These risks are captured and reported consistently, enabling them to be consolidated and ranked. This prioritisation of risks then feeds into our assessment of long-term viability.

The resultant Group Risk Register is subject to a detailed review and discussion by the Executive Committee which includes discussion of risks which may not have been identified through the normal channels. This is then submitted to the board for review and approval half-yearly. As part of this bi-annual process, Directors and senior leadership teams are required to confirm that they maintain effective controls to manage risk and comply with legislation, as well as with the Group's policies and procedures.

We also ensure that emergent risks are considered as part of the board's existing half-yearly reviews of risk and annual review of strategy. The Board confirms that it has undertaken a robust assessment of the Group's emerging and principal risks in FY 2023/24.

The board assesses the outputs from this process and takes comfort from the 'three lines of defence' risk assurance model. The first line represents operational management who own and manage risk on a day-to-day basis, utilising effective internal controls. Group functions and business units monitor and oversee these activities, representing governance and compliance at the second line. The third line is the independent assurance over these activities provided by internal and external audits. Rigour over the management of these risks is demonstrated through the updated Group risk assurance matrix which summarises the assurance activities taking place throughout the Group in relation to the principal risks.

Risk management and internal control continued

Internal controls

The system of internal control is designed to manage, but not to eliminate, the risk of failure to achieve business objectives and to provide reasonable, but not absolute, assurance against material misstatement or loss.

Ricardo's internal control and monitoring procedures include:

- Group-level policies, including risk management, approved by the board
- Procedure and process documents setting our controls, approved by Group functions
- Strategic plans, approved by the board and monitored through forecasting and budgeting processes
- Business unit review processes covering operational and financial performance
- Half-yearly business unit risk and control assessment sign-off confirming compliance with Group policies and procedures
- Control of key financial risks through clearly set authorisation levels and appropriate segregation
 of accounting duties
- Control of key project risks through project delivery and review systems
- Review and implementation of recommendations in reports on internal control by internal and external auditors
- A Speak Up process to ensure employee concerns are able to be raised
- Reporting on insurance policies as well as any uninsured risks

To ensure our risk process drives continuous improvement across the business, we monitor the ongoing status and progress of key action plans against each risk on a half-yearly basis. Risk is a key consideration in all strategic decisions made at board level.

The Group's internal audit function provides assurances on operating segment systems of internal control and compliance with applicable legislation and regulations. This is complemented by audits required as part of maintaining certifications to international standards for management systems. The effectiveness of these risk management and internal audit processes is reviewed annually by the Audit Committee and is set out on pages 99-101.

Financial risks faced by the Group comprise capital risk, liquidity risk, credit risk and market risk (comprising interest rate risk and foreign exchange risk). The Group's objectives, policies and strategies in respect of these risks are set out in Note 26 to the Group financial statements.

Principal risks and uncertainties

The following table details the Group's principal risks, the mitigating activities in place to address them and the risk to the Group.

It is also recognised that the Group is exposed to a number of emergent risks that are currently deemed to be less material, together with additional risks and uncertainties beyond those listed below that are at present not known to management and which may also have an adverse effect on the business.



Risk management and internal control continued

Strategic risks

Market changes

Change: \(\backslash \) Velocity: \(\backslash \) Link to strategic priorities: \(\backslash \) \(\backslash \)

Description

The Group operates in diverse markets which are politically and economically volatile. This exposes the Group to evolving legislative, geopolitical and macroeconomic pressures, as well as industry consolidation threats in a dynamic competitive landscape.

Impact

Unpredictability in the timing of the receipt of orders from clients and the utilisation of our resources to generate revenue and profit may give some volatility in our ability to forecast future performance.

Mitigation

- Diversification of the Group portfolio, so as to reduce exposure to any one specific client, territory or segment
- Rigorous performance review process which is led by the executive to monitor current and forecast performance
- Short-term contingency plans to react to sudden market downturn or changes in geopolitical risk

Climate change

Change: O Velocity: Link to strategic priorities: 2 3 4

Description

Climate change is both a series of risks and opportunities to the business, which we describe on pages 64-74. Failure to adapt to global climate change or respond to client needs driven by climate change. This includes both the legal and regulatory transition requirements as well as the acute and chronic physical impacts.

Impact

If we do not have the right services, capability and products to meet those client needs. we:

- Will be unable to meet our strategic objectives
- May have assets which are impaired due to the rate of climate change in certain markets
- May not deliver our net zero objectives

Mitigation

- Climate change in the short term (one to five years) is addressed by ongoing monitoring of and input towards evolving environmental legislation, and capital allocation process for sustainable technologies and solutions
- Long-term site footprint strategy to improve efficiency and take account of changing weather patterns
- Group-wide business continuity plans and a comprehensive insurance programme

Transformation management

Change: \(\backsquare{\backsq\quare{\backsquare{\backsquare{\backsquare{\backsquare{\backsquare{\backsquare{\back

Description

Failure to successfully, and simultaneously, deliver the significant change programmes currently in process and planned across the Group, including integration of any future acquisitions.

Impact

Decreased revenue and profit, increased costs, damage to operational performance and reputation.

Mitigation

- Dedicated project oversight of large capital projects
- Integration management teams for significant acquisitions
- Regular monitoring by the Executive Committee through operational and project reviews

Key to principal risks

Change in risk

- 1 Increase
- No change○ Decrease
- ____

Risk velocity

- High impact within one month of risk occurring

 Medium impact within one year of risk occurring
- **Low** impact after more than one year of risk occurring

- 1 Enabling meaningful and fulfilling work
- Achieving high growth in our chosen markets

- 2 Being a trusted partner to our clients
- 4 Delivering operational excellence and efficiency

Risk management and internal control continued

Operational risks

Client project delivery

Change: \(\tau \) Velocity: \(\tau \) Link to strategic priorities: \(\tau \) \(\tau \)

Description

The Group's revenue depends on successful delivery of a broad range of contract types for engineering, technical, environmental and strategic consultancy services, product supply (niche manufacturing of parts and components), together with accreditation and independent assurance services, with an increasingly complex range of projects, technologies, clients and geographies.

Impact

Failure to perform on contracts within estimated cost and delivery timescales, and to the required level of quality, could impact profitability.

Mitigation

- Risks are proactively managed by clearly defined lead qualification, bidding, contracting and project management processes
- Regular monitoring by the Executive Committee through operational and project reviews

Supply chain

Description

Failure or inability of critical suppliers to supply unique products, capabilities or services preventing the Group from satisfying clients or meeting contractual requirements.

Impact

Decreased revenue and profit, damage to operational performance and reputation

Mitigation

- Production supplier choices often undertaken with the original equipment manufacturer client so that risk assessments are shared
- Supplier quality assurance needs are agreed with clients and operate within our processes and ISO 9001 certifications
- Production supply chain monitoring and expediting capability and capacity
- Our sustainable procurement processes increase supply chain transparency and our Supplier Code of Conduct states our supplier expectations

Business interruption

Change: O Velocity: Link to strategic priorities: 2 4

Description

A catastrophic event such as natural disasters; civil unrest, military conflict or terrorist activity; or a pandemic (including further impacts from COVID-19) could lead to infrastructure disruption and/or property damage which prevents the Group from fulfilling its contractual obligations.

Impac

Decreased revenue and profit, damage to operational performance and reputation.

Mitigation

- Group-wide business continuity and crisis management plans, subject to regular testing and updated for lessons learned
- Comprehensive insurance programme, renewed annually and subject to property risk assessment visits

Key to principal risks

Change in risk

↑ Increase

No change

Decrease

Risk velocity

High – impact within one month of risk occurring

Medium – impact within one year of risk occurring

Low – impact after more than one year of risk occurring

- 1 Enabling meaningful and fulfilling work
- Achieving high growth in our chosen markets
- 5 Optimising cash to invest for growth

- 2 Being a trusted partner to our clients
- 4 Delivering operational excellence and efficiency

Risk management and internal control continued

Operational risks continued

People

Description

Change: O

lack of training and industrial action.

Velocity: Link to strategic priorities: 2 3

Impact

Decreased revenue and profit, damage to operational performance.

Failure to attract, retain or mobilise people due to factors including

availability of talent, inadequate compensation, workforce demographics,

Mitigation

- We aim to ensure that we actively develop and manage staff in an environment where everybody belongs
- We are sharing best practice in talent acquisition across business units so we can maximise recruitment and retention efficiency
- Our IT infrastructure enables us to share work and mitigates transport issues
- Our people as stakeholders are discussed further on pages 42-43

Health, safety & wellbeing

Change: O Velocity: Link to strategic priorities: 2 4

Description

Failure to comply with local health and safety requirements impacting the physical and mental health of our employees, stakeholders or the public.

Impact

Health and safety compliance failures by the Group, or its representatives, could result in reputational damage, substantial fines and potential market exclusion.

Mitigation

- The Group has defined health and safety policies and operational procedures which are supplemented by regular training
- Incident reporting with near miss and lessons learned processes
- Comprehensive insurance programme, renewed annually
- Regular health and safety audits supporting ISO 45001 Health and Safety Management certification

Information security

Velocity: Link to strategic priorities: 3 5 Change: O

Description

A breach of IT security due to increasingly more sophisticated cyber attacks resulting in proprietary or other sensitive information being lost, made inaccessible, corrupted or accessed by unauthorised users. This includes the loss of critical systems due to poorly executed implementation or change control; poor maintenance, business continuity or back-up procedures; and the failure of third-party service providers to deliver to their service level agreements.

Impact

The loss, theft or inability to access information assets could result in reputational damage, loss of competitive advantage, business disruption and financial penalties.

Mitigation

- Implemented an Information Security Management System certified to ISO 27001
- Adoption of a layered defence in-depth approach, with dedicated information security resources who continuously monitor controls and adapt them in response to emerging threats
- · Penetration tests are conducted regularly by both internal and external resources to augment our control regime
- Information security risk register maintained and reviewed by the CIO
- · The performance, progress and continued maturing of our information security controls are monitored bi-annually by the Audit Committee

Key to principal risks

Change in risk

↑ Increase

O No change

Decrease

Risk velocity

High – impact within one month of risk occurring

Medium – impact within one year of risk occurring

Low – impact after more than one year of risk occurring

- 1 Enabling meaningful and fulfilling work
- 3 Achieving high growth in our chosen markets
- 5 Optimising cash to invest for growth

- 2 Being a trusted partner to our clients
- 4 Delivering operational excellence and efficiency

Risk management and internal control continued

Operational risks continued

Investment in technology

Change: O

Velocity: Link to strategic priorities: 2 4

Description

Investment in technologies, products or services that prove unsuccessful or unsuitable for our chosen markets, or failure to invest in areas that are key for us and our clients.

Impact

Loss of competitive marketplace advantage and reduction in revenue. If there are disruptions in the implementation of new regulations, which in turn accelerate or delay client programmes dependent on new technology, the time taken to deliver returns from our research and development (R&D) programmes may also increase.

Mitigation

- Our R&D programmes are developed through a mixture of client consultation, long-range forecasting, thought leadership and deep technology roadmap development. We are increasingly leveraging digital and data science technologies as enablers for
- Capitalised development costs are subject to regular review to assess project progress, returns and any risk of impairment
- Capital allocation process to ensure robust executive review of resource prioritisation

Corporate risks

Laws and regulations

Change: O

Velocity: Link to strategic priorities: 2 4

Description

Failure to comply with laws or regulations leading to reputational damage, substantial fines and potential market exclusion. The Company operates in many jurisdictions and as a consequence is subject to complex and wide-ranging laws and regulations including those concerning export controls, data privacy, anti-trust, anti-bribery and corruption, and taxation.

Impact

Increased compliance costs, fines, penalties or reputational damage, or trading restrictions which could have a materially adverse impact on the

Mitigation

- To mitigate these risks, the Group has a number of defined policies and operating procedures in place and takes professional advice, where considered necessary, to ensure that the Group acts upon current and anticipated changes in legislation
- Our Code of Conduct ensures that employees and others act with the highest ethical standards and within local legal and regulatory requirements
- The Group's rolling assurance programme includes the review of compliance with applicable legislation and regulations and awareness of key Group policies and procedures

Financial risks

Financing

Change: O

Velocity: Link to strategic priorities: 3 5

Description

The Group is in a net debt position, having drawn on available facilities primarily to fund acquisitions and for general corporate purposes.

Impact

Inability to access financing on normal commercial terms.

Mitigation

- This risk is mitigated by robust cash and working capital management, regular process improvement initiatives, monitoring actual cash flows to budgets and forecasts, maintaining good relationships with the Group's bankers and ensuring that sufficient borrowing facilities are in place at all times to support the Group's funding requirements to deliver on its growth strategy, with additional headroom available to meet possible downside scenarios
- Further details of the Group's borrowing facilities and other financial risks can be found in Note 23 and Note 26 to the Group financial statements, respectively

Key to principal risks

Change in risk

- ↑ Increase
- O No change □ Decrease
- Risk velocity
- **High** impact within one month of risk occurring
- Medium impact within one year of risk occurring
- **Low** impact after more than one year of risk occurring

- 1 Enabling meaningful and fulfilling work
- 3 Achieving high growth in our chosen markets
- 5 Optimising cash to invest for growth

- 2 Being a trusted partner to our clients
- 4 Delivering operational excellence and efficiency

Viability statement

The Directors have assessed the prospects of the Group in accordance with provision 31 of the 2018 UK Corporate Governance Code.

The context supporting the assessment

The Group's prospects are underpinned by its business model and strategy, which can be found on pages 9 and 11. The Group continues to follow a balanced approach to its strategy, which is subject to ongoing monitoring and development as described herein. In FY 2023/24, the Group delivered revenue of £474.7m (FY 2022/23: £445.2m on a continuing basis) and underlying operating profit of £38.8m (FY 2022/23: £34.0m on a continuing basis), growth of 7% and 14% on the prior year, respectively. FY 2023/24 adjusted EBITDA, defined as earnings before interest, tax, depreciation, impairment and amortisation, excluding the impact of IFRS 16 leases, adjusted for any one-off, non-recurring, exceptional costs and acquisitions or disposals, was £47.5m (FY 2022/23: £44.4m).

The Group enters the new financial year with an order book of £396.5m (FY 2022/23: £395.3m), growth of 0.3% on the prior year, of which c.65% is expected to be workable within the next 12 months. The year-end order book comprises the value of all unworked purchase orders and contracts received from clients.

The Group funds its operations via a revolving credit facility (RCF) of £150m, with a £50m uncommitted accordion, which provides funding through to August 2026, alongside the Group's uncommitted overdraft facilities of £16.1m (FY 2022/23: £16.1m). Net debt at 30 June 2024 was £59.6m (FY 2022/23: £62.1m), comprising cash and cash equivalents, net of any restricted cash, of £47.3m (FY 2022/23: £49.8m) and borrowings, including hire-purchase liabilities, but excluding IFRS 16 lease liabilities, of £106.9m (FY 2022/23: £111.9m).

Adjusted leverage, defined as net debt over adjusted EBITDA, was 1.25x (FY 2022/23: 1.4x), providing significant headroom of 1.75x against the covenant limit of 3.0x. Interest cover, defined as adjusted EBITDA over net finance costs, excluding pension and IFRS 16 interest, was 5.86x (FY 2022/23: 8.3x), compared to the covenant limit of 4.0x. There are no changes to debt covenants under the new facility.

The strategy of the Group is to deliver long-term and sustainable growth in environmental and energy transition services. The Group's businesses' focus is on the development of longer-term, multi-year contracts and relationships, underpinned by global long-term megatrends. The board has considered the risk appetite and profile of the Group in this context and has determined that this remains appropriate for the Group as a whole.

Assessing the prospects of the Group

The Group's prospects are assessed primarily through its five-year business planning process, led by the Chief Executive Officer.

The five-year planning process is a forward-looking process which is undertaken by Group management and the Group's constituent operating segments in the second half of the financial year. The planning process includes an assessment of changes in the market and competitive environment, together with macroeconomic, political, societal and technological changes. The detailed operating segment business plans are consolidated to form a Group-wide budget and five-year plan.

The Group-wide and individual operating segment plans are reviewed and approved by the board. Part of the board's role is to review the performance of the Group in the last financial year and to consider whether the plan presented is appropriate. The first year of the business plan forms the Group's annual operating budget. This is subject to a re-forecast on a monthly basis.

Assessment of viability

The five-year business plan reflects the best estimate of the prospects of the Group. The first two years of the plan have been stress-tested, to consider the impact of known risks, including the pace of technological change in the automotive sector, driven by climate change, which continues to shift rapidly away from the traditional internal combustion engine towards more renewable propulsion methods, on the Group's results, operations and financial position in a severe but plausible downside scenario.

Viability statement continued

Assessment of viability continued

The scenario includes:

- Limited revenue growth from Automotive and Industrial established mobility and emerging solutions, normalising the revenue achieved in Q4 FY 2023/24
- Reduced revenue growth rates in Energy and Environment and Rail
- Decline in key programme volumes in Performance Products
- Continuation of the ABS retrofit programme at FY 2023/24 government funding levels and lower revenue growth in technical services
- Removal of any assumed working capital improvement compared with June 2024
- An increase in the SONIA interest rate compared with external bank forecasts

The scenario incorporates the appropriate reversal of discretionary bonus payments and setting suitable levels of dividends based on the sensitised results of the operating segments. Under this scenario, the Group's adjusted EBITDA is forecast to reduce by 15% in FY 2024/25 and then increase by 8% in FY 2025/26.

The impact of this scenario on the Group's business plan has been quantified and presented to the board as part of the approval process. The scenario, which is based on aspects of the Group's principal and emerging risks and uncertainties, including clients and markets, contracts and financing, as set out on pages 75-80, and takes into consideration the risks identified as part of our TCFD work, as set out on pages 64-74, represents severe but plausible circumstances that the Group could experience.

The results showed that the Group would be able to continue operating well within its debt covenants and liquidity headroom under the downside scenario. If full bonus costs were included, headroom under the Group's banking covenants and liquidity is reduced, but no covenants are breached.

The Group also performed reverse stresstesting on its financial plan using these scenarios to identify the point at which its banking covenants would be breached. Based on this reverse stress testing, a further 26% reduction in sensitised adjusted EBITDA compared to the downside scenario would be required in FY 2024/25 (15% in FY 2025/26) before the adjusted leverage covenant is breached. Similarly, a further 19% reduction in sensitised adjusted EBITDA compared to the downside scenario would be required in FY 2024/25 (21% in FY 2025/26) before the interest cover covenant is breached. In the event of such scenarios materialising, more severe cost actions would be taken to ensure covenant compliance.

The Directors have assessed the prospects of the Group over the five-year plan period to 30 June 2029, consistent with the five-year planning process, and confirm that their assessment of the principal and emerging risks and uncertainties facing the Group was robust. Based on their assessment of prospects and viability, the Directors confirm that they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the five-year period ending 30 June 2029.

Going concern

Given the viability statement provided above, the Directors consider it appropriate to prepare the financial statements on a going concern basis, as explained in Note 1(a) to the Group financial statements.

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Non-financial information and sustainability statement

This section constitutes the Group's non-financial information statement (NFIS), produced to comply with Sections 414CA and 414CB of the Companies Act 2006. The information presented below is incorporated by cross-reference and most of the policies listed can be found on our website: https://www.ricardo.com/en/who-we-are/governance/policies. Our Code of Conduct underpins Ricardo's business activities while providing our stakeholders with clear guidance on expected behaviours, actions and compliance requirements covering each of the below areas.

	Reporting requirement and policy position	Relevant policies and standards	Due diligence and further information
nvironmental matters	Our environmental policies set out our commitment to continuously	Environmental Policy	Responsible Business: page 44
	improving our environmental performance to ensure sustainable growth	Carbon Reduction Plan	TCFD report: page 64
	in line with global goals.	Sustainable Procurement Policy	Responsible Business Committee report: page 97
			Ricardo.com/en/sustainability
			 Ricardo.com/en/who-we-are/governance/policies
ople	Our people policies support our ambition to create an inclusive and	Human Resource Policy	Responsible Business: page 44
	engaging environment where our employees complete fulfilling work and	Health & Safety Policy	 Nomination Committee report: page 95
	thrive.	Diversity, Equity & Inclusion Policy	 Responsible Business Committee report: page 97
		Gender Pay Gap Report	Ricardo.com/en/sustainability
			Ricardo.com/en/who-we-are/governance/policies
cial matters	We have strict standards of behaviour that we expect of our employees	Code of Conduct	Responsible business – Governance section: page 59
	and supply chain partners, which are set out in our Code of Conduct	Supplier Code of Conduct	Governance report: page 85
	and Supplier Code of Conduct and other related policies. This includes respecting and safeguarding our people and the wider community.	Information Security Policy	Responsible Business Committee report: page 97
	respecting and safeguarding our people and the wider community.	Engaging and Supporting Local Communities Statement	Ricardo.com/en/who-we-are/governance/policies
		Modern Slavery Policy	
ıman rights	We recognise and respect the Universal Declaration of Human Rights,	Human Rights Policy	 Responsible Business – Governance: page 59
	ensuring that all people have freedom, dignity and equality. We uphold the	Modern Slavery Policy	 Ricardo.com/en/who-we-are/governance/policies
	highest ethical and legal standards within our business and supply chain.	Modern Slavery Statement	
ti-bribery and	We have zero tolerance on all forms of bribery and corruption and are	Code of Conduct	 Responsible Business – Governance: page 59
rruption	committed to conducting our activities in line with UNGC Principle 10.		Governance statement: page 88
	Our Code of Conduct covers our stance on these matters in detail.		 Audit Committee report: page 99
			Responsible Business: page 44
			 Ricardo.com/en/who-we-are/governance/policies
siness model			Business model: page 9
			Strategy: page 11
on-financial KPIs			Non-financial KPIs: page 18
incipal risks			How we manage our risks effectively: page 75
			Our principal risks and uncertainties: page 76
imate-related financial sclosures			Disclosure aligned to clauses (a) to (h) of The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022 detailed in the TCFD report: page 64

Section 172 statement

Stakeholders and the board

The Directors of Ricardo are bound by their duties under the Companies Act 2006 and, in particular, must act in the way they consider, in good faith, would most likely promote the success of the Company for the benefit of its members as a whole, taking into account the factors listed in Section 172(1)(a) to (f) of the Companies Act 2006.

The board recognises the need to build trust with our key stakeholders and executes its obligations of good faith accordingly to ensure the success of the Company and that of its shareholders.

In making decisions, we consider the interests of multiple stakeholders across the Company. The executive team advises the board on levels of engagement and seeks feedback. Board feedback is carefully considered and the Company adapts its approach where considered appropriate. Further details on engagement and how our board operates can be found in the Governance section of this report.

How Section 172 has become part of the way the Company operates can be found throughout this report, some examples of which are indicated below:

S172 duties and key examples Consequences of decisions in the long term 4 and 88 Chair's statement 6 Chief Executive's review Our business model 9 Our strategy 11 75 Principal risks and uncertainties Viability statement 81 91 Board activity FY 2023/24 Interests of the Company's employees Chair's statement 4 and 88 6 Chief Executive's review Our strategy 11 Strategic objectives 18 42 Stakeholder engagement Sustainability – Social 52 Company's business relationships with suppliers, clients and others Our business model 9 8 Market overview 11 Our strategy Strategic objectives and KPIs 18 42 Stakeholder engagement Responsible Business 44

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