Sustainability report

April 2022-March 2023

hrwallingford



Sustainability at HR Wallingford

2022–2023 was an exciting period at HR Wallingford. We finished our sustainability strategy in August 2022, before launching an extensive and ambitious sustainability programme later in the year.

We have created a dedicated sustainability team to deliver our sustainability programme, which includes a director responsible for sustainability to ensure strategic oversight.

This report covers the first five months of the programme to March 2023 in which we predominantly worked on building the foundations needed for success.

The team looked at the baselines for our future reporting, and took stock of where we are now on the material issues for our business. We also made great progress on starting to measure and manage our impacts across our consultancy, operations, and product development.

The purpose of this report is to show our baseline on sustainability, as well as providing a springboard to move forward and our 2030 sustainability vision of 'leading innovation in sustainable solutions that transform how we live and work with water'.

Highlights for 2023









25 metrics identified



Sustainability report published

Introduction

As the global leaders and independent experts in how to live and work sustainably with water, we are ambitious about our own impact on people and planet.

This has been a hugely important year for us. We have done a great deal of groundwork to better understand our impact as an organisation – on our people, our operations, our clients, our local communities and our stakeholders.

We have developed a more strategic approach to sustainability, resulting in an ambitious programme of work over the next three years that will drive us towards becoming a truly sustainable business by 2030.

Our level of ambition is high, which is a reflection of where our clients and stakeholders want to be, but is fundamentally driven by our people.

I am hugely grateful to everyone who has supported and been actively involved in the development of the sustainability programme and has volunteered to get involved in its delivery.

This sustainability report provides a summary of where we are now, where we want to be by 2030, and how we plan to get there.





Our sustainability team

I believe that our new sustainability programme is the start of something special.

> **Helen Udale-Clarke** Sustainability Programme Manager



Accurate and transparent reporting can help transform how we see ourselves as a sustainable business. The new role I've taken on feels like a big step in enabling this.

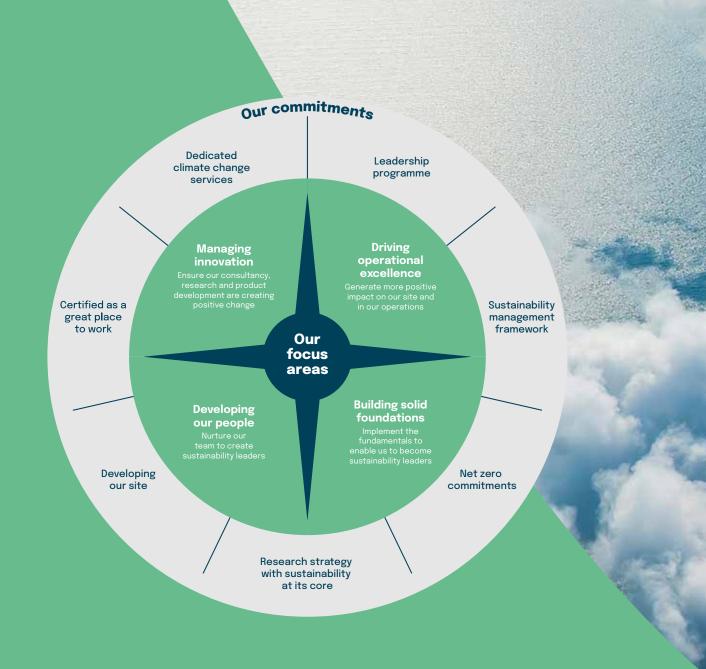
Liam CarterSustainability Data and
Reporting Officer

I have to say, my first year as director for sustainability has been a steep learning curve but I am enjoying and relishing the challenge.

> lan Cruickshank Director for Sustainability



Our sustainability strategy is made up of our vision, our seven big commitments and our four focus areas – each with a number of projects and initiatives for delivery.



Our vision

Leading innovation in sustainable solutions that transform how we live and work with water.

By 2030 we want to be the global leaders and independent experts in how to live and work sustainably with water.

This means that:

- Our innovation will address today's needs alongside tomorrow's challenges and opportunities;
- We will create smarter, more resilient solutions by helping the world understand the movement and influence of water:
- We will work together to deliver our ambitious sustainability goals;

 We will lead the way, showcasing innovation and impact in how we work. This includes our operations, consultancy, research, product development and manufacturing, as well as how we manage and use our site.

By 2030 we will:

- Be able to demonstrate and quantify how our innovation increases our positive impact;
- Have delivered our first two fullyfledged sustainability programmes;
- Be thought leaders in sectors where we can have the greatest positive impact.



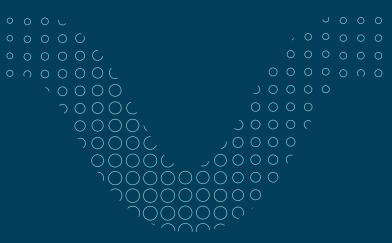
Our commitments

We have made seven commitments. These align with the UN Sustainable Development Goals and support the delivery of the outcomes of the Conference of Parties.



- 1. Ensure our research strategy has sustainability at its core, enabling us to leverage our world class research capability and create innovation for impact.
- 2. Launch dedicated climate change services as part of our portfolio to help our clients and partners with their climate-related problems, by identifying opportunities to leverage our technology and expertise.
- 3. Develop and launch a leadership programme which will help our people to take ownership of sustainability.
- 4. Design and implement a best practice sustainability management framework including how we report, govern, engage with our stakeholders - and develop a new set of sustainability-related performance indicators.

- 5. Develop a validated net-zero roadmap to progress our aspirations of achieving net-zero operations and a net-zero Howbery Park well in advance of the UK Government's 2050 target.
- 6. Leverage our world-class Howbery Park site to showcase sustainable innovation, best practice and attract world-class partners.
- 7. Secure certification as a great organisation to work for (e.g. the Great place to work certification) and lead in our sector classification.





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Our focus areas

We have developed four focus area, each with a number of initiatives to deliver change.

Building solid foundations

We will build the fundamentals that underpin HR Wallingford's approach to being a sustainable organisation and ensure our sustainability goals are embedded into how we work. This includes our brand, culture, governance, and processes.

We will create an enabling environment for employees to engage with our sustainability goals. This means reviewing the way we work and setting out how we will all take responsibility for sustainability.

Developing our people

We will support a responsible culture that promotes sustainable behaviours where all our people have the opportunity to help us reach our sustainability goals. We will nurture a diverse, equitable and inclusive workforce, so that everyone has pride in our business.

Managing innovation for impact

We want to manage our innovation so that it delivers on our sustainability goals. We want to support breakthrough innovation and be thought leaders in our sectors.

Driving operational excellence

We will ensure that we interact with the environment and the planet's resources sustainably.

The biggest positive impact that we can have on the world, and to the United Nations Sustainable Development Goals (UNSDGs), is through our innovation and consultancy work. But we need to ensure that all parts of our business are sustainable. This includes, for example, reducing the whole-life carbon footprint of the equipment we manufacture: responsibly sourcing, using, re-using, and re-purposing raw materials in our physical modelling labs; maximising energy and water efficiency and waste management across all our global sites.

At Howbery Park we have a great opportunity to demonstrate the operational excellence of our innovation. We are able to showcase our site for innovation, collaboration, and as a 'living laboratory' for sharing our expertise.

Sustainability snapshots

BeFloodReady Property Flood Resilience Centre

Climate change means flooding will affect ever more households and businesses. This year the Be Flood Smart campaign launched the BeFloodReady Property Flood Resilience Centre at HR Wallingford.

It's the UK's first dedicated facility to deliver accredited training on the specification, installation and maintenance of Property Flood Resilience measures. The aim is to encourage people to adapt their homes so they are better protected against the impact of future flooding.



Tackling deep sea floating wind challenges ▲

Our analysis of a cutting-edge floating wind foundation design – the Stinger Keel – is helping address the challenges of making huge turbines safe and affordable to build and install in the harsh conditions of deep seas.

We examined the Stinger Keel's hydrodynamic performance as part of a one-year project funded by Innovate UK to help expand energy output via floating turbines located in deeper seas.

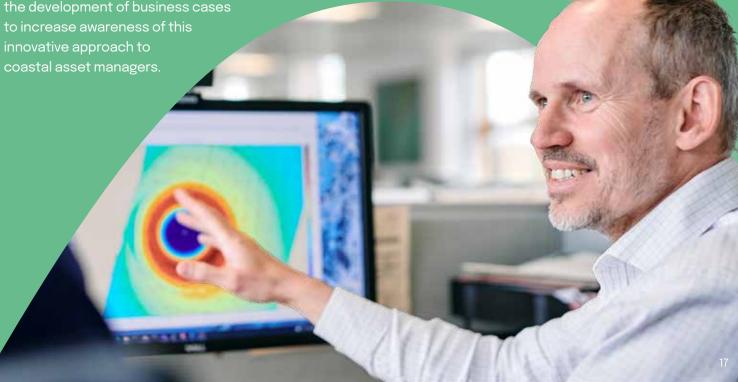
Eco-engineering solutions for coastal infrastructure

Academics worldwide have been researching and trialling innovative methods of adapting typical engineered coastal assets to boost biodiversity and quality in local ecosystems. This 'eco-engineering' is not common practice in industry, but it could transform the sustainability on the UK's coastal infrastructure. We headed up a team to explore the opportunities available to implement 'green' infrastructure along the coastline, whether that be through replacement, retrofitting or as part of a new build. The project explored the design, materials, asset lifecycle and provide key information on the development of business cases

Storm surge atlas for The Bahamas ▼

Climate change will increase the likelihood of flooding in The Bahamas because of rising sea levels and an increase in severe hurricanes.

Our Storm Surge Atlas for the government and people of The Bahamas will help to protect lives and livelihoods in the country. The information it contains will help the low-lying country to plan for major incidents, build flood defences and ensure that developments are in safe places.



Our material issues

We conducted our first materiality assessment in 2021.

Our material issues are summarised in the table below, with each issue listed under the focus area it affects the most.

We plan to conduct another materiality assessment as we near completion of the current sustainability programme, using those findings to form the basis of our next programme.

Building solid foundations

Stakeholder engagement

Corporate governance

Ethics, human rights and business compliance

Purpose, brand and culture

Developing our people

Learning and development

Health safety and wellbeing

Equity, diversity and inclusion

Managing innovation for impact

Sustainable industry collaboration

Research and innovation

Products and services

Community impact

Driving operational excellence

Energy and emissions

Biodiversity and habitat creation

Sustainable procurement

Resource management and circularity

Cyber security and data protection



Stakeholder engagement

As part of the development of our sustainability programme, we invited feedback from our clients, suppliers, sub-contractors, research and academic partners, tenants and local community, as well as our employees and non-executive directors.

The responses we received were instrumental in identifying our material issues and priority projects.

Our stakeholder engagement project, as part of our commitment to our stakeholders, will include a review of frameworks and best practice (such as ISO26000 and AA1000SES) to identify how we can best integrate stakeholder engagement into the governance of HR Wallingford.



We have a responsibility to our people, our clients and our stakeholders to bring them along with us on our sustainability journey. We need to be talking and listening to our internal and external stakeholders more than ever.

Andrew Brown
Business Development Director



1.87
customer satisfaction

Customer satisfaction

At 1.87, our customer satisfaction score has improved by 0.12 since FY22, and meets our target of being above 2. We have shown improvements in all scores, especially our comparison with others.

Score ranges from 1 (max) to 5 (min).

7.9
engagement score

Employee engagement

We are maintaining a 'good' level of engagement: 7.9/10 is unchanged from FY22, but 0.1 below the professional services benchmark this year. Our action plan is addressing this.

Score ranges from 1 (min) to 10 (max).

Corporate governance

Embedding sustainability and triple bottom line principles into our governance is fundamental to the effective delivery of our sustainability vision, including our path to net zero, and to ensure the financial sustainability of the business.

We've already taken great strides in this area, including appointing a director responsible for sustainability. Our job now is to improve this governance structure so that we improve our contributions to initiatives such as the UNSDGs, whilst fostering and enabling sustainable decisionmaking throughout the entire workforce, from the top-down.



Sustainability related certification

The quality of our work, its potential impact on the environment and the health, safety and welfare of our people, as well as that of any person potentially affected by our activities are of utmost importance to us.

We operate under an Integrated
Management System (IMS) combining
the requirements of ISO 9001: 2015 Quality
Management, ISO 45001: 2018 Occupational
Health and Safety Management and ISO 14001:
2015 Environmental Management Systems.



Sustainability spend

We spent £136k delivering the sustainability programme in FY23. This is less than budgeted, but we are confident that this spend has been efficiently deployed and that the long-term outcomes of the programme are still on track.

Ethics, human rights and business compliance

We insist on honesty, integrity and fairness in all aspects of our business, and we expect the same from our clients, funders and suppliers.

Our Ethical and Anti-corruption Policy is communicated to all employees via the company intranet and all new colleagues are introduced to the policy on induction. As part of our sustainability programme, we will expand on this policy by setting out how our ethics help drive our business decisions and we will embed this into our learning and development activities.

We recognise that compliance obligations of international trade are increasing and we have put in place measures to ensure we deliver on these obligations.



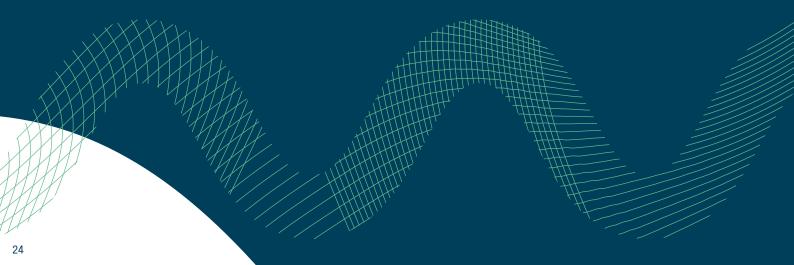
Purpose, brand and culture

Our purpose

To shape a future where people live and work sustainably with water

When we asked our people what HR Wallingford means to them and what they want for the future, sustainability was front and centre. Rebranding in 2022 gave us the opportunity to embed sustainability in to our organisational purpose, so it sits at the heart of our brand.

As part of the sustainability programme, we are working with all of our people to embed our brand and purpose across all of our business activities.



Learning and development

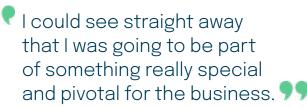


Employee turnover

Our focus for L&D this year was: employee engagement and wellbeing; line management capability; and senior leadership development. This included our companywide Employee Engagement survey, which resulted in the development of our Company Engagement Action Plan.

We are also committed to supporting employees with professional accreditation, from apprenticeships through to charterships and fellowships of professional bodies.

We recognise that sustainability leadership is needed throughout the business, and this is embedded within our L&D plan. We will develop a sustainability leadership programme to identify, support and create the enabling environment for our leaders of the future.



Claire Madle Learning and Development Manager Health, safety and wellbeing

Our people are our most valuable asset. It is our responsibility to safeguard their health, wellbeing, and welfare, alongside those who might be impacted by our operations.

Health and safety is of paramount importance to us.

We are committed to preventing work-related injuries and ill health by continually improving our occupational health and safety (OHS) management and performance. We maintain this commitment by continually certifying our OHS management system against ISO 45001.

We have five mental health first aiders, who run a range of awareness-raising campaigns and activities throughout the year, as well as providing support to individuals. Our occupational health professional provides a service designed to help employees stay in work, or to return to work, after experiencing mental health challenges. We also provide a confidential employee assistance programme and we have a Wellbeing Hub on the company intranet that provides a range of supporting information.

As part of the development of the sustainability programme, we also identified the need for a wellbeing programme to support the resilience of our people. This will build on the work already being done on employee wellbeing.





Equity, diversity and inclusion

Our Diversity and Inclusion (D&I) Group has been helping HR Wallingford change over the last few years. This year we commissioned the Diversity Trust to provide awareness-raising training for all our people, and to complete an audit and provide advice on policies, processes and documentation and, by extension, our D&I activities and approach.

One crucial area for HR Wallingford is our gender composition, which currently stands at approximately two men for every woman. Our gender pay gap has fluctuated since we first started reporting and there is still a significant difference in the gender pay gap.

We have developed an action plan to address our current gender pay gap, based on the Women In Science and Engineering (WISE) ten-step framework.

Our D&I Group reviews the plan every year to ensure it remains relevant and to measure progress.

As part of the sustainability programme, we also have a project looking at measuring and rewarding success. This will aim to reflect all of our sustainability goals including equity, diversity and inclusion (ED&I). We recognise that we still have much to do in this area.



Equity, diversity and inclusion

Our diversity and inclusion score has risen by 0.5 from a score of 7.5 in FY22.

Score ranges from 1 (min) to 10 (max).



Female employees and managers

Female employees decreased slightly from 32% in FY22. In FY23, a new metric shows that 25% of our female employees are managers.



Gender pay gap 2019-2022

	2022	2021	2020	2019		
Employee gender breakdown	30.4%	30.8%	32.3%	32.7%		
Mean pay gap	28.2%	26.5%	27.4%	25.9%		
Median pay gap	27.6%	28.6%	27.7%	21.1%		

Sustainable industry collaboration



HR Wallingford has a long and successful track record of collaboration across the globe. This includes sitting on industry and cross-sector panels; working with our clients and competitors as part of both research and consultancy partnerships; hosting and facilitating industry events that provide opportunities for knowledge sharing, training and creative problemsolving through systems thinking.

Innovation happens across all of our business, some of which is already contributing significantly to the overall sustainability of the business. We have ambitions to do much more.

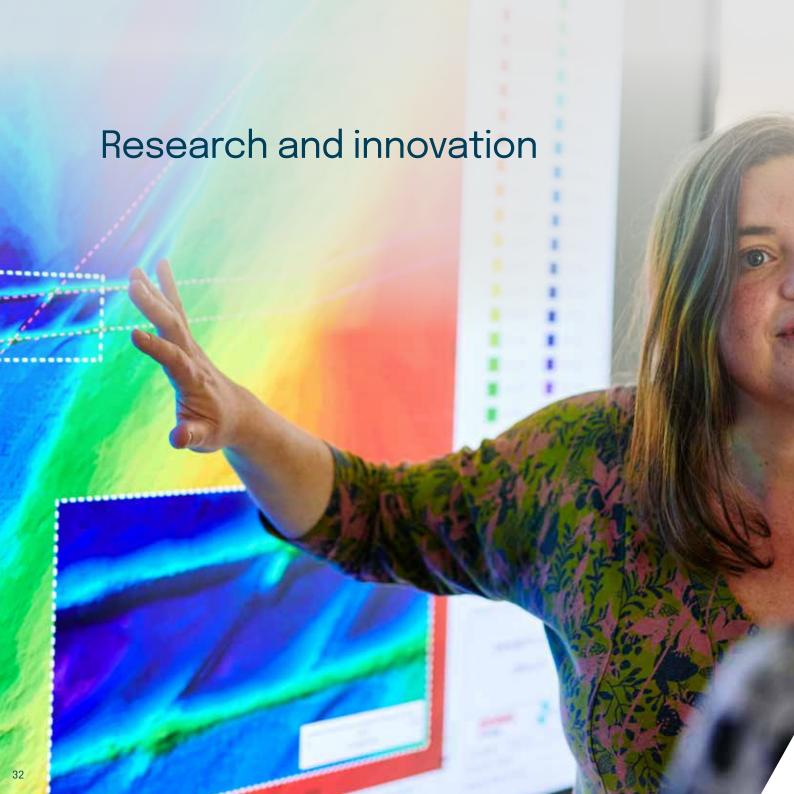
One of the things that sets us apart from others is our facilities – both in the UK and in Australia. Our physical modelling hall at Howbery Park is one of the world's largest, and included the world's most sophisticated flume, the fast flow facility. We also operate 12 ship simulators worldwide and our computing power allows us to run state-of-the art models.

The facilities we have at Howbery Park and our close proximity to several academic institutions, research organisations, clients, regional and local offices for government agencies, plus non-governmental organisations, make us ideally placed to be a hub for sustainable industry collaboration – which in turn will achieve our vision of leading innovation in sustainable solutions that transform how we live and work with water.

To solve the world's problems we need to work together. A key part of my role is to bring people together and to create opportunities for innovation.

Andrew Brown

Business Development Director





Products and services

The biggest impact we have is through our consultancy projects. To quantify this impact we are developing a method to assess projects against our sustainability goals and the UNSDGs, which will be useful for our clients and for us. We will then develop a similar method to assess our product manufacturing.

Our projects will be measured against selected social, environmental and economic factors, focusing on our most material impacts, such as carbon footprint, biodiversity, water, resource use and waste, employment and social inclusion.

The table, right, shows which UNSDGs our consultancy services contribute to the most, by client sector.



We already have a positive impact on the choices that our clients make as a result of our consultancy services. Once we can estimate and track that impact, we will be able to do even better.

Mike Godley Principal Engineer

Oliontocator	UN Sustainable Development Goal											
	1	2	3	6	7	9	11	12	13	14	15	17
Water and climate	0	0	0	0	0	0	0	0	0	0	0	0
Coasts	0			0	0	0	0	0	0	0		0
Ports and marine sustainability				0	0	0	0	0		0		0
Clean energy					0	0	0		0	0		
Industry and desalination				0		0	0	0		0		
Transition fuels						0	0					

UNSDG short titles



Community impact

Our UK business park is a beautiful place and is open to visitors, who can enjoy our Manor House, café and grounds. We also house over 50 tenants from the local business community, supporting a wide range of small local businesses with superb facilities - we even have on-site allotments. Perhaps it is no surprise that our tenants tell us that it is a great place to work.

In addition to this, we engage with our local community by supporting our local schools and colleges with open days, work experience and STEM activities.

Every year, our colleagues also nominate two charities (one national and one local) as the focus of our fund-raising activities throughout the year, which is match-funded by the company.

As part of our sustainability programme, we are looking at expanding our impact at Howbery Park through the creation of partnership projects with voluntary and community organisations. We will look at what we can learn from these activities to help us develop our community impact in Manchester and with our international offices.



Energy and emissions



As this is our first sustainability report, we are still working out the best carbon accounting methodology for our organisation. We follow the Greenhouse Gas (GHG) Protocol and, for FY23, we have taken a financial control consolidation approach.

This means that all scope 1 and 2 emissions that occur on our business park, including our tenants', are assumed as our own.

This also means that the scope 1 and 2 emissions that occur in our leased offices in Manchester and abroad fall under scope 3. We believe that is the most appropriate approach given our current business model and our varying operational controls across our property portfolio.

We are extremely proud of the highly productive solar farm that we have at Howbery Park. This solar farm was introduced in 2011 and currently provides us with around a quarter of our electricity for the year. This is inclusive of the electricity consumed by all our tenants on the park and is a demonstration of the exemplary work done by the Howbery Park team to increase the sustainability of the business park.

The rest of our energy consumption is comprised of both natural gas and electricity from the grid. During FY23 we evaluated options to move to a zero carbon tariff for the start of FY24, which will enable us to source 100% of our electricity from renewable sources on a market-based basis.

However, having carried out dual-accounting for our scope 2 emissions, we have chosen to prioritise the location-based methodology. This will provide a long-term driver for our energy portfolio to move beyond that of market-based contracts and onto options that facilitate the increased production of new renewable energy.

Since 2015, we have been participating in the government's energy savings opportunity scheme (ESOS) which has helped us to identify opportunities to reduce energy consumption. We have made recent progress on this by installing LED lighting across our vast physical modelling laboratories. This has led to a 52% increase in efficiency, or a saving of over 9,800kWh a month. We have also been trialling reduced hours and temperature of our heating in our offices at Howbery Park.

We have also been producing our streamlined energy carbon report (SECR) since 2018. Through this we have started to collect a significant amount of emissions data that, outside of scope 1 and 2, includes material consumption, flown and driven mileage, and waste data.

The figures, right, represent the emissions data we have captured for FY23. As yet, this is not the complete spectrum of emissions that we would need to declare our total scope 3, and furthermore our total GHG count. However, we have made progress on our data collection and this is why our reported emissions for scopes 1 and 3 for FY23 are significantly greater than for FY22. A large part of the sustainability programme is designed around improving and expanding our data collection, so that

52%
increase
in efficiency

Reducing energy consumption

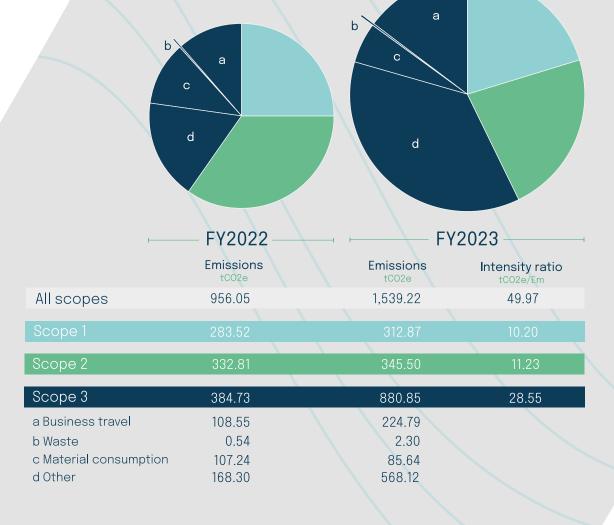
Installing LED lighting in our physical modelling laboratories led to a 52% increase in efficiency, or a saving of over 9,800 kWh a month.

we can have a more complete understanding of our energy consumption and our emissions.

Once we have a complete set of emissions data, we will look to set our baseline year and finalise our accounting method for tracking progress. As a company that takes pride in its technical expertise, we are wary of making environmental commitments before we know how we will meet them. As such, we will undertake a scenario analysis that will consider not only our business as it stands now, but how our business is likely to change in the future. This will enable us to plan a realistic roadmap, and at this point we can then more confidently make clear our net zero commitments.

A further part of the sustainability programme will be a full audit of our environmental impact, identifying areas where we excel and where there are opportunities to embed better practices. We will establish a robust baseline across our environmental impacts and resource use, and then develop clear plans for achieving operational excellence. This data will also feed into the work we will be doing on sustainable procurement, resource management and circularity.

Understanding our emissions



Biodiversity and habitat creation

We have worked on a range of biodiversity related projects over the last year, including enhancing wild flower diversity; landscaping of our new BeFloodReady Property Flood Resilience Centre; bird box maintenance and use; woodpecker protection; winter honey bee treatment and feeding; bird feeding stations; and no-mow and root protection areas.

Our onsite beehives had their best year ever for honey, with our bees producing 432 jars that we sold in our Manor House café.

Howbery Park is a unique site, enjoyed by many. We have habitats and opportunities for local biodiversity growth. We will look at how we can leverage this work to align with our sustainability ambitions, as well as how we implement new solutions.



Sustainable procurement

Fully understanding our supply chain is essential if we are to complete our scope 3 accounting. We will take steps to increase the strength of our supplier relationships, treating our suppliers as key stakeholders and partners who we can collaborate with on our journey to net zero.

Cyber security and data protection

The security of confidential information and our electronic systems is of paramount importance to us and our stakeholders.

We identify all types of security risk to our operations and at all times take reasonable, practical precautions to ensure that these risks are controlled and managed, and that plans are in place to ensure business continuity.







Sustainability snapshots

Investigating the marine impact of offshore wind growth

To help offshore wind expand in a sustainable way, as part of the ECOWind-ACCELERATE project we are looking at how the expansion of offshore wind may impact marine ecosystems.

Tests in our physical modelling hall were the first step in understanding the relationship between flow around wind turbines, and the impact on seabed, seabed animals, and the seabirds which feed on them. The ultimate aim of the project is to make the most of the opportunity from wind farm growth to ensure that seabed changes lead to biodiversity gain.

Flood rescue training ▼

With more frequent flooding expected in the UK, it's more important than ever that our Fire and Rescue services are prepared to respond when the worst happens.

Services from across the South East of the UK have been using our facilities to train their people in a safe and controlled environment. While simulating the strong flows and deep water they could encounter during a flood, they've even been able to practice rescuing stranded motorists.





Howbery Park won the pollinator award in CIRIA's 2022 BIG Biodiversity Challenge Awards, for our work supporting bees in our grounds. In line with our sustainable approach to running the park, we focused on bumblebees as part of a six-year biodiversity programme, meeting the criteria set by the Bumblebee Conservation Trust.



Nature-positive dredging for Harwich Haven ▲

We have helped Harwich Haven Authority to adopt new dredging methods that could help improve protected mudflats in the vicinity of the Port of Felixstowe. We assessed whether a new design of agitation dredger, could feed the mudflats with beneficial muddy sediment.

The mudflats and saltmarsh in the area provide habitat for internationally important species of migratory birds as well as providing natural protection against coastal erosion. Our work showed that the new agitation dredger is a viable, economical, low carbon-solution for dredging at Harwich Harbour that will also result in an increase in designated habitat.

Metrics

Our selection of metrics for inclusion in our first Sustainability Report is based on data that is available to us for FY23, and represents environmental, social and economic sustainability, plus governance.

Where data has been previously reported, this has been provided for the previous year. We plan to expand on this set of reported metrics next year and, as part of the sustainability programme, we have already started to collect the data.

For each of the years listed the reporting period is from the beginning of April to the end of March, unless indicated otherwise as the data is a snapshot on a specified date in the year. The derivation of these metrics is provided in the 'Deriving our sustainability metrics' section of this report.

Our sustainability metrics >

- 1 Figures are taken from our annual reports.
- 2 Date specific (i.e. snapshot as indicated in the Deriving our sustainability metrics section of this report).
- Increased scope compared to previous year, which means a comparison cannot be made between years.

Sus	tain	ability metric	FY23	FY22	Change
	M1	Operating profit/loss 1	£2.4m loss	£2.7m profit	189%▼
nio	M2	Sustainability programme spend	£136k	n/a	_
non	M3	Investment in R&D	£3.867m	£3.578m	8%▲
Economic	M4	No. of peer reviewed publications	27	19	8.
	M5	Customer satisfaction score	1.85	1.97	0.12▲
\	M6	Accident frequency rate	2.87	2.47	0.4▼
	M7	Gender pay gap ²	28.2% (mean)	26.5% (mean)	1.7% (mean) 🔺
			27.6% (median)	28.6% (median)	1% (median) ▼
	M8	% female employees ²	31%	32%	1%▼
<u>a</u>	M9	% female managers ²	25%	-	-
Social	M10	Employee turnover	12.2%	12.6%	0.4%▼
Š	M11	Employee engagement score ²	7.9	7.9	no change
	M12	Absenteeism rate	2.1%	1.9%	0.2%▲
	M13	Health and wellbeing score ²	7.8	7.7	0.1▲
	M14	Diversity and inclusion score ²	8.0	7.5	0.5▲
	M15	No. of chartered professionals ²	32		_
	_///			ا (ر	
	M16	Scope 1 emissions	312.87 tCO2e ³	238.52 tCO2e	n/a
	M17	Scope 2 emissions	345.50 tCO2e	332.81 tCO2e	4%▲
	M18	Scope 3 emissions	880.85 tCO2e ³	384.73 tCO2e	n/a
ınt	M19	Total GHG emissions	1,539.22 tCO2e ³	956.05 tCO2e	n/a
Environmental	M20	Total energy consumption	3,812,037 kWh ³	3,466,146 kWh	n/a
Pon	M21	% energy from renewables	19%	19%	no change
	M22	Material consumption emissions	85.64 tCO2e	107.24 tCO2e	27%▼
	M23	Total water usage	71,592 m ^{3 3}	60,472 m ³	n/a
	M24	Waste emissions	2.30 tCO2e ³	0.54 tCO2e	n/a
	M25	Business travel emissions	224.79 tCO2e	108.65 tCO2e	125%▲
0	M26	No. of sustainability related certifications ²	3	3	no change
Governance			-	-	

Reporting and external validation

This is our first sustainability report, which we consider as a work in progress. In future years we plan to expand on this report. Our objective is to ensure that our metrics, targets, data, roadmaps and plans are robust, credible and appropriately reported

Since 2018, we have included our Streamlined Energy and Carbon Reporting (SECR) in our annual report. However, we consider this the bare minimum. We are currently planning for future mandatory requirements, but our aim is to adopt best practices and external validation of both our mandatory and voluntary reporting.

Our aim, at present, is to align our reporting with the Global Reporting Initiative (GRI) framework. We will also commit to the UN SDGs and use them to demonstrate our contribution to sustainable development, for progress monitoring and goal setting. We have also benchmarked our report against leading organisations within our sectors and beyond.



We have calculated our scope 1, 2 and 3 emissions using the GHG Protocol. In future, we plan to validate our GHG emission calculations based on either the ISO 14060 series or other standards such as PAS 2060. At the present time, we are also evaluating the use of either CDP or SBTi for the development of our net zero roadmap.

Creating our base year and setting targets

The change in our reporting from FY22 to FY23 has been significant, as we have incorporated several more aspects of GHG accounting as we look to deliver a complete and comprehensive report on our emissions.

However, there is still much more to be done as we look to build out our competencies around monitoring our supply chain, and understanding the use of our products and services. Whilst we have made great progress, we have not painted a complete enough picture of our current activities to set FY23 as a baseline year, and have ambitions to set FY24 as the baseline instead.

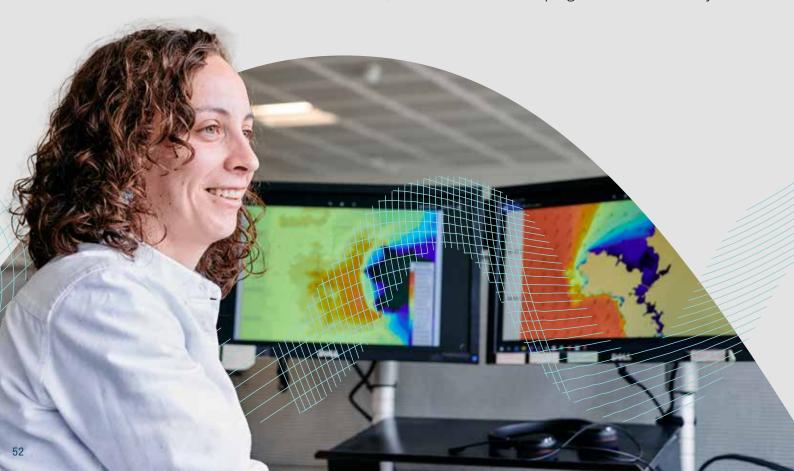
This forms part of our climate change strategy project, and sits alongside the decision-making process of what certifications and standards we wish to work against on our journey to net zero. Once we have established both our baseline year and which frameworks to use, we can publicly commit to emissions reduction targets.

How does everything work together?

As we strive to reach our 2030 sustainability vision, we need to ensure we are on track to meet our seven big commitments.

The initiatives in our four focus areas, which reflect our material issues, are designed to meet the seven commitments, and we have also designated metrics for each commitment to measure our progress.

The table opposite shows how these work together. For our next sustainability report we are confident we will have a much wider list of metrics, so we can measure our progress more accurately.



Relevant metrics

Primary focus

A sustainable Research and Innovation strategy	Operating profit Investment in R&D No. of peer reviewed publications	Managing innovation for impact		
Dedicated climate change services	Operating profit Investment in R&D Customer satisfaction score	Managing innovation for impact		
Leadership programme	No. of chartered professionals	Developing our people		
Best practice sustainability management framework	Gender pay gap % female employees % female managers Employee engagement score No. of sustainability related certifications	Building solid foundations		
Net zero roadmap	Scope 1 emissions Scope 2 emissions Scope 3 emissions Total GHG emissions Total energy consumption % energy from renewables Material consumption emissions Total water usage Waste emissions Business travel emissions	Driving operational excellence		
A world class Howbery Park	Scope 1 emissions Scope 2 emissions Total energy consumption % energy from renewables Total water usage Waste emissions	Driving operational excellence		
Great organisation to work for	Accident frequency rate Gender pay gap % female employees % female managers Employee turnover Employee engagement score Absenteeism rate Health and wellbeing score Diversity and inclusion score No. of chartered professionals	Developing our people		

Our material issues and our sustainability projects

Sustainability project

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Material issues	1	2	3	4	5	6	7	8	9	10	11	12	13
Building solid foundations													
Stakeholder engagement	0									0	0		
Leadership and governance				0		0							
Ethics and human rights			0										
Purpose, brand and culture		0			0						0		
Developing our people													
Learning and development						0	0	0	0	0	0		
Health, safety and wellbeing												0	
Equity, diversity and inclusion						0							0
Managing innovation for impact													
Sustainable industry collaboration	0									0			
Research and innovation							0						
Products and services													
Community impact	0									0			
Driving operational excellence													
Energy and emissions													
Biodiversity and habitat creation													
Sustainable procurement													
Resource management and circularity													
Cyber security and data protection #													

Our sustainability projects

- * Priority project
- # This business critical issue is not part of the sustainability programme

- 1 Stakeholder engagement and reporting
- 2* Embed our purpose
- 3 Robust and supportive ethics statement
- 4* Sustainability governance
- 5* Embed our brand
- 6 Measuring and rewarding success
- 7* Sustainability toolbox
- 8* Leadership programme: leaders of the future
- 9* Creating opportunities in sustainability leadership
- 10 Partnership programme: building long-standing relationships
- 11* Sustainability for everyone: engagement

- Key project
- Related project

Sustainability project

Material issues	14	15	16	17	18	19	20	21	22	23	24	25	26
Building solid foundations													
Stakeholder engagement		0									0		
Leadership and governance													
Ethics and human rights											0		
Purpose, brand and culture													
Developing our people													
Learning and development													
Health, safety and wellbeing													
Equity, diversity and inclusion													
Managing innovation for impact													
Sustainable industry collaboration	0	0	0										
Research and innovation	0		0	0				0					
Products and services	0		0		0	0		0			0	0	
Community impact							0						0
Driving operational excellence													
Energy and emissions									0	0			
Biodiversity and habitat creation									0	0			0
Sustainable procurement		0				0			0	0	0	0	
Resource management and circularity						0			0	0	0	0	
Cyber security and data protection #													

- 12 Resilience of our employees: wellbeing
- 13 Opportunities for all: diversity and inclusion
- 14* Sector transition plan
- 15* Framework for engagement
- 16* Research strategy with sustainability at its core

- 17* Innovation audit
- 18* Consultancy impact measurement framework for projects
- 19 Product impact and sustainability metrics
- 20 Partnership projects with voluntary and community organisations
- 21* Climate change services

- 22 Environmental impact strategy
- 23* Climate change strategy (mitigation and adaptation)
- 24 Supply chain standards
- 25 Sustainable materials and circular economy
- 26 Environmental protection strategy (biodiversity)

Deriving our sustainability metrics

Me	etric	Company scope	Period	Definition/methodology
M1	Operating profit/loss	Group	FY23	Reported operating profit or loss as per HR Wallingford annual accounts. A profit or loss from business operations (gross profit or loss minus operating expenses) before deduction of interest and taxes.
M2	Sustainability programme spend	Group	FY23	Total amount spent under the direct remit of the Sustainability Programme.
M3	Investment in R&D	Group	FY23	Employee time and expenses related to internally funded research + contribution to externally funded research + employee time invested in technical development.
M4	No. of peer reviewed publications	Group	FY23	Number of peer reviewed published academic papers and books (or chapters thereof) written by HR Wallingford Limited employees.
M5	Customer satisfaction score	Group	FY23	The score is derived from the average of the following three satisfaction scores: 'Quality of service', 'Timeliness of delivery', and 'Comparison with others' with 1 being the best possible score.
M6	Accident frequency rate	Group	FY23	Total accidents divided by total employee hours worked. 0 being the best possible result.
M7	Gender pay gap	Group	2022 Snapshot	Difference between the average (mean and median) earnings of men and women at HR Wallingford.
M8	% female employees	Group	2023 Snapshot	The percentage of HR Wallingford Limited employees that are female.
M9	% female managers	Group	2023 Snapshot	The percentage of HR Wallingford Limited managers that are female.
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	Met	ric	Compai scope	ny	Perio	bc	Definition/methodology
	M10	Employee turnover	Group		FY23		The percentage of employees that have left the company over the reporting period.
	M11	Employee engagement score	Group		2022 Snap	shot	Annual employee engagement survey (71% participation). Scored as per Peakon rankings. Engagement was broken into three sub-sections: 'Belief', 'Loyalty', and 'Satisfaction'.
	M12	Absenteeism rate	Group		FY23		The percentage of workforce hours lost due to unplanned absences, i.e. sickness and injury.
	M13	Health and wellbeing score	Group		2022 Snap	shot	Annual employee engagement survey (71% participation). Scored as per Peakon rankings. Health & wellbeing was broken into four sub-sections: 'Mental wellbeing', 'Organisational support', 'physical wellbeing', and 'social wellbeing'.
	M14	Diversity and inclusion score	Group		2022 Snaps	shot	Annual employee engagement survey (71% participation). Scored as per Peakon rankings. D&I was broken into three sub-sections: 'Diversity', 'Inclusiveness', and 'Non-discrimination'.
0	M15	No. of chartered professionals	Group		2023 Snaps	shot	Number of HR Wallingford employees who hold professional charterships. Gathered through our Personnel system. This does not include our Non-Executive Directors.
0	M16	Scope 1 emissions	Group		FY23		Total scope 1 emissions. Comprised of natural gas consumption, fugitive gas leaks, and diesel oil
0							consumption in company owned capital goods. GHG Protocol used for methodology. Utilised UK Government (Defra) 2022 conversion factors.
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Meti	ric	Company scope	Period	Definition/methodology
M17	Scope 2 emissions	Group	FY23	Total scope 2 emissions. Comprised of on-site electricity consumption. Electricity generated by our on-site solar park is not attributable towards an emissions conversion factor. GHG Protocol used for methodology. Utilised UK Government (Defra) 2022 conversion factors. Location-based method of accounting chosen.
M18	Scope 3 emissions	Group	FY23	Scope 3 is currently incomplete. GHG Protocol used for methodology. Scope 3 categories that were taken into account in this year's methodology: 'Purchased goods & services' (partially), 'Fuel- and energy-related activities', 'Waste generated in operations', 'Business travel', 'Employee commuting', and 'Upstream leased assets'. 'Downstream leased assets', 'franchises', and 'investments' are not applicable to HR Wallingford at the time of writing. Utilised UK Government (Defra) 2022 conversion factors and International Energy Agency factors. Location-based accounting method chosen.
M19	Total GHG emissions	Group	FY23	Scopes 1, 2, & 3 combined. GHG Protocol used for methodology. Utilised UK Government (Defra) 2022 conversion factors. Location-based accounting method chosen.
M20	Total energy consumption	Group	FY23	Total kWh of energy consumed globally by HR Wallingford (natural gas + electricity + liquid fuel). This year we have increased the scope of our data collection and included the electricity consumed in our global offices.
M21	% energy from renewables	UK only	FY23	Total percentage of energy (natural gas + electricity + liquid fuel) utilised in the UK that came from renewable energy. The majority of this coming from Howbery Park's on-site solar park, with a minority coming from the renewables available in the National Grid.

Metric		Company scope	Period	Definition/methodology
	aterial consumption missions	UK only	FY23	Emissions associated with material use at Howbery Park. Comprises the majority of HR Wallingford's supply chain emissions for scope 3 for FY23. Consists of wood, metal, concrete, aggregate, and paper. GHG Protocol used for methodology, along with activity-based data. Utilised UK Government (Defra) 2022 conversion factors.
M23 To	otal water usage	Group	FY23	This accounts for the abstracted water utilised by our modelling teams at our Howbery Park HQ alongside water consumption at the following of HR Wallingford's offices: Howbery Park (UK), Manchester (UK), Houston (US), Perth (AUS), Shanghai (CN), Dubai (UAE), and Mumbai (IN). The global offices are an increase in scope from FY22. For abstraction, HR Wallingford holds an abstraction license with the Environment Agency.
M24 W	aste emissions	UK only	FY23	Total emissions associated with the differing waste streams of our UK operations. Differing waste streams include: business waste, wood, metal, paper, glass, food, WEEE waste, and HazWaste. Waste is managed centrally and incorporates all of Howbery Park, including our tenants' waste. GHG Protocol used for methodology. Utilised UK Government (Defra) 2022 conversion factors.
	usiness travel missions	Group	FY23	Accounts for the emissions associated with our employees' flown and driven mileage (for business purposes only, so excluding employee commuting). Data is managed by our business support function. GHG Protocol used for methodology. Utilised UK Government (Defra) 2022 conversion factors.
M26 N	o. of sustainability elated certifications	Group	2023 Snapshot	The total number of verifiable/certifiable accreditations that HR Wallingford has been awarded that relate to different aspects of sustainability.



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