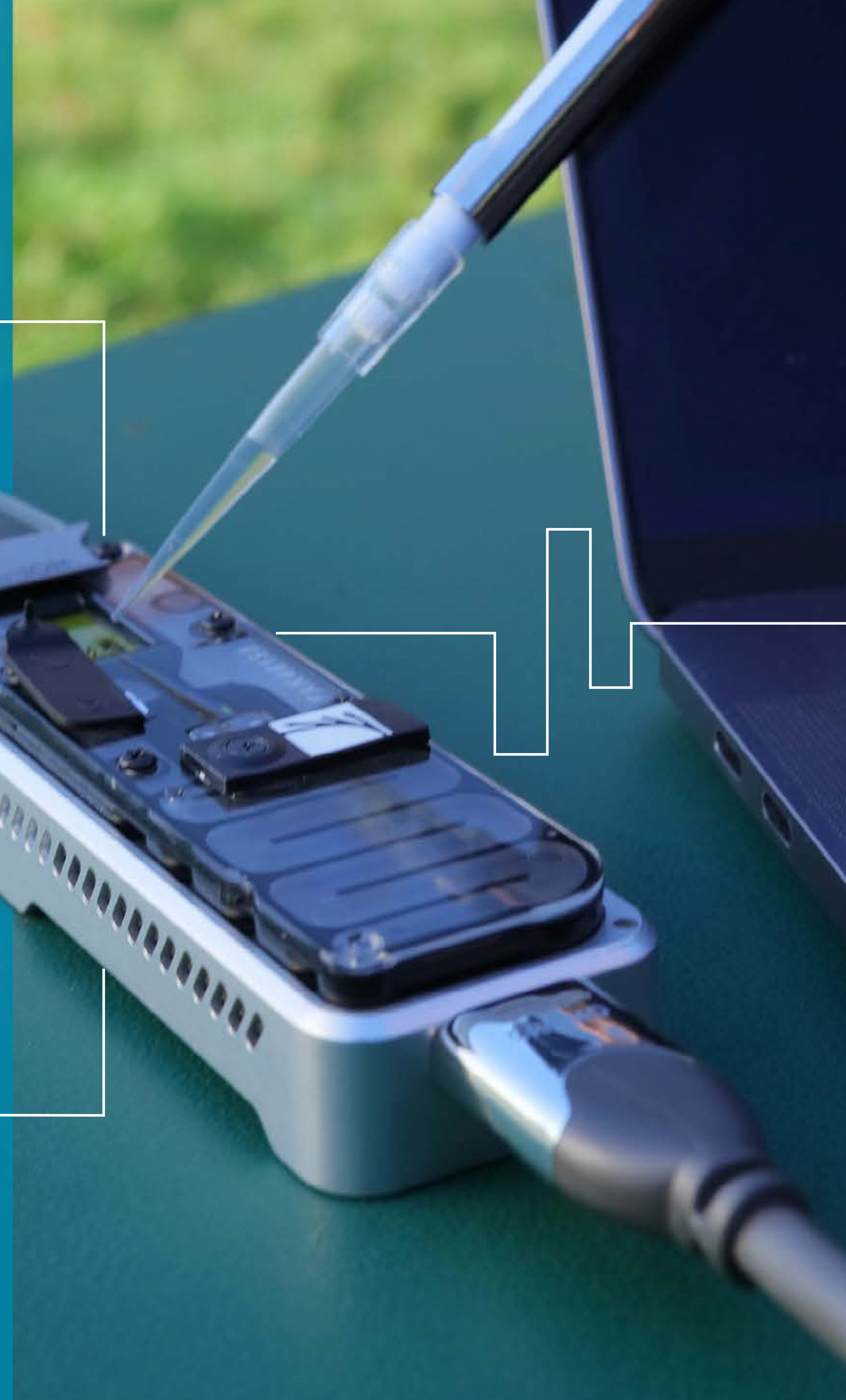


Our Sustainable Impact

SUSTAINABILITY
REPORT FY 2023

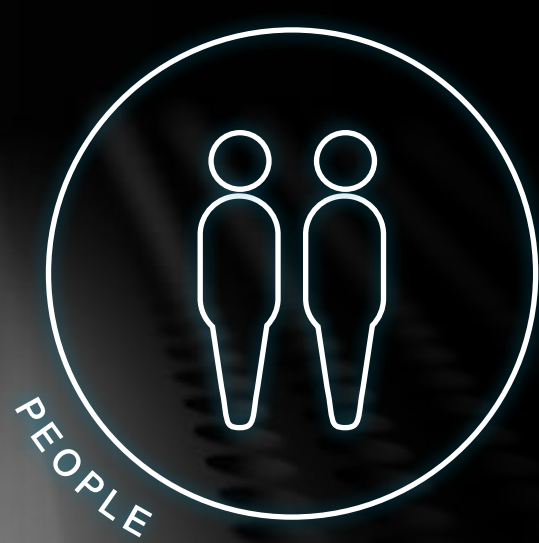


Introduction

About Oxford Nanopore Technologies

Oxford Nanopore Technologies' vision is to bring the widest benefits to society through enabling the analysis of anything, by anyone, anywhere. The company has developed a new generation of nanopore-based sensing technology for real-time, high-performance, accessible and scalable analysis of DNA and RNA. The technology is used in more than 125 countries to understand the biology of humans and diseases such as cancer, plants, animals, bacteria, viruses and whole environments. Oxford Nanopore Technologies' products are intended for molecular biology applications and are not intended for diagnostic purposes.

nanoporetech.com



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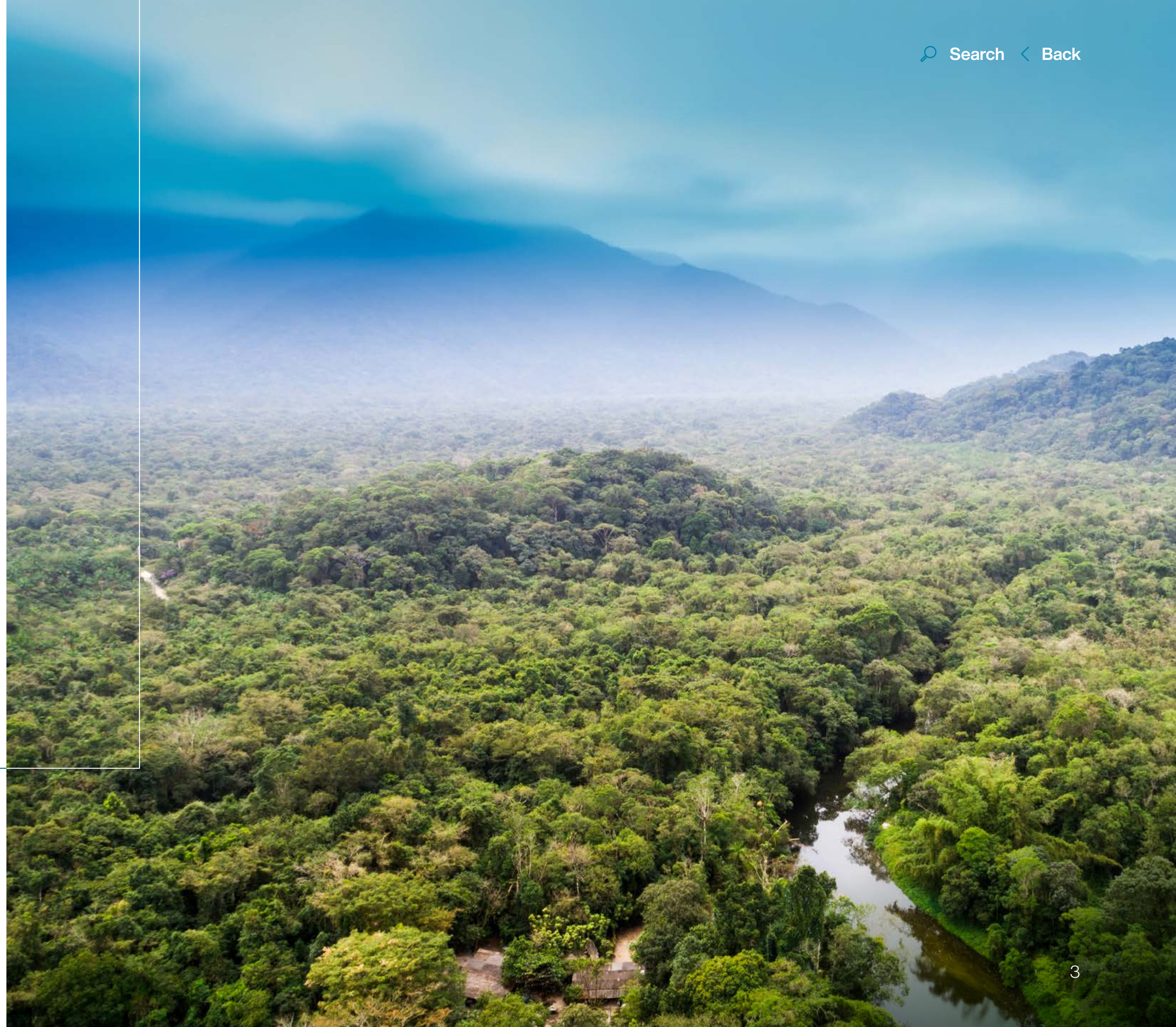
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About this report

This report, Our Sustainable Impact 2023, outlines our sustainability strategy and related policies, our approach to responsible growth and covers our activities for the 2023 financial year. This report considers sustainability issues that are priorities for our business and the way in which we address these.

This report should be read alongside our Annual Report 2023. We support the United Nations' Sustainable Development Goals (SDGs) and believe that we can play a role in solving these global development challenges. We demonstrate how our strategy links to the SDGs, and our related contributions, on pages **19** and **20**.



Letter from Board Chair: Duncan Tatton-Brown



We have fostered a culture of inclusivity, diversity, and continuous learning, ensuring that as our company grows...

Introducing Oxford Nanopore's second annual Sustainability Report

I am pleased to present Oxford Nanopore Technologies' second Sustainability Report, marking another milestone in our commitment to transparency, accountability, and sustainable impact. Our inaugural report laid the groundwork for our journey towards environmental stewardship, social responsibility and governance. Building on that foundation, this year's report reflects our continued progress and sets forth ambitious new goals as we work to have a positive impact on life on Earth and beyond.

Measuring our sustainable impact

A commitment to sustainable impact is core to Oxford Nanopore's mission. Last year, we formalised that commitment by introducing a new sustainability strategy – product, planet, people – that encapsulates the consistency of our wider business strategy and supports our commitments to progress initiatives across environmental, social, and governance (ESG). We also published our first-ever Sustainability Report to showcase the impact of our technology and the customers who use it, while also committing to build on that progress in the year ahead.

Human health, climate change and food security are defining issues of our time that Oxford Nanopore can positively impact. We are adapting to, and mitigating against, climate change risks, through commitments to improved efficiencies throughout Oxford Nanopore's operations, including in our products, facilities and value chain. Our products are already designed to minimise packaging and waste, to dramatically reduce dependencies on cold-chain shipping and to include recycling of key components into our business processes.

This year we are building on that commitment by publishing our Net Zero Transition Plan, including the targets we have set to ensure progress is being made to contain global warming to 1.5°C. You can find more details about our net zero plan on page 61, in addition to our findings against the Task Force on Climate-related Financial Disclosures (TCFD) framework in the **2023 Annual Report**.

Designed for positive impact

Our commitment to sustainability extends beyond environmental initiatives to encompass social and governance aspects as well. We have fostered a culture of inclusivity, diversity and continuous learning, ensuring that as our company grows, so too do opportunities for personal and professional development for our team members. Additionally, we have maintained full compliance with the UK Corporate Governance Code, underscoring our dedication to upholding the highest standards of corporate governance.

Beyond our internal operations, we are proud of the impact that our technology continues to have on the scientific community and society at large. From enabling groundbreaking research to transforming the future potential of clinical diagnostics, our nanopore sequencing technology is at the forefront of innovation. In the past year, we have forged strategic partnerships with industry leaders such as BioMérieux SA and the Mayo Clinic to expand our reach into clinical and applied markets, further cementing our future opportunity for impact.

Looking ahead

With a growing customer base, expanded leadership team, and a clear vision for the future, we are well-positioned for continued success in 2024 and beyond. We are committed to building on the progress we have made and to delivering on our mission to enable the analysis of anything, by anyone, anywhere.

I would like to thank our customers, partners, shareholders and employees for their hard work and dedication. Together, we will continue to drive positive change and make a meaningful impact on the world.

Duncan Tatton-Brown
Board Chair

June 2024

Who we are, what we do

Our vision is to bring the widest benefits to society through enabling the analysis of anything, by anyone, anywhere. We deliver high-performance innovations that enable broad scientific communities to access, understand and use biological information for research, and enable sustainable, accessible impact in health, food, agriculture and environments.

Oxford Nanopore Technologies plc was founded in 2005 as a spin-out from the University of Oxford. The company now employs more than 1,300 people across R&D, commercial, and operational functions, with users in 125 countries, and was listed on the London Stock Exchange in 2021.

We have developed, commercialised and continue to innovate a new generation of sensing technology that uses nanopores — nano-scale holes — embedded in high-tech electronics to perform comprehensive analyses of single molecules. Our first products sequence DNA/RNA but we intend to adapt the technology for the sequencing of proteins and other molecules.

A global impact beyond research

The data produced by our technology is used throughout scientific research, whether in university, government or industrial research groups, to help biologists answer a range of questions. The impact of our technology can be felt across the world and in a range of scientific disciplines, including research into human genetics, cancer, plants, animals and the environment.

Outside scientific research, DNA/RNA information can be used to support 'real-life' decision making, whether that is in healthcare, industrial or other environments. Oxford Nanopore is in the foothills of enabling these use cases; our goal is to drive new applications that have a profound, positive impact on society, by providing a new generation of accessible technology.



>7,600
active customer
accounts



>13,000
peer-reviewed
publications



>125
countries
served

Global footprint

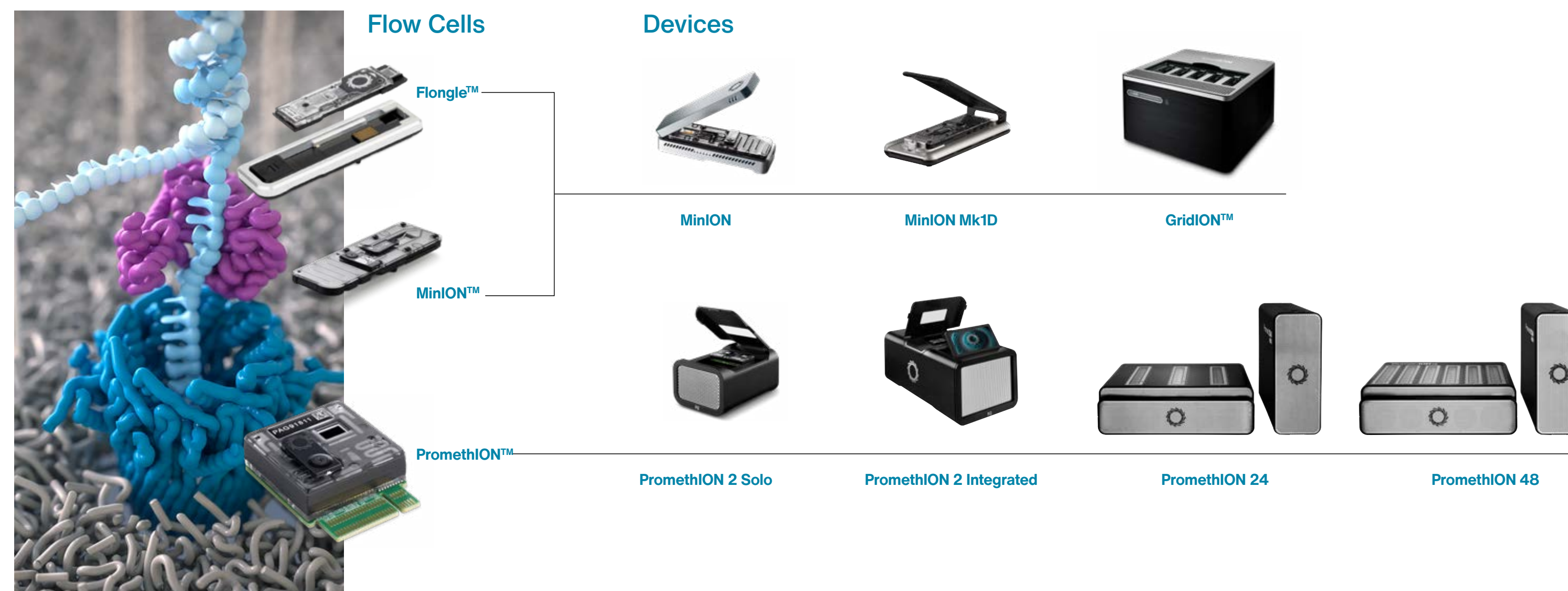
The impact of our technology

Enabling high-impact scientific research and meeting unmet needs in clinical and applied markets

Sequence data is used throughout scientific research to help biologists answer a range of questions. The impact of our technology can be felt across the world and across a range of applications, supporting fundamental scientific research or future clinical and applied markets.

Who we are, what we do

Oxford Nanopore sensing technology: Our first application – DNA/RNA sequencing



How it works

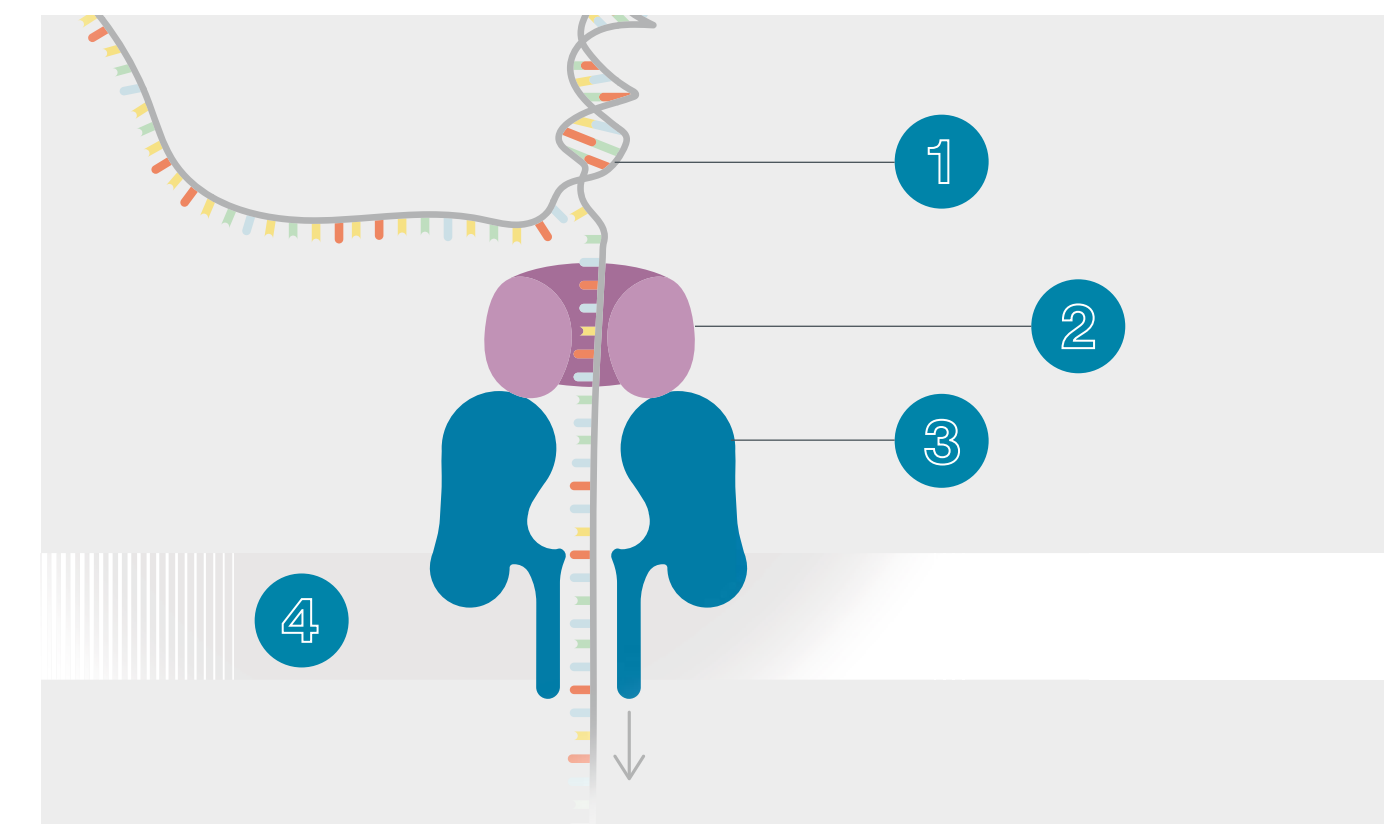
All Oxford Nanopore sequencing devices use flow cells which contain an array of tiny holes – nanopores – embedded in an electro-resistant membrane. Each nanopore corresponds to its own electrode connected to a channel and sensor chip, which measures the electric current that flows through the nanopore.



Watch our video explaining the process

One core technology at any scale

Our nanopore-based sequencing chemistry is integrated into consumable flow cells, which include arrays ranging from tens to thousands of electronic sensing channels. Users may deploy a range of different devices with these flow cells, which are designed to support any level of sequencing experiment, from go-anywhere, on-demand small analyses to ultra-high output projects, such as human population-scale sequencing. All devices can run the same nanopore-based sequencing chemistries, enabling users to scale their applications according to their needs.



1 The nanopore processes the length of the DNA or RNA fragment presented to it. The user can control fragment length through the library preparation protocol utilised, enabling experiments to characterise anything from ultra-long fragments of DNA to short fragments originating from cell free DNA in blood.

2 An enzyme motor controls the speed at which the DNA or RNA strand passes through the nanopore. Once the DNA or RNA has passed through, the motor protein detaches and the nanopore is ready to accept the next fragment.

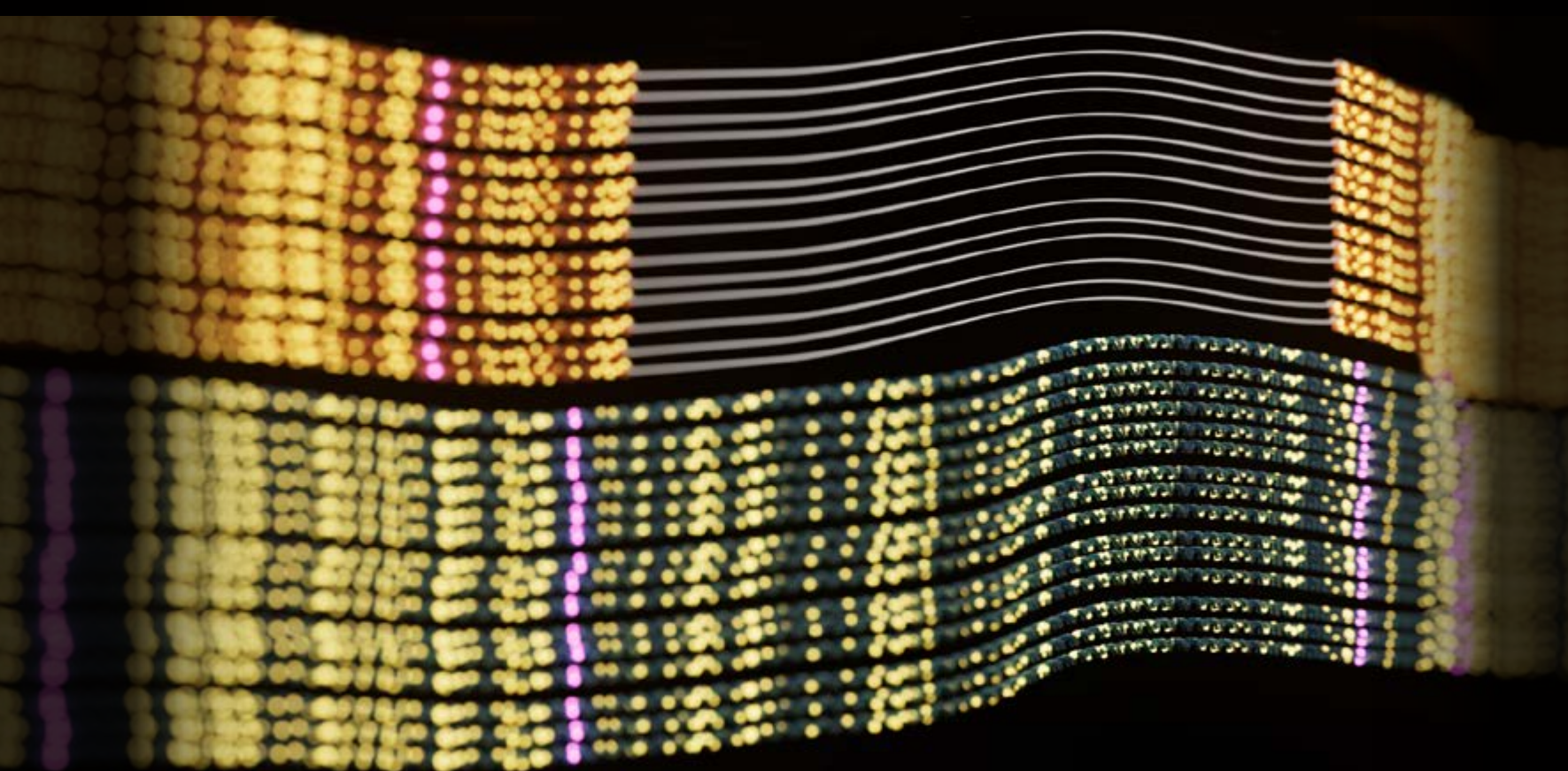
3 Nanopore reader - when a molecule passes through the nanopore the current is disrupted. Fluctuations in the current are decoded using basecalling algorithms to determine the DNA or RNA sequence in real time.

4 An electrically resistant membrane means all current must pass through the nanopore.

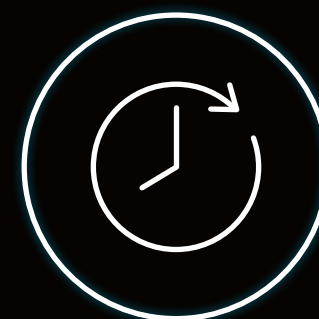
Oxford Nanopore DNA/RNA sequencing technology delivers novel benefits



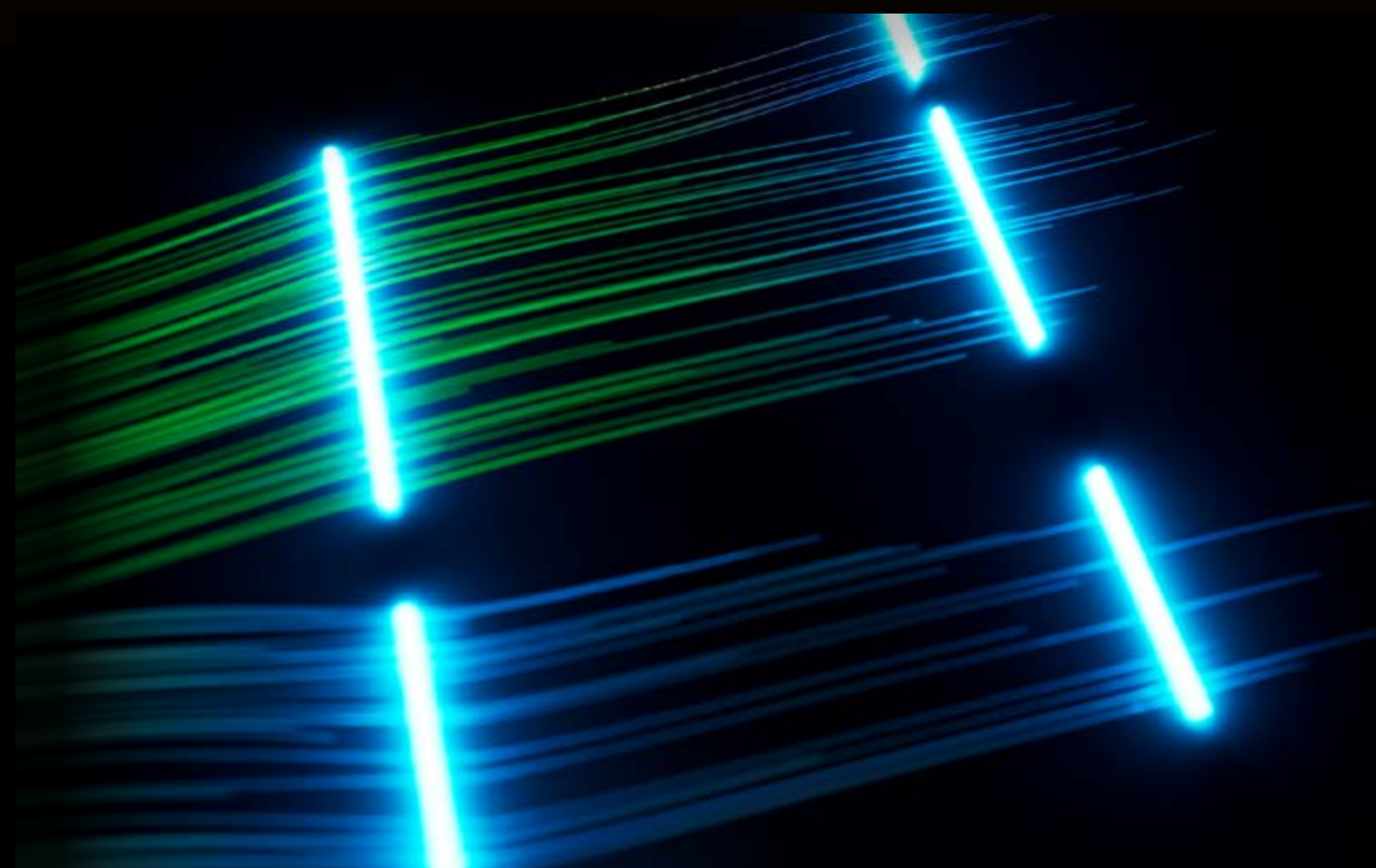
Richer Insights



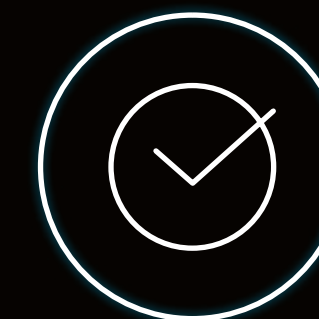
For multi-omics: Sequence native DNA/RNA of any length, giving richer biological insights



Faster Results



Complement rapid sample prep with data streaming and no need for batching



Accessible & Affordable

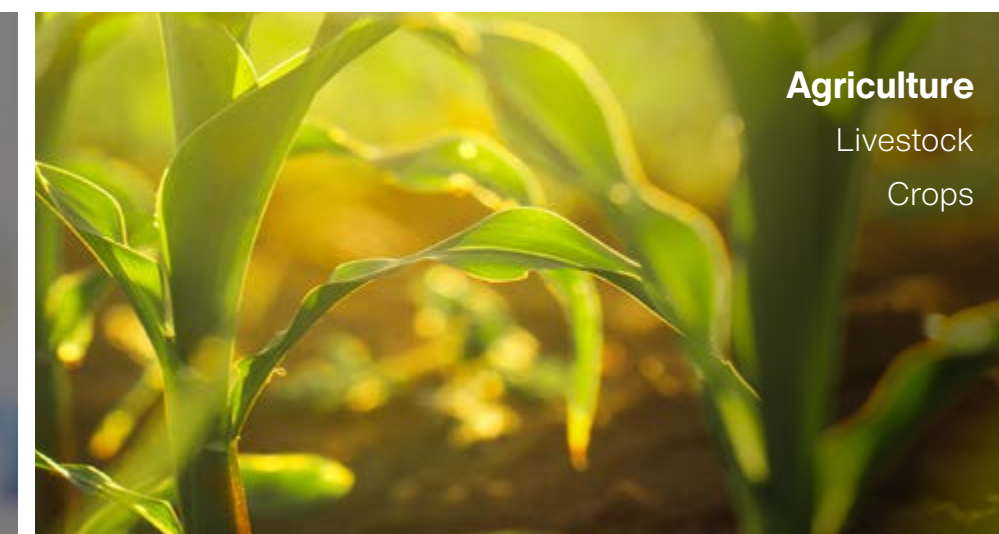
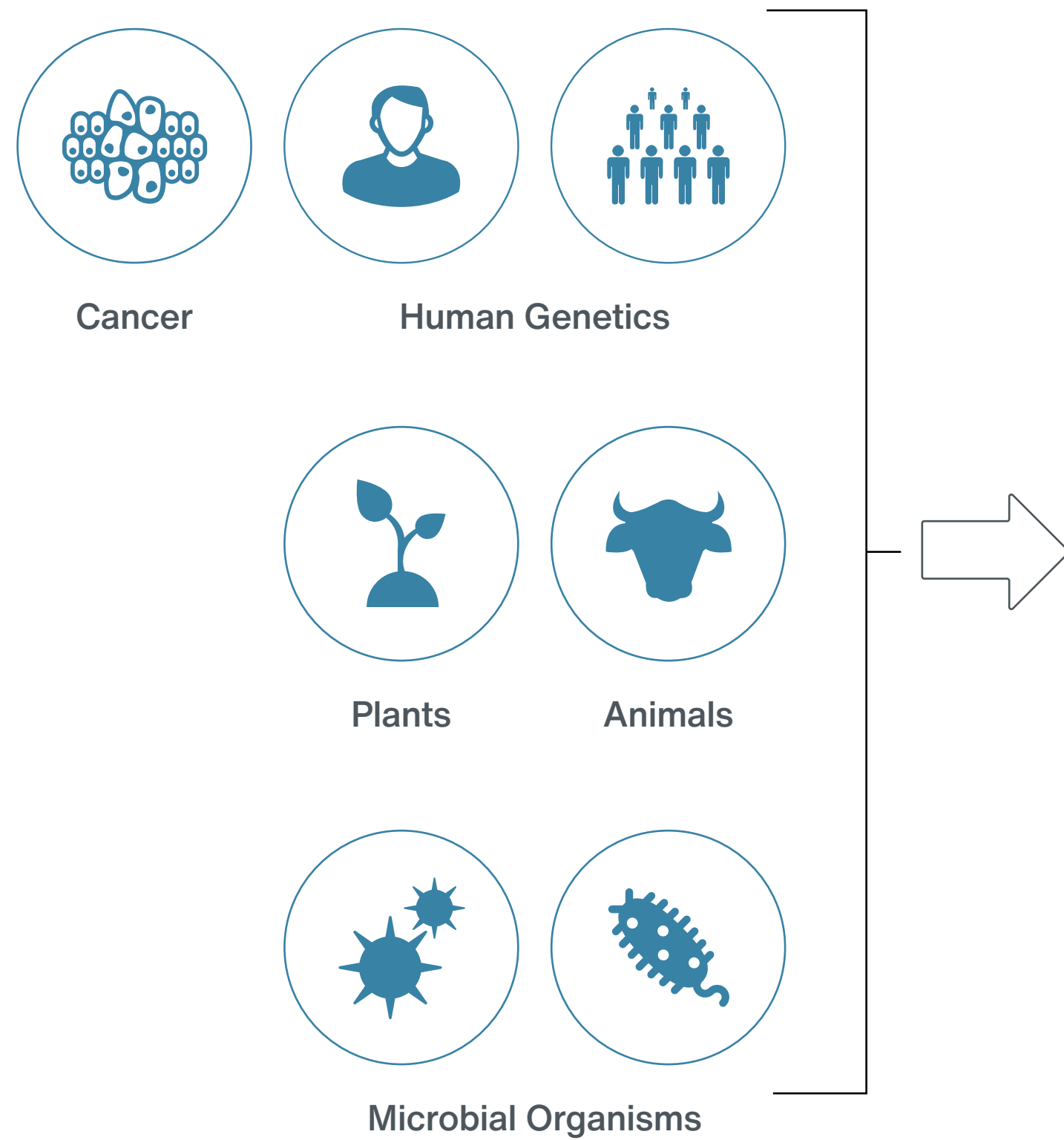


Fully accessible with starter pack model and competitive price per GB

Who we are, what we do: Applications of our technology

Life science research: Understanding the biology of any organism

As a foundation for emerging real-world impact:



Our vision, mission and values

Our vision

**To enable the analysis of anything,
by anyone, anywhere.**

Our mission

We empower people to explore and answer biological questions with our transformative technology platform.

Our purpose

By enabling biological insights, we strive to improve life on earth and beyond.

Our values

We are a mission-driven company, and we are guided by clear values that motivate our teams to deliver accessible, high-performance products that have positive, global impact. We have ambitious goals to develop market-leading, disruptive technology and grow customer communities around the world and across disciplines. With a clear vision and ambitious mindset, our culture is guided by the following values that we look for, and encourage in our teams.

With a strong and ambitious culture, we value:

- Determination
- Judgement
- Ability to positively contribute

Genomics can answer many questions about key global challenges, whether in health (human genetics, cancer, infectious disease, tissue typing for transplants, reproductive health, and common disease), agriculture, food, or the environment. These are priority focus areas as identified by the **United Nations' Sustainable Development Goals (SDGs)**.

Spotlight: Broadening access to genomics

We have built accessibility into our product and business design, so that we enable greater democratisation of access to biological information and access more scientific communities in more countries and environments. The thriving community of scientists using nanopore sequencing has published more than 13,000 peer-reviewed scientific papers to date, supported by our model of making our easy-to-use devices available for free: where users pay only for cost-effective consumables. To read more about how our products are designed to increase accessibility in genomics, see page **23**.



Accessibility in action: Tackling species conservation with portable sequencing

According to the International Union for Conservation of Nature (IUCN) Red List, more than 44,000 animal species on Earth are now threatened with extinction — an alarming increase of about 2,000 species since last year alone. Genomics has become indispensable in offering a deeper understanding of the biology, evolutionary history and environmental interactions of these endangered species and sequencing technology is crucial for guiding conservation efforts and informing future scientific research.



The ORG.one initiative, launched in 2021, is a forward-thinking project created by Oxford Nanopore aimed at democratising and localising the sequencing of critically endangered species. It empowers biologists to quickly analyse species close to the sample's origin, using portable nanopore sequencing tools. The program is also compiling a bank of knowledge for future studies and conservation management.

To date, more than 80 critically endangered species have been sequenced, with some made available for open access. In a significant move in 2023, Oxford Nanopore appointed Kara Dicks, a distinguished conservation geneticist, to spearhead the ORG.one programme and accelerate the compilation of reference genomes for highly threatened species. In May, the programme announced that it was expanding its mission to include a wider range of endangered species, aligning closely with the International Union for the Conservation of Nature's (IUCN) Red List. This strategic shift enhances support for conservation efforts towards species under the most severe threat categories: Endangered, Critically Endangered, and Extinct in the Wild. Through expanding the initiative, Oxford Nanopore is transforming how conservationists incorporate genomic tools and genetic data into conservation strategies and helping to combat global biodiversity loss.

Great Green Macaw
Ara ambiguus
CRITICALLY ENDANGERED

[Find out more](#)



“Embedding distributed sequencing capabilities in intensive care units across the NHS lays the groundwork for a world-leading public health surveillance system with profound implications for navigating future infectious diseases.”

Dr. Emma Stanton, Oxford Nanopore

CASE STUDY:

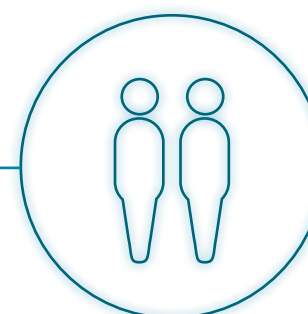
Guy’s and St. Thomas’ Hospital pilot programme showcases a world-first collaboration in infectious disease

For the past few years, Oxford Nanopore has embarked on a pioneering initiative in collaboration with Guy’s and St Thomas’ NHS Foundation Trust (GSTT), aimed at elevating infectious disease management. This world-first programme combines effective infectious disease management with rapid emerging pathogen detection and notification – and highlights the lifesaving benefits of accessible sequencing.

For the past three years, GSTT and Oxford Nanopore have carried out a pilot to gauge the implementation and effectiveness of rapidly testing and analysing the pathogens of critically ill patients in the National Health Service (NHS) intensive care. Researchers developed a workflow using nanopore sequencing to enable the rapid identification of all pathogens and their antimicrobial resistance in respiratory samples, leading to improved patient outcomes by facilitating more timely treatment decisions and providing an early detection mechanism for emerging pathogens. Nanopore sequencing was shown to be ideal for this rapid, accurate and targeted service in a research laboratory adjacent to the ICU.

Results of the pilot were published in the **American Journal of Respiratory and Critical Care Medicine**, showing that rapid testing resulted in a change in antibiotics for almost half of patients on the first day. The pilot also uncovered previously undetected infections in severely ill sepsis patients, presenting a paradigm shift in intensive care management practices. Furthermore, the identification of approximately 3% of pathogens triggered vital notifications to public health entities, augmenting surveillance efforts for emerging infections.

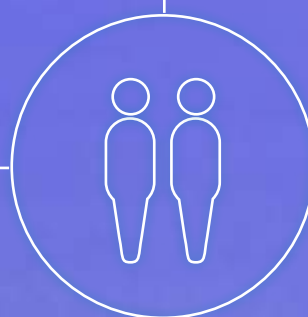
[Find out more](#)



CASE STUDY:

Nanopore Community Meetings

In celebration of the nanopore community and the continuous scientific success to come from researchers using the technology, Oxford Nanopore hosts flagship events each year – London Calling and Nanopore Community Meetings (NCM).



In 2023, we held three community meetings in London, Singapore and Houston for 3-day conferences during which a diverse array of scientists across a breadth of research areas networked, shared knowledge and took the stage to speak about their research using nanopore sequencing. These annual conferences provide a platform for researchers and scientists to demonstrate innovative approaches to common challenges and push one another to break boundaries in their work. This also helps us to further shape our technology with an iterative model that incorporates community feedback, which spurs innovation on our platform.

As with any career, science can be hierarchical. At London Calling and NCM, we have focused on breaking down these barriers and promoting the voices of young scientists who often drive the work. Ever since the inception of these events, researchers from all stages – from student to Nobel laureate – have been provided a platform to share their findings.

This year marked a further milestone for London Calling by earning its ISO 20121 accreditation.

We achieved this by working with event teams and suppliers who share our passion for reducing the environmental impact of our activities. We have minimised the use of single-use items on site, and food is sustainably and locally sourced wherever possible – with left over lunches sent to the Waterloo Soup Kitchen, and food waste sent to a local aerobic food digester facility, enabling the generation of useful biogas. After the event, plyboard items are reused to create dancefloors for community spaces. By making this a hybrid event, we can still converse and interact as a global scientific community, without excessive air miles and carbon dioxide footprints.

CASE STUDY:

Paediatric brain tumour types revealed mid-surgery with nanopore sequencing and AI

Central Nervous System (CNS) tumours pose significant challenges, particularly among children, due to their high fatality rates. The ability to classify these tumours quickly and accurately is key to informing lifesaving surgical decisions.

Surgeons must find a delicate balance between removing as much tumour tissue as possible to minimise the risk of recurrence and preserving the surrounding healthy brain tissue to maintain neurological function. Although this process has historically required two surgeries – the first to biopsy the tissue and the second to remove it – a team at UMC Utrecht in the Netherlands have shown that it's possible to do this all at once using nanopore sequencing.

In October, researchers published a paper in *Nature* unveiling a workflow that combined rapid sequencing and deep learning for real-time molecular classification of CNS tumours during surgery.

The team used Oxford Nanopore's sequencing technology to analyse the tumour tissue and identify methylation profiles accurately and in real-time, offering critical insights into the molecular characteristics of the tumour.

The researchers then paired those reads with 'Sturgeon', a deep-learning neural network trained to classify CNS tumours based on sparse methylation profiles.

By combining these two innovative technologies, the researchers were able to bring the time required for the entire process, from taking the biopsy to determining the tumour, down from one week to 60-90 minutes. This significant breakthrough highlights the potential for real-time sequencing to transform surgical decision-making, giving surgeons better tools to make critical and, in some cases, lifesaving decisions.

[Find out more](#)



CASE STUDY:

NIH Center for Alzheimer's and Related Dementias shows comprehensive, high accuracy sequencing approach

Our mission is to empower people to explore and answer biological questions with our transformative technology platform. This past September a team from the National Institutes of Health (NIH) Centre for Alzheimer's and Related Dementias (CARD), showed this in action by highlighting the power of nanopore sequencing to explore the genetic footprint of neurodegeneration.

In a publication in *Nature Methods*, researchers showcased a pioneering nanopore-based end-to-end pipeline that produced state-of-the-art single nucleotide polymorphism (SNP), structural variant and methylation calls, while being cost effective and scalable for large projects.

Their protocol is currently being used to sequence thousands of human genomes as part of the NIH CARD initiative, which aims to unravel the mysteries underlying Alzheimer's disease and related dementias. Researchers showed that they were able to analyse base modifications during the standard sequencing run, gaining haplotype-resolved methylation data without the need for a separate process.

Leveraging the high-throughput capabilities of the PromethION 48, which can sequence over 4,900 genomes annually, paired with advanced chemistry and flow cells, this paper paves the way for a new era of comprehensive and accurate genomic data at an unparalleled scale.

[Find out more](#)

Note from our CEO: Dr. Gordon Sanghera



We founded Oxford Nanopore with a goal of developing and deploying a new generation of electronics-based molecular sensing technology. In the 10 years since we launched our first product, the MinION, we have worked hard to improve our DNA/RNA sequencing platform so that it is best in class, providing highly accurate, fast, data-rich genetic information in an accessible and affordable design.

Our vision is to enable the analysis of anything by anyone, anywhere and this has framed our mission to empower people to explore and answer biological questions with our transformative technology platform.

Increasing access to valuable genetic information is foundational to our business model, and the scientific work by the research community is starting to actively address real-world problems in health (e.g. human genetics, cancer, infectious disease), agriculture, environment, education and more. Our goal is to have a profoundly positive and sustainable impact on society and the planet by enabling our customers to access the advanced scientific data to support their work, whether in fundamental scientific research or in future clinical and applied markets. We do this by breaking down barriers to acquiring and using our sophisticated sequencing tools. After our initial decade of fundamental R&D that resulted in novel technology features for broad communities – such as portability and the ability to sequence longer fragments of DNA/RNA – we have also invested deeply in continuous improvement of our technology. We strive to ensure that their accessibility is matched by the quality and comprehensive nature of the data generated on Oxford Nanopore sequencers, in addition to the small environmental footprint created by the devices themselves.

We are proud of the incredible innovation and productivity of our technology’s user community, who have published more than 13,000 peer-reviewed papers in scientific journals using nanopore sequencing. We are in a phase of rapid international growth, as our technology is used by more scientists to answer more biological questions. We are committed to growing responsibly.

Alongside our business strategy grounded in positive global impact, we have fully committed to building environmental, social and governance (ESG) considerations into our products and our business operations. We strive to grow in a responsible way, by protecting the planet through energy efficiency, product design and ensuring that our commitment to sustainable practices extends beyond our internal operations to encompass our entire value chain. Last year, we published our first Sustainability Report, which included the introduction of a new sustainability strategy – product, people, planet – to embed sustainability practices into our wider business strategy. We enhanced our emissions reporting, completed a full scope three emissions assessment, and

reported against TCFD for the first time. Alongside this, we continued to take actions to reduce our emissions intensity whilst growing the business, successfully reducing tonnes of CO₂e emitted per £m revenue by 12.7% in 2023, beating our target of 2.5% reduction.

This year, we have built on that strong foundation. In 2023, we concluded an in-depth materiality analysis to review and understand our priorities when addressing our environmental and social impacts and opportunities. We worked with an external consultant to identify the environmental and social issues that are more pertinent to Oxford Nanopore and our external stakeholders, including customers, investors and partners, and to ensure that the sustainability investments we make are aligned with those priorities.

This year, for the first time, we also published our first-ever Net Zero Transition Plan, joining the UK’s commitment of reaching net zero by 2050 in accordance with the Paris Agreement, through identifying and analysing several projects to help us reach that target.

Beyond our environmental footprint, we recognise that the success of our products is only possible through the strength of our team. We are incredibly proud of our people and the dynamic, interdisciplinary culture we have created and continue to foster through a variety of talent development programmes, which have continued to grow over the last year. We are committed to building sustainability considerations into the foundations of our long-term growth.

We strive to grow in a responsible way, by protecting the planet through energy efficiency, product design, and ensuring that our commitment to sustainable practices extends beyond our internal operations to encompass our entire value chain.

Dr. Gordon Sanghera
Chief Executive Officer

June 2024



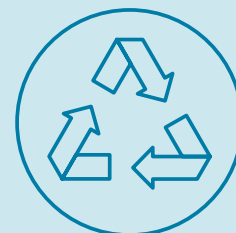
Product

Expanded our global collaboration with UPS healthcare, which now serves the Americas, APAC and Australia.



We continued to design and support a transformative technology platform that empowers people to answer biological questions.

We saw a 55% year-on-year increase in the tonnes of used products returned to 8.6 tonnes (7.4 tonnes of devices; 1.2 tonnes of consumables) in 2023



21% increase

A 21% year-on-year increase in the recycling of disposable flow cells returned to us. We were able to reuse one quarter of these for external customers, R&D activities, and in Configuration Test Cells (CTCs).

We published an updated Supply Chain Policy, which covers a range of environmental and social considerations to foster transparency and accountability throughout our supply chain.



56% of the 29 tonnes of packaging material we purchased for our primary products was renewable (made from a natural resource that can be replenished).

We hosted London Calling, an ISO 20121-accredited event, which enabled a diverse array of scientists across a breadth of research areas to network and share their research using nanopore sequencing.

25% reduction

Achieved a 25% reduction in plastics used in flow cell consumables through re-engineering the flow of materials.



People

36,050 total training hours

Staff training hours completed increased by 308% year-on-year, totalling 36,050 total training hours completed, of which 1,134 of these hours were completed through digital learning platforms.

After its launch in 2022, the Values in Action initiative progressed successfully in 2023 with three initiatives delivered including Inclusion Week.



A year-long executive business strategy programme for 39 senior leadership culminated in the identification and delivery of significant organisational effectiveness priorities.

333% increase

The roll out of a new internship programme in December 2023 resulted in 1,300 applicants by year end, reflecting a 333% increase from 300 applicants for the previous programme.

A new web-based platform was implemented, EcoOnline, which has made our EHS information more transparent and accessible.

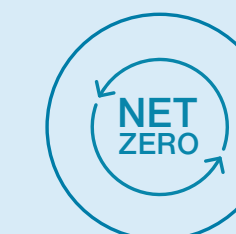


Successfully trained 33 staff to become mental health first aiders in 2023.



Planet

We submitted science-based targets and have disclosed a transition plan showing Oxford Nanopore's commitment to the UK's own net zero ambitions. We also reported against TCFD with full compliance.



Successfully reduced energy consumption through upgrading the boiler at Oxford Nanopore's Gosling building. We also performed lighting retrofits at our Florey and ECH buildings to improve energy efficiency.



12.7% CO₂e reduction

We have successfully reduced tonnes of CO₂e per £m revenue by 12.7% in 2023, beating our target of 2.5% reduction.

This year we hired a new programme manager, Kara Dicks, who brings 15 years' experience in conservation and molecular lab techniques to support the expansion and success of the ORG.one programme, designed to support sequencing of critically endangered species.

Externally published a standalone environmental policy in 2023 that covers biodiversity, climate change, energy, waste and water with a commitment to minimise the environmental impact of our products.



Sustainability strategy: materiality assessment

Our mission is to empower people to explore and answer biological questions with our transformative technology platform. Creating positive, lasting impact is at the core of what we do.

Alongside our company strategy, last year we launched our sustainability strategy as part of our commitment to apply a sustainability embedded mindset to our entire value chain, from our products to our team and to our global footprint.

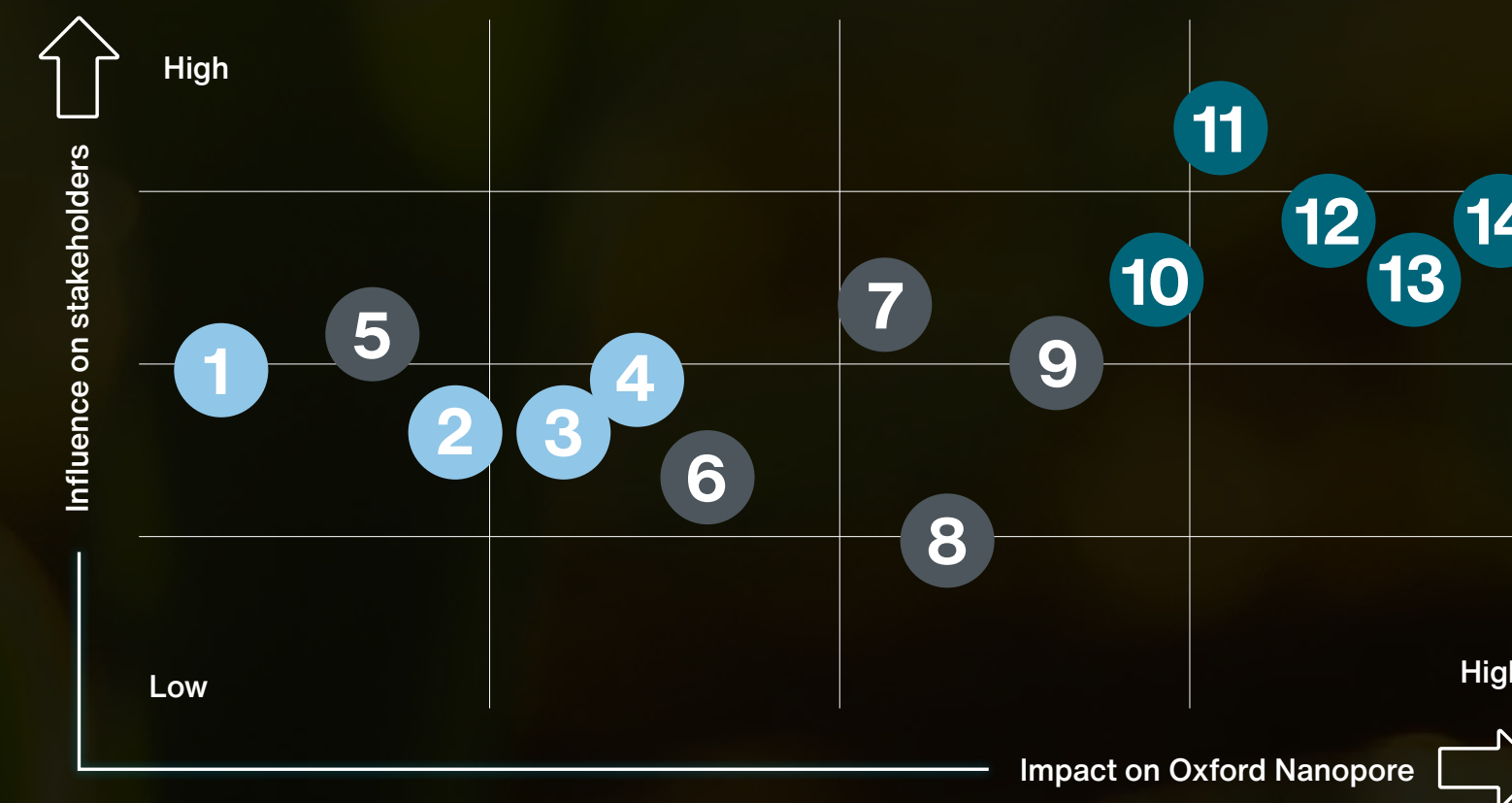
Materiality assessment

During FY23, we completed a materiality assessment to determine the company’s key sustainability issues. These are issues that have strategic relevance to the business, have a social, economic or environmental impact in the company’s value chain and/or have the most significance to stakeholders. The results of the assessment has provided guidance on what areas should be prioritised for measurement and disclosure in the sustainability report.

We held a workshop with our working group made up of senior leadership from across the business to develop a shortlist of 14 topics and prioritised their relative importance to the business. We also surveyed a selection of employees and external stakeholders, including customers, suppliers and investors to incorporate their views into our analysis and to help improve our understanding of issues that are of highest importance to them.

The results from the materiality assessment are shown in the matrix below. The 14 topics have been plotted against the two matrices, by the impact of the issue on our business (x-axis) and the level of influence the issue has on stakeholders (y-axis).

The most material issues for Oxford Nanopore are in the top right of the diagram. These all fall under the ‘Product’ pillar of our strategy which aligns with the structure of our previous sustainability report. However, the next grouping falls under the ‘People’ category and then ‘Planet’. There are some topics with cross over between Product and Planet where environmental impact will only occur through product design and innovation. It is important to note that all of these topics are important to Oxford Nanopore.



Planet

- 1 Climate change including emissions and energy management
- 2 Resource efficiency, packaging and circularity
- 3 Waste management
- 4 Responsible sourcing



People

- 5 Cybersecurity/IP and data protection
- 6 Talent and career management
- 7 Ethical conduct and compliance
- 8 Diversity and inclusion
- 9 Health, safety and wellbeing



Product

- 10 Biomedical ethics
- 11 Product responsibility (Environment and Social)
- 12 Product quality and safety
- 13 Access and impact
- 14 R&D and innovation



Sustainability strategy

Our business strategy

We are focused on delivering sustainable, long-term growth by making sequencing more valuable and more accessible to genomics researchers worldwide, building on research advances with methods that provide actionable insights for real-world problems across health, agriculture, food, and the environment.

Our long-term growth strategy is based on three strategic pillars:

- Disruptive innovation
- Commercial execution
- Operational excellence

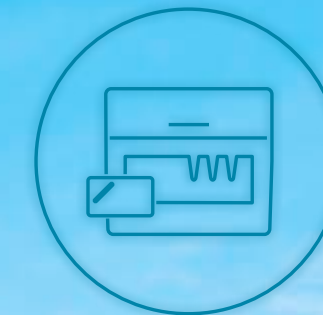
These strategic priorities are designed to create sustainable long-term growth by expanding our market share, growing existing markets, and by creating entirely new markets.

Our sustainability strategy

Launched last year, our sustainability strategy is part of our commitment to apply a sustainability-embedded mindset to our entire value chain — from our products to our team, and to our global footprint.

Inspired by the United Nations' Sustainable Development Goals

Our sustainability strategy is inspired by the United Nations' Sustainable Development Goals (SDGs). Our strategy takes into account the positive, global impact of our products, while acknowledging that we do not operate in isolation and must also account for the wider social, environmental, and economic implications of our wider business operations and value chain.



Product

STRATEGIC PILLAR 2 Sustainable innovation

Continuous innovation of our technology through creative and flexible approaches to maintaining our competitive advantage without sacrificing our core values.



People

STRATEGIC PILLAR 3 Inclusivity & wellbeing

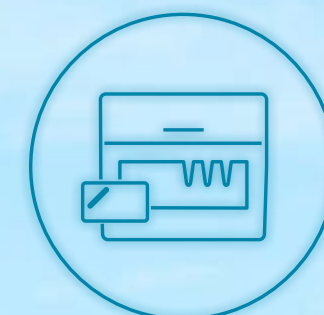
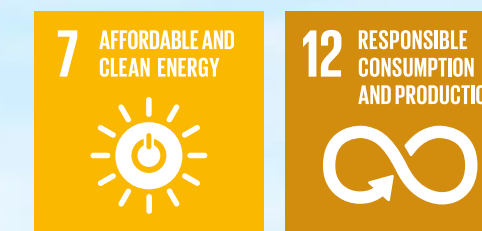
Promote a culture that is inclusive, embraces diversity and prioritises the development of our people and their wellbeing.



Planet

STRATEGIC PILLAR 4 Responsible scaling

Maintain high growth in a responsible way by protecting the planet through energy efficiency and ensuring that our commitment to sustainable practices extends beyond our internal operations and distribution to encompass our entire value chain.



Product






STRATEGIC PILLAR 1 Accessibility & impact

Design our business and innovate our products to increase accessibility within the broader scientific communities who are driving solutions to global challenges in health, food and the environment.





United Nations' Sustainable Development Goals

To ensure alignment with the global sustainability agenda, the below displays our highlights for 2023 and our updated commitments for 2024 that map back to the UN Sustainable Development Goals (SDGs) and related targets that matter most to Oxford Nanopore.

Focus area	SDG Goal	Relevant UN targets	Our relevant commitments	2023 highlights
Product	 3 GOOD HEALTH AND WELL-BEING	3.3	<ul style="list-style-type: none"> Continue to establish global support and logistics to fulfil our mission to enable anyone, anywhere to use Oxford Nanopore products, building on progress made to date Continue to iterate on product design to develop smaller, easier-to-use, and lower cost formats to enable more people in broader communities to use this technology Strengthen our relationships and collaborations with the education landscape, utilising these examples to showcase student research impact across demographics and geographies 	<ul style="list-style-type: none"> We continued to design and support a transformative technology platform that empowers people to answer biological questions
		3.9		
		3.b		
Planet	 14 LIFE BELOW WATER	14.1	<ul style="list-style-type: none"> Continue to establish global support and logistics to fulfil our mission to enable anyone, anywhere to use Oxford Nanopore products, building on progress made to date Continue to iterate on product design to develop smaller, easier-to-use, and lower cost formats to enable more people in broader communities to use this technology Strengthen our relationships and collaborations with the education landscape, utilising these examples to showcase student research impact across demographics and geographies 	<ul style="list-style-type: none"> We continued to design and support a transformative technology platform that empowers people to answer biological questions
		14.2		
		14.3		
Planet	 15 LIFE ON LAND	15.4	<ul style="list-style-type: none"> Continue to establish global support and logistics to fulfil our mission to enable anyone, anywhere to use Oxford Nanopore products, building on progress made to date Continue to iterate on product design to develop smaller, easier-to-use, and lower cost formats to enable more people in broader communities to use this technology Strengthen our relationships and collaborations with the education landscape, utilising these examples to showcase student research impact across demographics and geographies 	<ul style="list-style-type: none"> We continued to design and support a transformative technology platform that empowers people to answer biological questions
		15.5		
		15.6		
Planet	 7 AFFORDABLE AND CLEAN ENERGY	7.3	<ul style="list-style-type: none"> Repeating our target to reduce the tonnes of Scope 1 and 2 CO₂e emitted per £m revenue by 2.5% again in 2024 	<ul style="list-style-type: none"> Successfully reduced energy consumption through upgrading the boiler at Gosling We also performed lighting retrofits at Florey and ECH to improve energy efficiency We have successfully reduced tonnes of CO₂e per £m revenue by 12.7% in 2023, beating our target of 2.5% reduction
Planet	 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2 12.4 12.5 12.6	<ul style="list-style-type: none"> Minimise the environmental impact of our product packaging by: <ul style="list-style-type: none"> Further investing in recyclable materials and packaging aiming to continue to improve our packaging by moving up the waste hierarchy and/or by improving the % of recycled material. Ensure all recycled packaging states it is made of recycled content and includes the material symbol where feasible Improving the processes and systems for recording packaging to ensure scope and boundary is consistent and data/measures are accurate Compiling SKU data on all packaging weights by types and material component and continuing to reduce SKU packaging variability to reduce packaging waste Minimising packaging weight, while ensuring the protection of the product For sub-components, using reusable packaging for transport where feasible If using plastics, selecting those that are recyclable Strengthening our supply chain by identifying opportunities to replace disposables with reusables in all points of the value chain Align our EHS programmes with the international standards for the environment and occupational health and safety by 2025 Continue to work with all suppliers on core ESG compliance, ensuring that all key suppliers (covering 43% of total spend) meet our ESG standards on human rights, environmental protection, health and safety, compliance and more 	<ul style="list-style-type: none"> We saw a 55% year-on-year increase in the tonnes of used products returned to 8.6 tonnes (7.4 tonnes of devices; 1.2 tonnes of consumables) in 2023 A 21% year-on-year increase in the recycling of disposable flow cells returned to us. We were able to reuse one quarter of these for external customers, R&D activities, and in Configuration Test Cells (CTCs) 56% of the 29 tonnes of packaging material we purchased for our primary products was renewable (made from a natural resource that can be replenished)

United Nations' Sustainable Development Goals cont.

Focus area	SDG Goal	Relevant UN targets	Our relevant commitments	2023 highlights
			<ul style="list-style-type: none"> Align our ESG compliance in supply chain with best practice of the UN Global Compact As part of net zero commitments, a dedicated Supply Chain Engagement programme will be developed and launched during 2024 to provide training on the following topics: <ul style="list-style-type: none"> Carbon Footprint ISO 14001 EMS Systems Implementation Energy Audits Use the waste hierarchy to assess, and where feasible, implement projects to further enhance waste management practice across the organisation Increase the recycling and reuse of waste materials by 10% from 2023 totals at our Oxford and Harwell sites managed by AXIL-IS. 	
People		10.2 10.3 10.4	<ul style="list-style-type: none"> Continue running events through our Values in Action (ViA) initiative. From 2023, ViA commits to deliver the introduction of emergency hygiene products to all UK offices (rolling out globally by end of 2024), volunteer in the community and host wellbeing events in June for International Wellbeing Week Continue to strengthen the skills of our employees through ongoing customised learning and development. Bespoke training solutions will be devised and delivered for several teams needing to focus on key skills and build collective performance 	<ul style="list-style-type: none"> After its launch in 2022, the Values in Action initiative progressed successfully in 2023 with three initiatives delivered including Inclusion Week A year-long executive business strategy programme for 39 senior leadership members culminated in the identification and delivery of significant organisational effectiveness priorities Staff training hours completed increased by 308% year on year, totalling 36,050 training hours completed of which 1,134 of these hours were completed through LinkedIn Learning
People		5.5 5.b	<ul style="list-style-type: none"> Increase our Board gender diversity to at least 33% female representation 	<ul style="list-style-type: none"> Across our employees, the gender split at the end of 2023 was 43% female which is 2% higher than 2022

Sustainability governance

Key principles and governance highlights for 2023

We are committed to conducting all of our business in an honest and ethical manner, and we are proud of our ethical standards. These values and our approach to sustainability is directly linked to our business strategy and our vision to achieve the analysis of anything, by anyone, anywhere. Robust corporate governance and embedding a culture of risk identification and mitigation is a key part of achieving our strategy:

- We voluntarily comply with the UK Corporate Governance Code and we are currently fully compliant with the Code. We are committed to diversity, in its widest sense, both at Board level and throughout the Company. Last year, we made progress in fulfilling our target to reach 40% female representation on the Board by welcoming Kate Priestman, Dr. Sarah Fortune and Dr. Heather Preston as Non-Executive Directors to the board, who bring diversity of experience, nationality, technical expertise and strategic experience. Their appointment to the board brings our gender diversity to more than 33% as at 31 December 2023. In 2024 we are continuing to evolve the board and make further progress on our target.
- We have policies and procedures in place that reflect our ethical standards. In 2023, we introduced a new Code of Conduct, which is **published on our website**. The Code of Conduct applies to all directors, employees, consultants and temporary workers of Oxford Nanopore, and applies principles to help guide us to act legally, ethically and in line with stakeholder expectations.

Sustainability governance structure



Board

The Board has overall responsibility for sustainability.

This includes overseeing performance, and evaluating and monitoring risks. The Board will review our Sustainability Report prior to publication. ESG and sustainability is an agenda item for the Board at least twice each year. The Board is supported by the Audit and Risk Committee.

Operating Committee

The Operating Committee's role is to develop the Company's purpose, values, objectives, culture, and strategic and long-range plans. The Operating Committee also discusses and considers risks and reviews the Sustainability Report prior to approval by the Board.

Environmental Health & Safety (EHS)

An operational and strategic pathway feeds into the Board through the Operating Committee supported by the EHS Steering Committee.

The EHS Steering Committee meets on a bi-annual basis and is a cross-functional committee led by Dr. Gordon Sanghera (CEO), which has responsibility at management level over all environmental, health, and safety issues facing Oxford Nanopore, including climate-related risks and opportunities.

[Find out more](#)



Product

23 Accessibility
 27 Impact
 31 Sustainable innovation

35 Biomedical ethics
 36 Supply chain
 37 Sustainable innovation

Sustainable innovation has been key to developing a product line that fulfils our mission to increase global access to genomic information, while minimising our environmental impact.

2023 highlights

55%
increase

year-on-year in the used products returned. 8.6 tonnes (7.4 tonnes of devices; 1.2 tonnes of consumables) in 2023

21%
increase

year-on-year in the recycling of disposable flow cells returned to us. We reused 1/4 of these for external customers, R&D activities, and in Configuration Test Cells (CTCs)

25%
decrease

in plastics used in flow cell consumables through re-engineering the flow of materials

STRATEGIC PILLAR 1

Product: Accessibility and impact

Guiding principle

Design our business and innovate our products to increase accessibility within the broader scientific communities who are driving solutions to challenges in health, food and the environment.

Commitments

- Continue to establish global support and logistics to fulfil our mission to enable anyone, anywhere to use Oxford Nanopore products, building on progress made to date
- Continue to iterate on product design to develop smaller, easier to use, and lower cost formats to enable more people in broader communities to use this technology
- Strengthen our relationships and collaborations with the education landscape, utilising these examples to showcase student research impact across demographics and geographies

SDGs



Product: Accessibility and impact

With a goal to increase access to genomics and optimise for positive, global impact, we have designed our business model and developed our products to broaden accessibility for global scientific communities who are driving solutions to challenges in health, food and the environment. Our goal is to put these tools directly into the hands of existing scientific communities so that researchers no longer need to rely on external partners to perform their experiments.

Accessibility

The cost, size and complexity of legacy sequencing technologies have historically made genomic insight inaccessible to much of the world and have resulted in imbalances in the most developed countries. We have brought solutions to the market that increase access to high-quality sequencing by making available the devices for free and charging for flow cells (the consumable cartridges that contain the technology and chemistry needed for nanopore based sequencing and are run in conjunction with Oxford Nanopore's devices), in addition to consumables and software licenses. Our products are easy to use and portable, making nanopore sequencing technology accessible to anyone, anywhere. Accessibility at Oxford Nanopore also involves disrupting access to technology within hierarchical institutional structures in wealthier economies. Traditional academic research funding and even commercial sequencing mechanisms have been centred around a small number of expert institutions, with researchers traditionally sending their samples through these central laboratories.

This often causes significant time delays, removing the ability for real-time insights and rapid trial-and-error, which is useful in the scientific process. Oxford Nanopore technology removes the need for this centralised processing, enabling rapid, high-throughput insights to help answer whatever the scientific question, no matter the resources of the investigator. We have been proud to play a part in a changed market dynamic as researchers are increasingly able to take control of their own sequencing.





CASE STUDY:

Education program and collaboration with Cold Spring Harbor DNA Learning Center

In August, Oxford Nanopore Technologies launched a pioneering pilot program called “Education Beta,” the first-ever global initiative to integrate nanopore sequencing into educational settings. Aimed at enhancing life science literacy among future generations, this programme engaged 50 like-minded scientists who are passionate about incorporating sequencing into high school or undergraduate education.

Our goal is to broaden access to genomics. As part of that, we are committed to introducing strategies that expose people to sequencing earlier in their learning journey, which led to a strategic collaboration with the Cold Spring Harbor Laboratory DNA Learning Center (DNALC) in New York to develop accessible educational infrastructure, with the goal of making DNA sequencing routine in classrooms.

The DNALC is renowned for its expertise in genetics education and is working with Oxford Nanopore to adapt our user-friendly DNA sequencing technology for the classroom.

This collaboration aims to update DNALC’s DNA Subway bioinformatics platform and integrate nanopore sequencing into educator training programmes, prioritising institutions that serve historically underrepresented students. The initiative aims to build a vibrant community of young biologists by offering education-based pricing and fostering collaborations globally to explore innovative applications of nanopore sequencing in undergraduate and high school education.

[Find out more](#)



Cold Spring Harbor Laboratory
DNA LEARNING CENTER



CASE STUDY:

Sequencing became even more accessible with the Apple M3 launch

The world is changing rapidly and, with it, our understanding of the molecular building blocks of life. In September, Apple introduced the power and speed of M3 silicon chips, and spotlighted Oxford Nanopore DNA/RNA sequencing devices as a companion technology that naturally partners with the new Macbook Pro™ and iMac™, enabling more people, anywhere, to quickly uncover new insights about living systems.

Living beings, from tiny microbes to giant whales, depend on DNA, RNA, and proteins to function. These biological molecules determine how organisms grow, adapt, and thrive. Oxford Nanopore has designed a platform capable of reading the DNA and RNA of anything in real-time. This gives the scientific community unparalleled insights into the nature, health, and evolution of organisms, and in the future could transform complex challenges such as how we treat disease and protect the planet.

While traditional sequencing platforms are large, complex to run and designed for use only in centralised labs, the founders of Oxford Nanopore had a different vision: a small, portable tool that would enable real-time sequencing anywhere, be it a high-tech lab, the middle of the ocean, or even in space. Our sequencing devices are the first to be compact enough to fit in a backpack or on a makeshift workbench in a remote location.

With Apple's latest M3 silicon chip series, sequencing becomes not just powerful, but more globally accessible.

The M3 provides the rapid computational horsepower to support nanopore technology, seamlessly integrating with software that processes the reads from our MinION and PromethION 2 Solo devices. That data is then turned into usable insight through a range of software applications. Now, anyone with the latest iMac and Macbook Pro featuring these chips will be able to access the same high-definition biological data with only a sequencer and a high-efficiency Mac computer.

Today, our devices are used for scientific discovery. More and more, this distributed sequencing approach is making it possible to obtain accessible and rapid biological insights at the source with impact in areas such as cancer, rare disease, infections, conservation, agriculture and more. We envision a future where this technology will be routinely used in clinical care.

[Find out more](#)

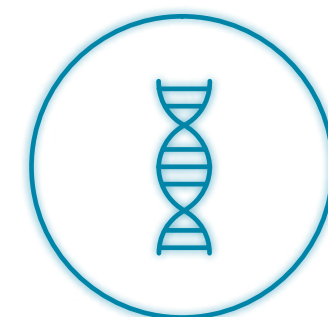


Product: Impact

Oxford Nanopore technology is positioned to provide solutions to many of the world's greatest challenges.

Scientists continue to use our technology in more traditional laboratory environments in universities, industry and government facilities, but many are also expanding the reach of science by sequencing in new environments such as jungles, deserts, in the Antarctic, and on the International Space Station.

Our technology provides a more comprehensive insight into genomics, with the ability to read short to long fragments of DNA, as well as being able to look directly at the individual bases that make up DNA and RNA in a way not possible using other sequencing technology. As a result, a new generation of research is pushing biological science further than previously possible.



Impact in biomedical research and human health

Impact

Infectious disease: rapidly understanding the genomic sequence of pathogens can identify the disease and any drug-resistance characteristics. Oxford Nanopore tech rapidly characterises pathogens, on-demand and in environments near the sample

Human genetics: from discovery of new drug targets for various diseases, to understanding the cause of rare disease and characterising tissue for rapid transplants, the impact of comprehensive genomic insights is broad

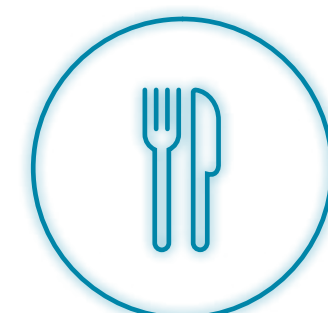
Cancer: DNA/RNA is altered in cancer. Understanding those changes can help design best treatment pathways and identify new drug candidates. Oxford Nanopore tech provides the most comprehensive characterisation of cancer DNA, including methylation (chemical corruption of the DNA), and 'liquid biopsy' samples that identify cancer markers directly from blood

Why is this important?

Lower respiratory infections remain the fourth most common cause of death. Infectious diseases including tuberculosis, viral hepatitis, rare disease, and sexually-transmitted infections will kill an estimated four million people in 2020

It is estimated that 5.3% of newborns will suffer from a genetic disorder and 34% of all disease-causing variation is made up of variants that are larger than a single base-pair substitution, making long sequencing reads vital

Worldwide, there will be 28 million new cases of cancer each year by 2040



Food security and agriculture

Genomics can help grow more efficient crop/livestock, reduce food spoilage and enable quality assurance. Oxford Nanopore tech provides accessible, high-performance analyses to users in broad environments

Around 795 million people face hunger daily and more than two billion people lack vital micronutrients, affecting their health and life expectancy. 30% of food production is lost to pests and pathogens



Environment

Oxford Nanopore tech is enabling researchers to find out quickly, and often *in situ*, if a species is endangered and how to support it. Our tech also helps to further knowledge of changing environments such as the ocean microbiome

Three-quarters of the land-based environment and about 66% of the marine environment have been significantly altered by human actions and one million species are now threatened with extinction. Loss of biodiversity is therefore shown to be not only an environmental issue, but also a developmental, economic, security, social and moral issue as well



CASE STUDY:

Mayo Clinic and Oxford Nanopore collaborate to advance precision medicine for cancer and genetic disorders

As part of Oxford Nanopore's goal to positively impact clinical care, this year the company announced a collaboration with Mayo Clinic aimed at advancing precision medicine for cancer and genetic disorders. This multi-year project will bring nanopore sequencing technology into clinical laboratories at the Mayo Clinic to enhance disease understanding and patient care.

The collaboration, based on a shared vision of improving clinical decision-making, will focus on developing new clinical tests across various areas, including translational research in human genetics and the detection of genetic predispositions to cancer.

By combining Mayo Clinic's expertise in clinical and diagnostic testing with Oxford Nanopore's innovative sequencing capabilities, the collaboration will position both entities at the forefront of precision medicine advancements with the goal of improving patient care. The research and development will be led out of the Mayo Clinic's campus in Rochester, Minnesota.

[Find out more](#)





CASE STUDY:

Accelerating research into quality control testing for mRNA vaccines

The University of Queensland, in collaboration with Oxford Nanopore Technologies, is spearheading research to advance quality control testing for mRNA vaccines and therapies.

Leveraging Oxford Nanopore's state-of-the-art sequencing technology, researchers are aiming to streamline and enhance the quality assurance process for mRNA-based vaccines and therapeutics globally.

The BASE team at UQ's Australian Institute for Bioengineering and Nanotechnology (AIBN), renowned for its expertise in mRNA research, are utilising nanopore-based sequencing to optimise performance and expedite the assessment of mRNA vaccine quality attributes. This innovative approach, showcased in a recent study published in *Nature Communications*, enables real-time analysis of individual mRNA vaccine molecules, ensuring precise measurement of sequence identity and integrity.

Dr. Helen Gunter, a researcher at BASE mRNA technologies, highlighted the potential for nanopore sequencing to revolutionise mRNA vaccine analysis, offering rapid detection of quality control issues crucial during pandemics or personalised therapy development. The collaboration underscores the growing importance of mRNA-based therapeutics, with projections estimating the market's value to reach \$US68 billion by 2030.

[Find out more](#)

CASE STUDY:

WHO endorses Oxford Nanopore's Tuberculosis test

Tuberculosis (TB), one of the world's deadliest infectious diseases (second only to COVID-19), remains a significant public health challenge, exacerbated by the rise of drug-resistant strains. Traditional methods for detecting drug-resistant TB (DR-TB) are slow and ineffective, hindering the global fight against TB. To address this, Oxford Nanopore, in collaboration with the Quadram Institute Bioscience (QIB), are developing an innovative and rapid sequencing-based test to identify TB drug resistance, which received endorsement from the World Health Organization (WHO) in July.

Oxford Nanopore's rapid test can detect drug resistance mutations in the TB genome directly from DNA in sputum samples, offering a major leap forward in how TB is diagnosed and treated.

Capable of delivering results in just five hours, it sets the stage for quick, tailored treatment strategies, significantly improving outcomes for patients.

In its endorsement, the WHO noted that this solution meets the essential performance criteria for detecting drug resistance following a TB diagnosis, which could aid the decision-making process for treating DR-TB. This WHO endorsement marks one of the first for a sequencing-based test, underscoring a critical advancement in combating one of the most enduring public health challenges globally.

[Find out more](#)



**World Health
Organization**



**Quadram
Institute**

Science ◀ Health ◀
Food ◀ Innovation

STRATEGIC PILLAR 2

Product: Sustainable innovation

Guiding principle

Continuous innovation of our technology through creative and flexible approaches to maintaining our competitive advantage without sacrificing our core values.

Commitments

Minimise the environmental impact of our product packaging by:

- Further investing in recyclable materials and packaging, aiming to continue to improve our packaging by moving up the waste hierarchy and/or by improving the percentage of recycled material. Ensure all recycled packaging states it is made of recycled content and includes the material symbol where feasible
- Improving the processes and systems for recording packaging to ensure scope and boundary is consistent and data/measures are accurate
- Compiling SKU data on all packaging weights by types and material component and continuing to reduce SKU packaging variability to reduce packaging waste
- Minimising packaging weight, while ensuring product protection
- Transporting sub-components using reusable packaging where feasible
- If using plastics, selecting those that are recyclable
- Strengthening our supply chain by identifying opportunities to replace disposables with reusables in all points of the value chain

SDGs



Product: Sustainable innovation



Resource efficiency and materials

Oxford Nanopore is committed to conducting our operations and producing our devices in the most sustainable and resource-efficient manner possible. Oxford Nanopore products use very little power to operate relative to the output in sequencing data, making them inherently energy efficient. We analysed the energy consumption of Oxford Nanopore's product range at max power consumption, meaning all positions on the instrument simultaneously acquiring raw sequencing data and basecalling with the highest accuracy models in real time.

In this theoretical analysis, we found that power consumption ranged from .135 kW for the MinION Mk1B up to 3.45 kW for a PromethION 48 A-Series. By comparison, the average dishwasher uses about .91 kWh per dishwashing cycle.

We have focused on internal processes, switching the packaging material in our distribution process, as well as increasing circularity in the life cycle of our products. Oxford Nanopore is further committed to improving the environmental performance of our products.

We are constantly reviewing and optimising our manufacturing processes and use of materials to reduce our environmental impact. In 2023, we maximised the circularity of our raw materials to deliver resource efficiency by taking back 8.6 tonnes of our products (7.4 tonnes of devices; 1.2 tonnes of consumables). In 2022, we took back 5.2 tonnes (3.3 tonnes of devices; 1.9 tonnes of consumables).

We have allocated 'return bins' since 2020 to make recycling used flow cells even easier for our customers. This minimises the transportation of return items and enables us to recycle some of the electronic components and finite materials. The programme continues to grow and, in 2023, we saw a 21% year-on-year increase in the recycling of disposable flow cells returned to us and we were able to reuse a quarter of those for external customers, R&D activities, and in Configuration Test Cells (CTCs). The remainder are either kept for future use or the electronic components and finite materials are recycled. Any materials that cannot be reused are disposed of responsibly.

Boosting innovation

We continue to integrate sustainability into our product design and delivery as new materials and components become available. We consider and respond to environmental issues throughout every stage of our product lifecycle, and our high-efficiency products play a role in helping the economy move to a low-carbon future.

Packaging

As part of our ongoing efforts to increase the accessibility of our products to communities around the world, we have worked toward the goal of removing our reliance on cold chain distribution. That said, our products still need to be kept within a certain temperature range during distribution. Conventional cooling methods commonly found in the biotechnology industry typically consist of single-use non-recyclable polystyrene containers filled with dry ice or cold packs, the disposal of which has significant negative impacts on the environment. To ensure our packing is as recyclable and sustainable as possible, starting in 2017, we began insulating our products with Woolcool®, a recyclable cardboard container with a wool-based insulator to keep products at the required temperature, without the need for polystyrene. In 2023, we continued to insulate our products with Woolcool® and make best use of Credo Boxes (reusable iceless insulating containers) resulting in an avoidance of plastic use of 11.3 tonnes. From the 29 tonnes of packaging material we purchased for our primary products, 16 tonnes (56%) were renewable (made from a natural resource that can be replenished). Overall, in 2023 across all our products and services, we were able to source 82 tonnes (72%) of packaging from recycled materials. Additionally, the nanopore development team has worked to deliver reagent kits that are suitable for ambient or cool shipping. This enables them to be shipped alongside our consumable flow cells and reduces the number of parcels required to ship compared to other technologies that have to ship their consumables and reagents separately.

Product: Sustainable innovation

Quality

Oxford Nanopore is committed to providing high-quality products. We have a Quality Management System (QMS) in place, which was certified to ISO 9001:2015 at year end, enabling more customers who may be operating in regulated environments to work with nanopore sequencing. This certification covers 11 of our products which are intended for use in regulated environments, however we adopt the ISO procedures and practices where appropriate for out-of-scope products also. Many of our QMS Standard Operating Procedures and processes are applied company-wide.

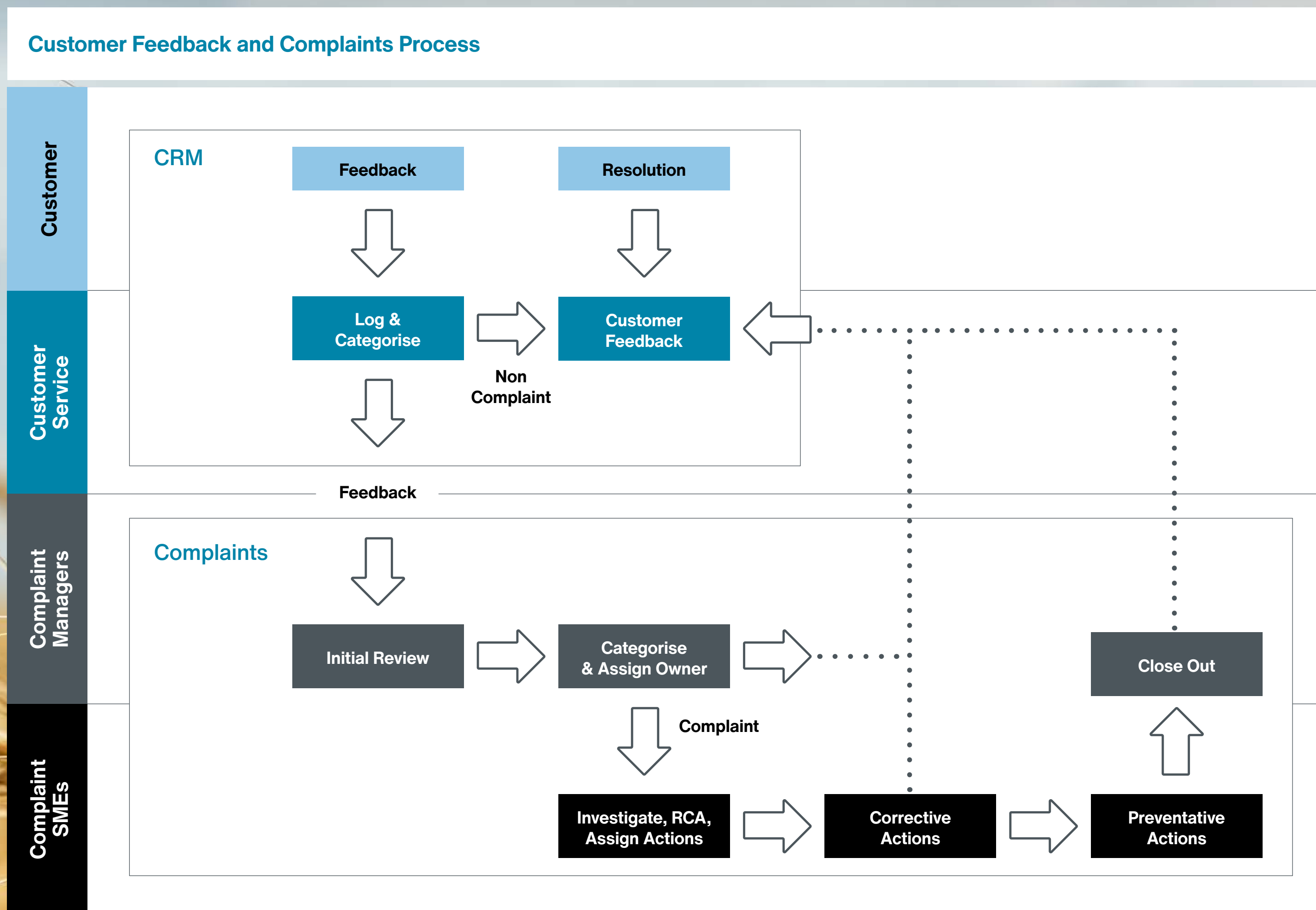
Our Quality Policy outlines our commitment to:

- Meet and exceed customer expectations to deliver high-quality products and services
- Maintain compliance to applicable external regulations and standards
- Ensure through quality system feedback processes that the voice of the customer (internal and external) is heard throughout the organisation so opportunities for improvement are identified and acted upon

During the year, 17 internal quality audits were carried out (2022:7).

Customer feedback can be submitted through a range of channels including email, LiveChat, phone and the nanopore community website. All feedback is recorded and stored on our CRM system and monitored by our customer service team. Where possible complaint managers will offer an immediate resolution so that the customer may continue their work. Root cause analysis is undertaken by subject matter experts. Customer feedback and complaints are tracked and categorised for trend analysis with all open and recently closed cases reviewed monthly.

There have been no product recalls in the current or last two fiscal years.



**CASE STUDY:**

Building sustainability into product development

At Oxford Nanopore, sustainability isn't just a buzzword; it's a core value ingrained throughout the company's operations. This commitment is reflected by Tara Kent, Director of Product Management Operations, whose passion for sustainability drives innovation and environmentally-conscious decisions throughout Oxford Nanopore's product line.

From shipping containers to packaging solutions, Tara and her fellow product and sourcing leads have made key decisions in recent years aimed at reducing the environmental impact of products and packaging, while sourcing from the right places, all in alignment with business objectives.

“My belief is that if we put processes in place to get good quality products in, we should produce good quality products out and improve customer satisfaction. I have two children who will grow up in this world, I'm aware of the legacy I will leave and the impact I have both on my own actions and the company's as well.”

Tara's role is pivotal in integrating sustainability considerations into product and packaging design. She recently championed the redesign of kit packaging, eliminating non-recyclable components such as UV dots, and optimising sizes to minimise waste. She also worked to develop more sustainable product containers, transitioning from cardboard boxes to reusable Pelicases for smaller devices. Recently, the team also evolved from including multiple small vials in library prep kits to larger, more eco-friendly bottles, reducing plastic usage significantly.

Tara is grateful to work for a company that embraces talent development and instilling a sustainability mindset through the Lean Six Sigma course, a process improvement approach to reducing waste and defects with the aim to improve employee and company performance. She's currently working towards her green belt alongside other colleagues.

For Tara, sustainability is about mitigating environmental impact and creating a better world for future generations. Her dedication to finding sustainable solutions reflects Oxford Nanopore's ethos of responsible innovation, not only in its breakthrough technology but also in its environmental stewardship.

Product: Biomedical ethics

Oxford Nanopore is committed to promoting and conducting research involving human samples or data in accordance with all applicable laws and regulations, and in line with the highest standards of ethical conduct. Oxford Nanopore does not support the use of its technology for purposes that may deliberately or illegally harm human health or otherwise deliberately infringe on human rights, for example for the creation of biological weapons or deliberate ethical misuse of genomic data. Oxford Nanopore employees should not engage in research that supports any such uses.

The company has developed an ethics policy that sets out Oxford Nanopore's approach to ethical conduct within research involving human samples and/or data. To hold itself accountable, the Company has several governing bodies in place to ensure adherence to the policy, including:

- A designated Ethics Committee, which oversees all matters relating to the conduct of ethical research within Oxford Nanopore. The committee meets a minimum of twice yearly, with additional meetings scheduled as needed
- The Human Physical Sample Committee reviews projects involving human samples and approves commencement of projects involving the acquisition and use of human samples within the Company based on review of information provided by the project team in relation to relevant policies
- The Board of the Company is responsible for ensuring that Oxford Nanopore has appropriate technical and organisational measures in place designed to enable compliance with this policy



Product: Supply Chain

Responsible sourcing

Our commitment to sustainable practices extends beyond our internal operations and distribution, to encompass our entire value chain. Oxford Nanopore seeks to work with worldwide suppliers who operate under principles that are similar to Oxford Nanopore's business conduct and ethics.



Supply Chain Code of Conduct

Oxford Nanopore has a Supply Chain Code of Conduct in place, which covers all of our suppliers and includes environmental factors, such as the reduction of waste, pollution, water, and energy use.

At Oxford Nanopore, we are committed to promoting resource efficiency in our supply chain. This includes reducing raw material consumption and utilising sustainable alternatives whenever feasible. We also hold our suppliers accountable for taking measurable steps to report and reduce their emissions, aligning with our own efforts to combat global warming.

We acknowledge the importance of biodiversity conservation and expect our supply chain to minimise negative impacts on ecosystems and natural habitats. Sustainable sourcing practices and conservation efforts are essential components in this commitment. Social topics are also covered in the Supply Chain Code of Conduct including minimum living wages, maximum working hours and eliminating excessive working hours, rights to collective bargaining, acceptable living conditions, non-discrimination, corporal punishment and harassment.

We have implemented a robust, risk-based approach to managing ESG within our supply chains. It is important that Oxford Nanopore works with suppliers who have a consistent set of ethical standards who conduct business legally, fairly, and with integrity. All suppliers must comply with the laws of applicable legal systems and apply the United Nations Guiding Principles on Business and Human Rights to all business operations, which we monitor through a combination of self-assessment questionnaires, onsite or remote audits and third-party web verification to identify potential infringement/risks.

We are dedicated to engaging with suppliers who uphold high ethical standards, prioritise environmental stewardship and embrace social responsibility.

Product:

Sustainable innovation

In 2023, we hired an Associate Director, ESG and Risk who is tasked with improving our ESG and Risk processes and streamlining several elements of the supplier review process, allowing us to increase the audit coverage of suppliers and obtain substantial supplier data across both environment and social factors for subsequent review and action where appropriate. This leader is also leading the governance layer of our ESG and Risk related procurement processes to review key data and meet regularly with members of the risk, legal and procurement teams. This committee will report up to the COO if there are any non-conformances that require further action from the Board.

Thorough risk assessments of all our global key suppliers, which comprised 43% of our total spend, were undertaken through a combination of self-assessment questionnaires, onsite or remote audits and third-party AI tools to identify risks early. All existing key suppliers are assessed annually for their environmental policies and procedures.

If the ESG disclosures submitted are found to be incomplete or out of date, then further audits can be carried out. Non-key suppliers, making up the remaining 57% of spend, were also risk assessed and invited to make disclosures against the same set of environmental parameters and social factors. Further follow up actions are being investigated for 2024. Non-compliance with ESG policies results in escalation to the Procurement Director and VP of Supply Chain, and where remedial action is not appropriate or sufficient, trading could cease.

We had a 100% response rate on the core ESG surveys and all suppliers complied with the core requirements across these topics. The next phase of this exercise is to investigate sub-tier suppliers to ensure our entire supply chains are lower risk. As well as helping to ensure we are confident

on ESG compliance throughout our supply chains, it will also reduce our risk exposure due to a changing geopolitical environment. This is an extensive exercise which will take several years to mature.

Confirmation of compliance with ESG standards are also sought from all new suppliers including human rights, forced and child labour, anti-bribery and anti-corruption, and conflicts of interest.

As part of our net zero commitments and supporting science-based targets, a dedicated Supply Chain Engagement programme will be developed and launched during 2024. This will assist our suppliers in developing and improving their own environmental monitoring and improvement processes that will drive decarbonisation in the supply chain and align them with Oxford Nanopore's own environmental ambitions. The programme will include elements to improve carbon footprint reporting, ISO 14001, environmental management systems implementation and energy audits.

Engagement in various cross-industry workshops were undertaken during events over the past year at the edie 23 net zero & Sustainability Forum, Innovation Next, National Oceanography Centre Climate Action Parliamentary reception and webinars from the UN Global Compact to improve on supply chain environmental impacts. Our Associate Director, Procurement ESG and Risk was invited as a guest speaker to present on topics related to supply chain decarbonisation, carbon policy, climate change mitigation and biodiversity conservation. These industry stakeholder discussions featured panels and some of the workshops also explored ESG topics on circular economy, supply chains and technology for good.

Conflict minerals

Oxford Nanopore is committed to the responsible sourcing of minerals throughout its global supply chain. We have a Conflict Minerals Policy in place, approved by the Board. Oxford Nanopore is not mandated to directly register with the U.S. Securities and Exchange Commission ('SEC') on its dealings with conflict minerals. However, as a responsible organisation, we aim to follow best practice in all of our dealings.

We routinely evaluate our suppliers to ensure that they are adhering to our expectations and values. We will immediately suspend or discontinue engagement with any suppliers where we identify a reasonable risk that they are sourcing from, or linked to, any party committing human rights abuses.

People

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Building an inclusive culture that supports the health, wellbeing and development of our people is a key driver to the success of our business.

2023 highlights

308%
increase

in staff training hours completed, totalling 36,050 hours completed, 1,134 of which were completed through LinkedIn Learning

39
senior leaders

participated in a business strategy programme that culminated in the identification and delivery of significant organisational effectiveness priorities

333%
increase

in applicants after the roll out of a new internship programme. Rising to 1,300 applicants by year-end, from 300 applicants for the previous programme

People:

Health and safety

Health and safety

Health and safety is of paramount importance to us as a responsible employer. We strive to safeguard the health, safety and wellbeing of all our employees, including visitors and contractors. Our EHS Policy sets out our arrangements for health and safety, with the Board having ultimate responsibility and accountability. Performance against the objectives of the EHS policy is reviewed at least every six months at Oxford Nanopore EHS Steering Committee meetings.

Leaders at all levels of the organisation have been trained and are required to communicate Oxford Nanopore health and safety expectations and ensure appropriate resources are provided to achieve a high health and safety performance standard. Oxford Nanopore is committed to ensuring awareness about health and safety issues through our internal Oxford Nanopore Resources Centre which is available to all employees, managerial meetings, committees and EHS representatives. Oxford Nanopore is committed to providing safe and healthy working conditions and implementing EHS objectives that drive continuous improvement of EHS programmes and performance across all aspects of the business. This includes collaboration with employees on EHS issues.

All employees are responsible for their health and safety through compliance with Oxford Nanopore's EHS policy, procedures, and EHS performance expectations. Employees are also responsible for the health and safety of their colleagues, contractors, and visitors by highlighting and reporting health and safety risks and concerns, and where safe to do so, taking action.

Safety first

Oxford Nanopore is in the process of developing an EHS management system, and we are continuing to align our EHS programmes with the international standards for the environment (ISO 14001) and occupational health and safety (ISO 45001) with the objective to be certified during 2025. We provide all of our employees with health and safety training, including general and role specific EHS training. General training includes EHS induction, manual handling, ergonomics, fire and evacuation procedures. Employees are also given specific training based upon their role, such as managerial responsibilities and accountability awareness, best laboratory practices, first aid and fire marshal training.



People:

Health and safety

Safety performance

Oxford Nanopore is committed to preventing occupational accidents, diseases and illnesses to ultimately achieve an accident-free workplace. We target zero harm in our workplace. Our commitment also includes preventing exposure to hazardous substances and improving workstation ergonomics. Health and Safety hazards are identified and associated controls enacted; the process is documented and disseminated through formal risk assessments. Health and Safety metrics are recorded using EcoOnline and we actively encourage the reporting of injuries, incidents, improvement suggestions, near misses and hazards. There have been no fatalities of employees or contractors in 2023 and in all prior years. Our Lost Time Incident Rate (LTIR) is defined as total number of lost-time incidents in a year, divided by the total number of hours worked, multiplied by 200,000. We define a lost-time incident as an incident that occurs when a worker sustains a lost-time injury that results in time off from work, or loss of productive work. In FY23, we reported no Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) incidents making our RIDDOR rate zero.

We continued to carry out EHS inspections, which has allowed Oxford Nanopore to better understand performance and prioritise areas for improvements and best practice. 2023 saw even further improvements in process and enhancement of the health and safety modules. The culture of reporting is positive and reporting continues to be more and more consistent and complete. This has meant issues are identified quickly and reporting in a single platform provides us with unity and clarity for all levels of management and employment.

Environmental modules previously provided by EcoOnline have been retired. Consequently, we are looking at alternative options in 2024 to gain the benefits we have seen in previous Health and Safety reporting. This will aim to include environmental data such as energy, water, and waste, where available including documents, training, checklists and environment, which will enhance the worth of the data database as a one-stop EHS portal for Oxford Nanopore.

Number of staff trained on health and safety standards in 2023

Type of training	Number of staff
Fire Safety	267
Manual Handling	208
Workstation DSE	240
Laboratory Safety	144
COSHH	436
Risk Assessment	255
Permit to Work	87
Auditor/Inspection	114
IOSH Managing Safely	10
IOSH Leading Safely	10
First Aid	14
Spills	29
Mental Health for Managers	175
Mental Health First Aiders	33
Fire Marshal	60
Transport of Dangerous Goods	44

Health and wellbeing

We believe that our employees' wellbeing is a critical component to the company's success.

Both physical and mental wellbeing are of importance to us, and we take steps to proactively assist all of our employees. We recognise the critical importance of mental health to the overall wellbeing of our workplace and commit to promoting wellbeing across our business. We aim to make sure that we provide our employees with the support they need to stay healthy and to have easy access to help, advice, and treatment when they may need it.

We have various programmes and provide a range of benefits to support their health and wellbeing, including private medical insurance and an Employee Assistance Programme (EAP). The EAP is an employee benefit designed to help employees deal with personal and professional problems, which could be affecting their home or work life, health, and general wellbeing.

We consistently review the range of support we provide and to continue our focus on employee's mental health. To help ensure our employee's mental wellbeing, in 2023, we provided 33 employees with Mental Health First Aid (MHFA) training. We look after our employees, support their training and development, recognise cultural differences, respect their human rights, and promote a fair working environment with equal opportunities for all.

Our people believe in our purpose and vision. Effective engagement aligns employees with our strong culture and core values, ensuring everyone works together towards a shared vision.

CASE STUDY:

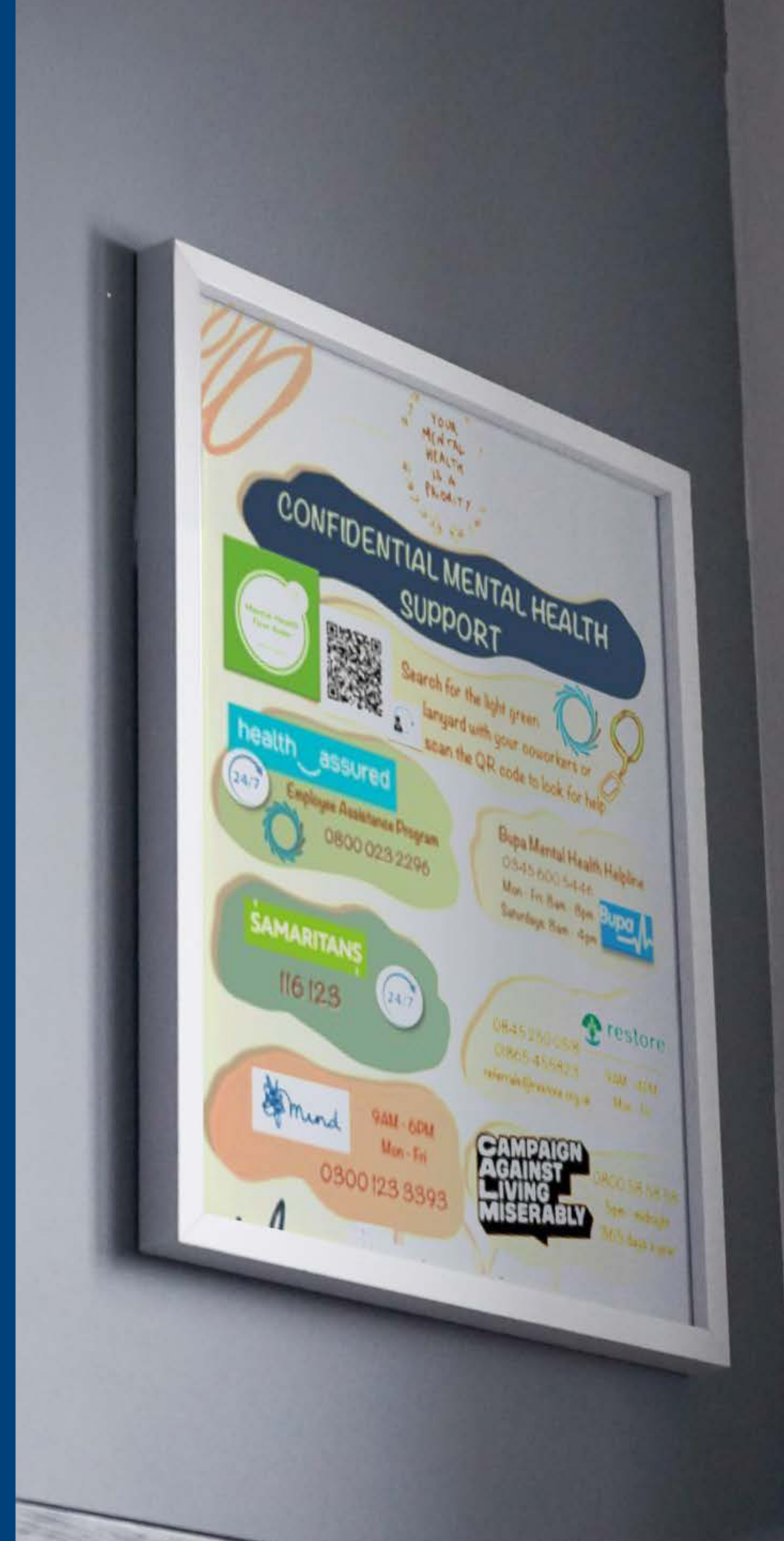
EcoOnline

Over the years, Oxford Nanopore’s rapid expansion has necessitated a more transparent and cohesive approach to managing Environmental Health and Safety (EHS) information and processes.

In 2022, after a thorough evaluation of potential suppliers, Oxford Nanopore settled on EcoOnline - a web-based platform that allows for the central dissemination of all EHS-related records across the company. It is hosted externally with backups and support services that allow for a near 100% uptime and security.

The integration of EcoOnline’s platform has significantly enhanced EHS transparency, accessibility, and time efficiency by reducing redundancy in risk assessments and enabling performance monitoring. Oxford Nanopore has adopted various modules including Near Miss, Incident and Suggestions, and Risk Assessment, fostering a culture of proactive engagement and continuous feedback among staff, which has led to further system enhancements.

Looking ahead to 2024, we aim to incorporate environmental data and metrics into the platform, along with new modules for documents, training, checklists, and environment management. This expansion will solidify EcoOnline’s platform as a comprehensive EHS portal, further streamlining Oxford Nanopore’s EHS practices and contributing to a safer, more sustainable workplace.



CASE STUDY:

Restore – training 33 mental health first aiders

Back in 2022, Oxford Nanopore’s EHS team worked to confront a significant challenge in the workplace: mental health. By teaming up with Restore - an Oxfordshire mental health charity - Oxford Nanopore’s employees now have access to a wide array of services aimed at empowering individuals on their journey to mental wellness. With therapeutic groups, training programs, and the Oxfordshire Recovery College, Restore has established itself as a leader in community rehabilitation and mental health education.

Two years on, and the partnership stands strong. As of 2023, the initiative has now trained 33 Mental Health First Aiders and 175 managers, fostering a supportive workplace where employees look out for each other and are trained to spot signs of struggling colleagues. Looking forward, Oxford Nanopore plans to expand this training to satellite offices outside of the UK and is continually assessing the program’s positive influence on its employees’ mental wellbeing.



STRATEGIC PILLAR 3

Inclusivity and wellbeing

Guiding principle

Promoting a culture which is inclusive, embraces diversity and prioritises the development of our people and their wellbeing.

Commitments

- Continue running events through our Values in Action (ViA) initiative. Continuing from 2023, ViA commits to deliver the introduction of emergency hygiene products to all UK offices (rolling out globally by end of 2024), a focus on volunteering in the community, plus plans to host wellbeing events in June for World Wellbeing Week
- Continue to strengthen the skills of our employees through ongoing customised learning and development. Bespoke training solutions will be devised and delivered for several teams needing to focus on key skills and build collective performance
- Improve Environmental Health & Safety (EHS) resources, implementing additional EcoOnline modules, including documents, training, and checklists, which will enhance the value of the database as a one-stop EHS portal for Oxford Nanopore
- Align our EHS programmes with the international standards for the environment (ISO 14001) and occupational health and safety management (ISO 45001) by 2025

SDGs



People:

Inclusivity and wellbeing

Engagement

Employee engagement is critical to our success. In 2022, we launched the Values in Action (ViA) programme, a framework to optimise engagement and offer everyone in the Company the chance to contribute. In 2023, the ViA pods met monthly to gather input and drive diverse projects, resulting in three initiatives delivered during the year. Kate Priestman, Oxford Nanopore's designated Non-Executive Director, has taken on responsibility for employee engagement and inclusion. The ViA pod will be an opportunity for Kate to engage with employees, to explore and validate the lived culture and ViA of our organisation, and report back to the wider Board.

Case Study: Inclusion week

Our talented team is made up of 61 different nationalities working across our three regions, with 75% under 44 years old. In October 2023, Oxford Nanopore hosted our first inclusion week to celebrate our diversity.

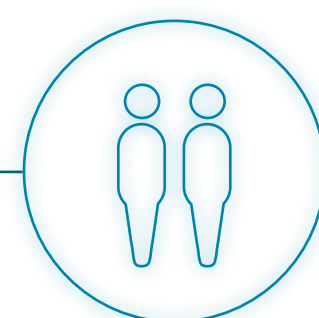
Our differences are something to celebrate openly and regularly. Embracing our mix of backgrounds, thinking and expertise gives us more creativity in innovation and makes us more effective at engaging our global user community.

As part of the week, the ViA pod designed, organised and delivered four days of engaging activities, including panel discussions, talks, and learning sessions.

Two members of the ViA pod attended the Inclusive Employers' Inclusionneers Conference in 2023 and used their insights to shape Inclusion Week, which was sponsored by Senior Vice President Lakmal Jayasinghe.

The week touched on several themes including women in biotech, the LGBTQ+ communities, and raising awareness around neurodiversity. The objective was to build an environment where every member of the Oxford Nanopore team feels an inherent sense of belonging and support from all members of the company with equal access to resources and opportunities.

To round off the event, we celebrated our international workforce with a World Food Day event, which saw over 20 countries represented by nearly 40 volunteers who prepared dishes representative of their cultural heritage to share and enjoy.



People: Our diversity commitments

At Oxford Nanopore, we actively recruit people from diverse backgrounds with varied experience and perspectives who truly reflect the global scientific community we serve. With over 61 nationalities represented at Oxford Nanopore, diversity is a foundational value of our business. Our ambition is to build and maintain a diverse, equitable, and inclusive culture in the workplace and across Oxford Nanopore's value chain. We value people as individuals with diverse opinions, cultures, lifestyles, and circumstances and believe in equality of opportunity, following practices that are free from unfair and unlawful discrimination.

We are committed to creating a supportive and inclusive environment where respect and understanding are fostered, and the diversity of both people and perspective is positively valued.

Oxford Nanopore has an Equality and Diversity Policy in place, applicable to all employees. The Board has overall responsibility for this policy. Additionally, we set up a Diversity and Inclusion (D&I) Framework in 2020. This outlines the commitments and actions that will continue to maintain and foster Oxford Nanopore's diverse and inclusive culture that permeates our workplace and across our community. We offer monthly programmes that bring in external researchers to discuss how they are using our products, helping educate our employees with diverse backgrounds and different experience levels.

We broadly support employees who wish to perform scientific outreach, and we are commencing more formal programmes. For example, in 2022, we launched a commitment to donate £25,000 per annum for three years to the Broadening Horizons initiative with the Royal Society of Chemistry. The Broadening Horizons initiative sponsors the promotion of careers in chemistry to under-represented, minority graduates and PhD postgraduates. Our Director, Talent Development, is accountable for managing this relationship and supporting educational and recruitment activity to support its success.

When creating our D&I framework, we completed an internal evaluation, holding focus groups with employees to learn directly from them. The focus group findings showed that employees immensely valued flexible working hours and days, but also revealed that employees were seeking increased transparency around hiring, employee surveys to provide direct feedback, and increased employee development opportunities. These findings, in addition to feedback garnered by ViA members, continue to inform improvements about how we empower employees to contribute to topics such as D&I and internal knowledge sharing.

Oxford Nanopore is committed to non-discrimination. We recruit the best, regardless of gender, race, social background, religion or belief, sex, sexual orientation, gender reassignment, marital or civil partnership status, pregnancy and maternity, age, disability, political opinion, trade union membership, or sensitive medical conditions. We have clear procedures in place that enable candidates for jobs and employees to raise a grievance or make a complaint if they feel that they have been unfairly treated.

Our commitments: Diversity

- Create an environment in which individual differences and your contributions are recognised and valued
- Provide a working environment that promotes dignity and respect for all, where no form of intimidation, bullying, or harassment is tolerated
- Provide training, development, and progression opportunities for all
- Understand equality in the workplace is good management practice
- Review and update all of our employment practices and procedures to ensure fairness
- Review and update our recruitment practices to ensure they are fair, consistent, and free from unconscious bias
- Full support of this policy by senior management
- Monitor and review this policy annually
- Have clear procedures that enable candidates for jobs and employees to raise a grievance or make a complaint if they feel unfairly treated
- Treating breaches of our equality and diversity policy as misconduct which could lead to disciplinary proceedings

People: Inclusivity and wellbeing

Oxford Nanopore will also ensure through its recruitment and selection policy that the structure, design, and requirements of jobs do not discriminate but promote the diversity and inclusion our business needs to be successful. We appreciate that more and more of our people are striving for greater flexibility in how they manage and deliver their work, and we are open and supportive to flexible and smart arrangements that support the needs of our people and the overall business.

We have many examples of flexible working arrangements, including reduced hours and the ability to work from home, to support the diverse nature and realise the full potential of our employees. We offer enhanced maternity and paternity leave and actively engage in wellbeing and support programmes. We will not tolerate victimisation, bullying, or harassment in any form.

Oxford Nanopore allows employees to take a reasonable amount of time off to care for dependents. Special leave is allowed for Jury/Witness Service, Voluntary Armed Forces Leave, Special Circumstance Unpaid Leave and Bereavement Leave.

Oxford Nanopore is an equal opportunities employer and is committed to recruiting people from diverse backgrounds, including people with disabilities. Any person who identifies as having a disability is given fair consideration for a vacancy against the requirements of the role and, where possible, we make reasonable accommodations for employees who identify as having a disability. All employees are given the same training, development, and job opportunities.

Should any employee experience a situation where they become disabled during their employment, we would ensure all efforts are made to retrain and adjust the employee's environments and/or working patterns where possible to allow them to continue to maximise their potential.

Our SVP Global HR and the Non-executive Director for Workforce Engagement oversee collective accountability and meet regularly to review and appraise our practices and positive activity.

The company's Equality & Diversity Policy is a core feature of onboarding for all employees and is interconnected/interdependent with all employment policies.

As such we are transparent in promoting collective responsibility as fundamental to our practices. All managers, whether individual contributors or people leaders, hold clear accountability to promote ED&I in their practices and will be challenged within our established processes, if not. Should any case arise which requires investigation, our HRD EMEA will explore the situation (as ER lead) with support from a dedicated team of impartial and experienced senior leaders.

We provide support and D&I training to managers and senior leaders to ensure our practices are free from bias. We have further developed D&I training and education for all employees. During 2023, training on equal opportunities has been completed by employees through leadership programmes, specific coaching, and crucial conversation modules. All hiring managers - new to the company or new to hiring - undertake recruitment training modules online and in-person, which incorporate a specific module on diverse recruiting.

We will ensure that all employees, regardless of gender, have the right to the same contractual pay and benefits for carrying out the same work, work rated as equivalent work, or work of equal value. As a UK company, we must comply with regulations on gender pay gap reporting. We use data to track and evaluate our progress. This demonstrates that Oxford Nanopore is progressing towards our goal of closing the pay gap.

Oxford Nanopore is committed to, and recognises the benefits of, diversity at all levels throughout the organisation.

People: Board diversity

The Company is committed to, and recognises the benefits of, diversity at all levels throughout the organisation. The Company places great importance on ensuring the members of the Board reflect diversity in its broadest sense and believe that greater diversity is essential to deliver Oxford Nanopore’s strategy and can provide the Company with a competitive edge. The Nomination Committee will promote equal opportunity and will consider diversity of gender, ethnicity, race, country of origin, social, cultural and ethnic backgrounds, neurodiversity, and cognitive and personal strengths in relation to future appointments to the Board, with a particular focus on increasing its female representation on the Board to 40%.

The Board meets the target on ethnic diversity representation on the Board as set out in the **Parker Review**.

Oxford Nanopore has a commitment to increase its Board gender diversity to at least 40% female representation within three years of its initial public offering. We also meet the proposed FCA recommendation that at least one of its senior board positions is held by a female director.



Gender diversity statistics 2023

	Male	Female	Total	% Male	% Female
Board	8	4	12	67	33
Operating Committee	7	5	12	58	42
Operating Committee direct reports (excluding admin support)	32	32	64	50	50
All employees	715	536	1251	57	43

Across our employees, the gender split at the end of 2023 was 43% female which is 2% higher than 2022.

Board (12 people)



67% male
33% female

Operating Committee (12 people)



58% male
42% female

All Employees (1251 people)



57% male
43% female

People: Talent, training and career management

Talent and career management

Our goal is to attract, develop and retain talent at Oxford Nanopore, as well as inspire and nurture the next generation of scientists, through provision of accessible technology and educational support. To strengthen these efforts, we conduct a number of internal and external programmes.

The Nomination Committee is responsible for ensuring that appropriate talent development programmes are in place to maximise the potential of our employees. As our employee base has grown two-fold over the past five years, we have worked to maintain a culture that incentivises and rewards excellence, while encouraging long-term relationships with Oxford Nanopore, resulting in our low employee turnover rates. In 2023, our employee turnover rate was 8.03% (2022: 12%).

Our new recognition scheme NanoStars was launched in 2023. All employees are eligible to recognise and be recognised based on pre-defined criteria to enable a consistent and fair approach. In 2023, 81 colleagues received standout awards and a further 53 were recognised with star awards.

Training

We are committed to offering training for all employee levels, providing opportunities for our employees to engage in lifelong learning. Digital learning platforms of various disciplines are offered to employees worldwide. This allows unlimited access to personal effectiveness, management, and skills-based learning. In 2023, we increased focus on regional growth to ensure our colleagues in the Americas, APAC and EMEA are included and connected. This was not only achieved through online and virtual sessions scheduled for the time zones, but with in-person development weeks hosted in New York, Shanghai and Abu Dhabi.

In 2023, 36,050 total training hours were completed via digital platforms, virtual and classroom learning, with the rest from essential skills and mandatory learning. One-to-one coaching also forms a vital part of talent and leadership development, representing 293 hours of additional learning within management programmes and for bespoke support.

In July 2022, we launched our Mastery series of leadership, management, and personal development programmes: a suite of modular content that supports personal effectiveness through to strategic thought leadership. In 2023, 383 employees completed a My Mastery or Manager Mastery programme with 387 hours of instructor-led mastery programmes conducted. Attendance rates for programmes were 51% female and 49% male.

Two MBAs were completed in 2022, and another is ongoing.

Average training hours per delegate (hours) in 2023:

Training Type	Hours per delegate
Professional Development	19
Functional/Technical Capability	50
Required Learning	6

Average training expense per delegate (£) in 2023:

Training Type	£ per delegate
Professional Development	2,660
Functional/Technical Capability	2,193
Required Learning	10

People: Career development

Career development

Oxford Nanopore is committed to promoting career development. In 2023, we expanded organisational development opportunities with the launch of four strategic programmes that will align to promote professional excellence through industry recognised programmes with Six Sigma, Gartner's Supply Chain and Challenger's Sales Enablement. These programmes are designed to support career development and to enable growth of the company through strategically appropriate market approaches and additional de-risking strategies.

Organisational Development is reflected through four functional, ongoing capability programmes (Supply Chain, Lean Six Sigma Project Management, Challenger Sales Training and Customer Success training) in addition to our personal, management and leadership development 'Mastery' modules.

A year-long executive business strategy programme for 39 senior leadership culminated in the identification and delivery of significant organisational effectiveness priorities. These leaders completed 2,730 hours of residential learning and coaching to develop their thought leadership and strategic business skills.

Six Sigma qualifications were achieved by 12 participants, with a further cohort planned for 2024. This has been a key area for Oxford Nanopore to enhance the operational effectiveness of our teams through teaching the Six Sigma methodologies and tools focused on enhancing quality while remaining efficient.

Our focus on employee growth is complemented by a focus on annual and mid-year performance and development reviews. In 2023, all employees completed at least one annual review where manager conversation guides and drop-in training calls were used to ensure every employee received a fair and consistent review. High performing teams were supported by outside suppliers: Acumen Executive Coaching delivered bespoke team development, while our partners at Inspire provided insightful, experiential events with functional teams across the business, including APAC leadership. Acumen Executive continues to support Oxford Nanopore with one-to-one developmental coaching for senior leaders and high-potential employees. They also support new senior leaders to onboard, or transition into, their new roles providing cultural immersion to, and accelerate their contribution.

In 2024, we plan to continue to strengthen the skills of our employees through ongoing customised learning and development. Bespoke training solutions will be devised and delivered for several teams needing to focus on key skills and build collective performance. Themes include 'Five Functions of High Performing Teams', 'Evolving from Customer Service to Customer Success', 'Stakeholder Management' and 'Six Sigma Fundamentals - insights into a new way of working'.

People: Internships and early careers

Internships

Our core intern programme runs from April each year and accommodates up to 22 science undergraduates and postgraduates for 3-to-12 month placements. An additional five interns are placed for 12 months each in our Corporate Functions. For 2024, a new process has been designed to create a cohesive campaign promoting diversity and inclusion and improve candidate experience, including extensive recorded marketing collateral on our Early Careers pages within the company website.

The intention is to build an intern community where onboarding, social activities and personal development opportunities will be promoted during their placements and a talent pipeline will be created to attract candidates to return for permanent opportunities.

Early careers

Oxford Nanopore strategically revamped its R&D internship programme through a collaboration between R&D Leadership and our Talent Development team. The programme relaunched with ambitious goals to raise our employer profile, increase diversity of candidates and improve future talent opportunities for a wider student demographic.

We initiated this transformation with a well-timed launch in December 2023, leveraging a peak recruitment period to maximise impact. By introducing a new Early Careers page, developed with Nanopore Education, we offered candidates a window into the diverse experiences of our team members, enhancing relatability and appeal.

The selection process was meticulously structured to uphold the highest standards of inclusivity and candidate experience. Supported by a specialist selection partner, we conducted Selection Excellence workshops involving 27 hiring managers who engaged in role-playing scenarios to fine-tune their approach to interviews, specifically focusing on accommodating neurodivergent candidates and mitigating unconscious bias.

Our targeted advertising reached twenty-three university job boards, driving a substantial increase in applications — from a yearly average of about 300 to over 1,350. This robust campaign culminated in the extension of 25 balanced offers to both female and male candidates, who will commence their 3-to-12 month internships starting in April 2024. This initiative not only enriches our talent pipeline but also reinforces Oxford Nanopore's commitment to diversity and excellence in early career development.



Governance: Ethics and compliance, modern slavery and whistleblowing

Ethics and compliance

Oxford Nanopore has policies and codes of conduct in place to ensure consistent ethics and compliance governance. These include but are not limited to: a Code of Conduct, Oxford Nanopore's Anti-Bribery and Corruption Policy, Modern Slavery Statement, Whistleblowing Policy, Anti-Facilitation of Tax Evasion Policy, Conflicts of Interest Policy, Privacy Policy, Data Retention Policy, and Securities Dealing Code.

In 2023, training was provided to all employees on data protection, whistleblowing, insider dealing, modern slavery, anti-bribery and corruption, and the anti-facilitation of tax evasion. In addition, all new employees are required to read and agree to our compliance policies.

Modern slavery

Oxford Nanopore supports the Modern Slavery Act 2015 and is committed to ensuring that slavery, human trafficking, child labour, forced labour, or any other abuse of human rights has no place in its business or its supply chain. All employees who engage in purchasing activities are trained to ensure they are aware of the Modern Slavery Act and both the company's, and their own responsibilities. The Board is ultimately responsible for compliance. We have published our **Modern Slavery Statement** on our website.

We have delivered training in a number of areas of human rights, including modern slavery. Our modern slavery statement confirms that Oxford Nanopore is committed to ensuring that slavery, human trafficking, child labour, or any other abuse of human rights has no place in our business or supply chain.

Whistleblowing

Oxford Nanopore is committed to an open environment where employees can raise any issue about any aspect of our business.

Our Whistleblowing Policy applies to all employees, contractors, and temporary workers, working for and on behalf of the Company, including any connected entity or subsidiary, subject to applicable local laws that impose any additional requirements on the Company.

A confidential and anonymous incident reporting facility is available 24 hours a day, seven days a week. It is provided by an independent specialist company called SafeCall. SafeCall runs in every country that we operate in, other than China. Whistleblowing claims from China can be reported to our General Counsel. SafeCall is available in the local languages of the locations it operates in.

Any potential incidents that are reported, via the anonymous reporting facility or directly to individual line managers or leadership, are followed up and investigations are launched where appropriate. Ongoing investigations and their outcomes are subsequently reported to the Audit and Risk Committee. Oxford Nanopore protects employees who are whistleblowers from any detrimental treatment resulting from any whistleblowing, providing they acted in good faith. In the UK, whistleblowers are protected against dismissal or detriment by the Public Interest Disclosure Act 1998.

No incidents were reported during 2023, 2022 or 2021.

Governance: Anti-bribery and corruption (ABC), facilitation payments and gifts

Anti-bribery and corruption (ABC)

We are committed to conducting all of our business in an honest and ethical manner, and we are proud of our ethical standards. We have a zero-tolerance approach to bribery and corruption at all levels with the organisation globally and expect high standards of integrity from our people, agents, consultants, interns, and subcontractors, and any other person associated with us in business dealing and relationships worldwide. The Board is ultimately accountable for the Company's Anti-Bribery and Corruption Policy, and the responsibility for reviewing the Company's systems and controls for preventing these are delegated to the Audit and Risk Committee.

Our Anti-Bribery and Corruption Policy, including our policy on gifts and hospitality, is available for all of our people to access on our internal policy hub. The Policy is mandatory and should be considered an integral element of the Group's workplace rules.

What is bribery?

Bribery is an inducement or reward offered, promised, provided, or accepted in order to improperly gain any financial, commercial, contractual, regulatory, or personal advantage, which may constitute an offence under the Act, namely:

- Giving or offering a bribe
- Receiving or requesting a bribe
- Bribing a foreign public official

Oxford Nanopore prohibits bribery. The following are examples of conduct that are prohibited under the policy:

- Making unofficial payments to officials in order to obtain any permission, permit, or stamp, particularly in connection with importing or exporting goods
- Appointing any third-party or supplier to act on behalf of the Group who you know or have good reason to believe to have engaged in any corrupt or unlawful conduct including any offences under the Act
- Paying any third-party for the purposes of being a 'fixer' to open doors and make connections for us locally or overseas or in return for a business favour or advantage, or paying an unexpected or additional fee or commission to 'facilitate' a service
- Offering a potential customer tickets to a major sporting event, but only if they agree to do business with the Group
- A supplier gives your relative a job but makes it clear that in return they expect you to use your influence within the Group to ensure we continue to do business with them

It is important to note that the above examples are non-exhaustive and have been provided for illustrative purposes only. Any other similarly corrupt behaviour is also prohibited.

In FY23, no employees left Oxford Nanopore due to non-compliance with our Anti-Bribery and Corruption Policy.

Facilitation payments

Facilitation payments, ('facilitating', 'speed', 'back-hander' or 'grease' payments) are any payments, usually small cash payments made to low-level officials, as a bribe to secure or expedite the performance of a routine or necessary action or level of service. Facilitation payments are prohibited and the Group's employees or related third parties must never offer, pay, solicit or accept bribes in any form, including facilitation payments.

Gifts

The policy does not prohibit normal and appropriate gifts and hospitality (given and received) to or from third parties unless otherwise specifically stated in the policy. The intention behind the gift or hospitality should always be considered and the expectation is that gifts and hospitality offered or accepted should be modest, proportionate (including in respect of frequency and appropriateness of timing), and at all times consistent with customary business practice.

Governance: Suppliers, donations, compliance, training and human rights

Suppliers

Where there is a significant bribery risk, all areas of the business must consult with the General Counsel in relation to appropriate anti-bribery compliance measures before:

- appointing a new supplier
- entering into a partnership
- appointing an agent to work on the Company's behalf or
- entering into a new contract/or amending the terms of an existing contract

Political and Charitable donations

The Group prohibits political contributions or donations (whether in cash or in kind) to political organisations or independent political candidates, nor do we incur any political expenditure. We respect the right of individual employees to make personal contributions, provided they are not made in any way to obtain advantage in a business transaction and/or do not in any way connect the Group with such contributions.

In 2023, we made no political contributions or donations.

Charitable contributions may only be given to recognised non-profit charitable organisations.

All charitable donations given on behalf of the Company must be:

- transparent, not used as a scheme to conceal bribery and properly recorded in our books and records
- receipted or have a letter of acknowledgement from the charity to ensure that the donations receive the proper tax treatment and
- be compliant with local law, regulations or local or internal policies

Compliance

We take compliance with the policy very seriously. Any employee who breaches the policy may face disciplinary action up to and including dismissal for gross misconduct. In FY23, no employees left Oxford Nanopore due to non-compliance with our Anti-Bribery and Corruption Policy.

Training

The Company provides mandatory online training to ensure our people understand all elements of the Anti-Bribery and Corruption Policy.

Human Rights

We support the principles set out in the UN Declaration of Human Rights. We respect and uphold human rights and fully comply with applicable human rights legislation in all the countries in which we operate. This includes upholding the right to freedom of association and collective bargaining, equal remuneration, minimum living wages, prohibition of child labour and forced labour, and protection against discrimination.



Governance: IS&T and tax transparency

Information Systems and Technology (IS&T)

Oxford Nanopore considers that it has appropriately robust and secure information technology systems, and has a Data Privacy Policy in place.

Responsibilities:

- The Oxford Nanopore Board is responsible for ensuring that Oxford Nanopore has appropriate technical and organisational measures in place to ensure compliance with the GDPR and all other relevant data protection legislation, and to be able to demonstrate compliance
- All Oxford Nanopore users are responsible for complying with the policy, and for consulting the Data Protection Officer (“DPO”) if they need clarification, guidance or support
- Oxford Nanopore’s DPO is responsible for overseeing the implementation of this policy and for monitoring compliance with all relevant legislation, and with this and all other relevant policies
- Oxford Nanopore “Data Owners” are responsible for ensuring the compliance of their part of the business with the policy, and with the Company’s information security policies and controls

The Group has processes in place to reduce risk such as internal vulnerability testing on a regular basis, and penetration testing. Oxford Nanopore is certified to ISO 27001:2013, Information Security Management System and is also certified to ISO 22301:2019, Business Continuity Management System. Business continuity plans and incident response procedures are in place and are tested at least every three years. Regular cybersecurity training and awareness is provided to staff with at least an annual requirement to read Company policies.

We have not experienced an information security breach in 2023 or the previous two years.

Tax Transparency

The Group is committed to acting with integrity and transparency in all tax matters and is committed to anti-facilitation of tax evasion as part of its Corporate Governance policies. The Group has policies and procedures in place designed to promote and commit to compliance with all applicable tax laws and regulations, which are continually reviewed as the Group expands its operations in existing and new jurisdictions. The Board approved the prevention of facilitation of tax evasion policy and any changes to the policy. Oxford Nanopore operates in a transparent manner, committing not to transfer value to low tax jurisdictions and not use tax structures for tax avoidance. Oxford Nanopore does not operate in any countries blacklisted or grey listed by the EU as at 31 December 2023.



Planet

- 55 Responsible scaling
- 57 Waste management
- 59 Energy and greenhouse gas emissions
- 61 Transitioning our business to net zero

We believe that high growth does not need to come at the expense of the planet – and we are committed to scaling responsibly by making choices that protect our environment.

2023 highlights

12.7% decrease

in tonnes of CO₂e produced per £m revenue, in 2023, beating our target of 2.5% reduction

Energy efficiency

we reduced energy consumption by upgrading the boiler at Gosling, and lighting retrofits at Florey and ECH to improve energy efficiency

Net zero

ambitions set by the UK are the goal of our science-based targets, and we've disclosed a transition plan showing Oxford Nanopore's commitment to this

STRATEGIC PILLAR 4

Planet: Responsible scaling

Guiding principle

Maintaining high growth in a responsible way, by protecting the planet through energy efficiency, product design and ensuring that our commitment to sustainable practices extends beyond our internal operations and distribution to encompass our entire value chain.

Commitments

- Repeating our target to reduce the tonnes of Scope 1 & 2 CO₂e emitted per £m revenue by 2.5% again in 2024
- Continue to work with all suppliers on core ESG compliance, ensuring that all key suppliers (covering 43% of total spend) meet our ESG standards on human rights, environmental protection, health and safety, compliance and more. Align our ESG governance in supply chain best practice with the UN Global Compact
- The EcoOnline system has been implemented for Health and Safety in 2023. In 2024, we are committed to adding in the environmental data and metrics
- As part of net zero commitments a dedicated Supply Chain Engagement programme will be developed and launched during 2024, that provides training on the following topics:
 - Carbon footprint
 - ISO 14001 EMS systems implementation
 - Energy audits
- Use the waste hierarchy assessing and, where feasible, implement projects to further enhance waste management practice across the organisation
- Increase the recycling and reuse of waste materials by 10% from 2023 totals at our Oxford and Harwell sites managed by AXIL-Integrated Services

SDGs



Planet: Responsible scaling, managing environmental performance, water consumption and biodiversity

Responsible scaling

At Oxford Nanopore, our devices contribute to research designed to analyse, assess and develop solutions and strategies to address the impacts of climate change that affect us all globally. We are committed to protecting the environment and reducing our impact within all our operations. We are adapting to, and mitigating against, climate change risks and impacts through commitments to improved efficiencies throughout Oxford Nanopore's operations, including in our buildings and value chain. Our commitment to transparency includes the disclosure of our carbon emissions and reporting against the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, which includes details of our oversight, risk assessment and strategy of climate-related issues.

Our full TCFD can be found in our [2023 Annual Report](#).

Managing environmental performance

Our Environment, Health & Safety (EHS) Policy sets out our environmental arrangements and the Board has ultimate responsibility for environmental matters. The EHS Policy applies to all employees. In 2023, environmental training was provided to employees through EHS Inductions, management training, communications via our Resource Centre and through discussions at the EHS Steering Committee meetings. During the year, there was a significant increase in the range and number of options for training and made this more accessible for our people. We strive to improve our environmental performance throughout all of Oxford Nanopore's global operations. We are committed to pollution prevention, the reduction of waste, releases, emissions and water use, and to the efficient use of energy. Oxford Nanopore also has an environmental team which was formed late 2022, whose aim is to facilitate the implementation of employee ideas to improve the environmental performance of Oxford Nanopore. Oxford Nanopore has incurred no environmental fines or penalties in the current and last three fiscal years.

Water consumption

Oxford Nanopore's operations are not particularly water intensive. However, we recognise the importance of water conservation and are committed to reducing our water consumption and withdrawal across all of our operations. We will employ water-efficient technologies and practices to minimise our impact on water resources.

	2023	2022	2021	2020
Freshwater usage (m ₃)	4,152	4,311	2,558	3,304

This data covers water use in Gosling, MinION, Gensis and ECH. It is based on water bill estimates.

Biodiversity

Although we do not have a significant impact on biodiversity, we are committed to protecting biodiversity where appropriate by minimising the impact of our activities in the areas in which we operate. Furthermore, our products are used to tackle species conservation which will enhance biodiversity.

Waste management

Within all of our operations, we aim to reduce, reuse, and recycle waste, both hazardous and non-hazardous. Our EHS management system covers waste and hazardous materials, with our offices and labs including recycling facilities for paper and other recyclable items. The cafe at Oxford Nanopore headquarters does not offer single-use plastics, instead providing paper takeaway materials, larger condiment bottles, and metal cutlery.

Each of our employees has access to a reusable porcelain cup. We also reduce the waste associated with distribution through the use of Woolcool®, a recyclable cardboard container with a wool-based insulator, which keeps devices at the required temperature without the need for polystyrene. We also encourage customers to return their used products in the same packaging, which allows us to reuse or recycle the materials, creating a closed-loop system.

All businesses have a duty of care to ensure they segregate, store and transport waste appropriately and securely. We have recently introduced a total waste management process. This will allow us to increase waste segregation options, establish a waste hierarchy, and provide us with transparent waste data and metrics, while also reducing costs.

Using the waste hierarchy assessing and where feasible implementing projects to further enhance waste management practice across the organisation, through for example employee training and education, increased segregation and recycling and reuse of waste materials.

Waste generation in 2023:

Waste Type	Tonnes
Total recycled waste generation	109.2
Total non-recycled waste generation	199.5
Total waste generation	308.7

The above covers 85% of operations.





CASE STUDY: AXIL WASTE

A total waste management service

To further adapt to the inevitabilities of rapid growth, in 2023, Oxford Nanopore sought to find a supplier who offered a 'Total Waste Management' service to facilitate the need for a more focused and efficient approach to waste management.

After a careful evaluation based on criteria such as data provision, compliance, segregation improvement, documentation, innovation, environmental performance and cost reduction, AXIL-Integrated Services (Axil-IS) emerged as the supplier of choice. Since partnering with AXIL-IS, Oxford Nanopore has witnessed remarkable improvements in waste management, achieving a significant monthly cost reduction of approximately £10,000, alongside enhanced data tracking via the AXIL-IS customer portal. Environmental achievements for 2023 include a 25.9% recycling, reclamation, and composting rate at our Oxford Science Park and Harwell sites.

Looking to the future, Oxford Nanopore plans to build on this success by exploring further waste management enhancements, such as employee training and increased waste segregation and recycling, solidifying our commitment to environmental stewardship and operational efficiency.



Planet: Energy and greenhouse gas emissions

Oxford Nanopore is committed to reducing energy consumption across all aspects of our operations.

Oxford Nanopore has committed to reduce the carbon intensity of our operations. With support from several environmental consultants, we have begun to recognise opportunities to understand and improve sustainability, and we have placed a specific focus on identifying projects to reduce carbon emissions.

For the year ending 31 December 2023, we aimed to reduce the tonnes of CO₂e emitted per £m revenue by 2.5%. We have successfully reduced tonnes of CO₂e emitted per £m revenue by approximately 12.7% in 2023. In 2024, we will repeat our target to reduce the tonnes of Scope 1 and 2 CO₂e emitted by £m revenue by 2.5%.

See our Science-based targets and summary of our transition plan on [page 61](#).

During the year, we upgraded all remaining fluorescent fittings to LED with intelligent controls at two facilities on our Oxford campus, Florey and ECH, and we will be implementing further LED upgrades within our operations in 2024. The gas boiler was upgraded at Gosling to improve energy efficiency.

All directly charged metered electricity was generated by Renewable Energy Guarantees of Origin (REGO) renewable wind sources through our supplier EON/NPower. This accounts for 100% of our total electricity supply.

We continue to investigate the feasibility of solar panel installations for a number of our facilities. We have undergone an Energy Savings Opportunities Scheme (ESOS) to determine where energy efficiency improvements and reductions are possible at our headquarters in Oxford, while also encouraging employees to join workplace energy reduction initiatives, such as our 'Cycle to Work' commuter bicycle programme.

Additionally, we are analysing our shipping and distribution process, to increase energy efficiency and reduce emissions related to our distribution chain.

As part of our net zero commitments and supporting science-based targets set in 2023, a dedicated Supply Chain Engagement programme will be developed and launched during 2024, that provides training on Carbon Footprinting, ISO 14001 EMS Systems Implementation and Energy Audits. This will assist with aligning our suppliers with Oxford Nanopore's environmental ambitions.

To calculate our emissions and energy usage data, we have followed the 2019 UK Government environmental reporting guidance. We have used the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard (revised edition) and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2019. Our reporting of scope 1 and 2 emissions and energy data covers 100% of our global operations. Furthermore, our reporting of scope 3 emissions covers 100% of our upstream and downstream value chain.

Scope 1 has decreased year on year largely due to fewer refrigerant top-ups needed for the air conditioning systems. There was also a gas usage reduction at Gosling due to the new, more efficient boiler which we expect will see even further reductions in 2024. Scope 2 increased in line with increased employee numbers and operational growth.

For scope 3, the process of setting science-based targets led to a review of the footprint and enhancement of the quality of data used and the methodology carried out. This resulted in increased business travel emissions as more accurate data was obtained for flights.

Despite spend increasing, purchased goods and services emissions decreased due to more reliable emissions factors being utilised. However, the increased expenditure on purchased goods, increased transport emissions year-on-year.

Planet: Energy and greenhouse gas emissions cont.

Energy consumption and emissions data

	FY23			FY22 ¹		
	UK	Global (excl UK)	Total	UK	Global (excl UK)	Total
Emissions (tCO₂e)						
Scope 1 (tCO ₂ e) Total	361	0	361	592	0	592
Scope 2 – location based (tCO ₂ e)	1,197	0	1,197	959	0	959
Total scope 1 & 2 – location based	1,558	0	1,558	1,550	0	1,551
Scope 2 – market based (tCO ₂ e)	0	0	0	0	0	0
Total scope 1 & 2 – market based	361	0	361	592	0	592
Intensity ratio (tCO ₂ e per £m revenue) – Scope 1 & 2 location based			9.22			10.56
Energy (kWh)						
Total energy consumption (kWh)	6,802,410	0	6,802,410	6,682,065	0	6,682,065

Energy consumption (renewable/non-renewable)

	FY23	FY22 ²
Energy (kWh)		
Total renewable energy consumption	5,259,759	5,016,174
Total non-renewable energy consumption	1,542,651	1,665,891

¹ 2022 Scope 1 has been restated due to the emissions from refrigerants being omitted. Scope 1 and 2 were also both restated due to several sites being determined to not be within Oxford Nanopore's operational control.

² 2022 energy consumption has been restated due to the changes mentioned in Note 1 where by those sites energy consumption has been removed.

³ Fuel and Energy related activities has been restated due to the changes mentioned in Note 1 whereby those sites not within Oxford Nanopore's operational control have been removed from Scope 1 & 2 and therefore the associated fuel and energy related activities have also been removed.

⁴ Use of sold products has been restated due to changes in methodology.

Scope 3 Emissions

Category	FY23 (tCO ₂ e)	FY22 (tCO ₂ e)
Purchased goods and services	36,477	49,014
Capital goods		
Fuel and energy related activities ³	439	390
Upstream transports and distribution	331	204
Waste generated in operations	7	66
Business travel	7,203	1,078
Employee commuting	1,216	1,057
Upstream leased assets	875	420
Total Upstream Scope 3	46,548	52,229
Downstream transportation and distribution	1,441	1,053
Processing of sold products		
Use of sold products ⁴	1,935	870
End-of-life treatment of sold products	2	37
Downstream leased assets		
Franchises		
Investments	1,778	306
Total Downstream Scope 3	5,156	2,266
Total Scope 3	51,704	54,495

Planet: Transitioning our business to net zero

Introduction

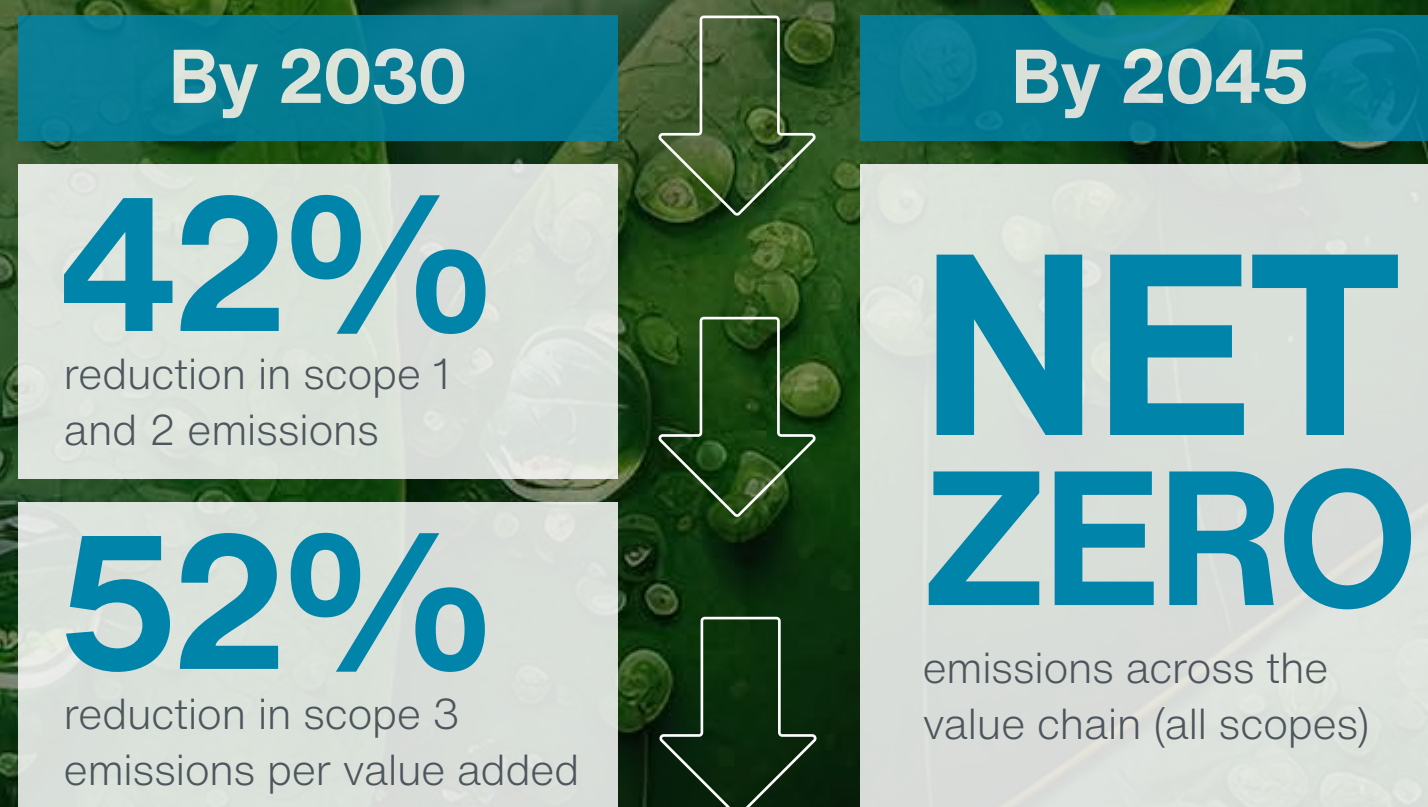
Our business was founded on the vision of making a positive impact and we are committed to understanding and improving our environmental and social performance so that we can ensure this vision is realised. We strive to grow in a responsible way, by protecting the planet through energy efficiency, product design, and ensuring that our commitment to sustainable practices extends beyond our internal operations to encompass our entire value chain.

The development of our climate change response reflects this vision. In 2022, we launched and formalised our sustainability strategy – product, people, planet – and we enhanced our emissions reporting, completed a full scope 3 emissions assessment, and reported against TCFD for the first time. Alongside this, we continued to take actions to reduce our emissions intensity whilst growing the business, setting a target for 2023 to reduce the tonnes of CO₂e emitted per £m revenue by 2.5%, which was achieved. We also committed to develop a Net Zero Transition Plan during 2023.

To that end, in 2023 we set ambitious near-term science-based targets for scope 1 & 2 and 3 emissions and formalised the Group’s commitment to net zero across all scopes by 2045, with minimal use of offsets. To support the delivery of our targets, we have identified, and analysed several initiatives to deliver emissions reductions, as outlined below.

Our targets

In order to ensure we align to the Paris Agreement goals of keeping warming within a 1.5°C scenario and contribute to the UK’s commitment of reaching net zero by 2050, we have set the following science-based targets:



- Our targets have been submitted to the Science Based Targets initiative (SBTi) for validation
- Targets are set on a 2023 base year
- We target at least 90% reduction in emissions by 2045. Any residual emissions may be addressed via the use of offsets

Our plan

We have developed site level decarbonisation pathways for our main operational sites, drawing on the recommendations set out in our recent ESOS report and Building Energy Use Audits. By analysing the sources of our scope 3 emissions we have also developed pathways for our key value-chain emissions, which will be actioned by our team in collaboration with our customers and suppliers. Our biggest emission impacts are from our Purchased Goods and Services. We recognise we will need to work collaboratively with our main suppliers to achieve reductions; work in this area has only just started.

We are a fast-growing and ambitious business, so our expectations also factor in potential growth for the coming years and the implications of that on both our operational and value chain emissions. Based on the outline below we do not envisage any material changes in the Group’s resource allocation from our transition plan over and above our current business strategy and expect to achieve our plans within a business-as-usual context in the near-term.

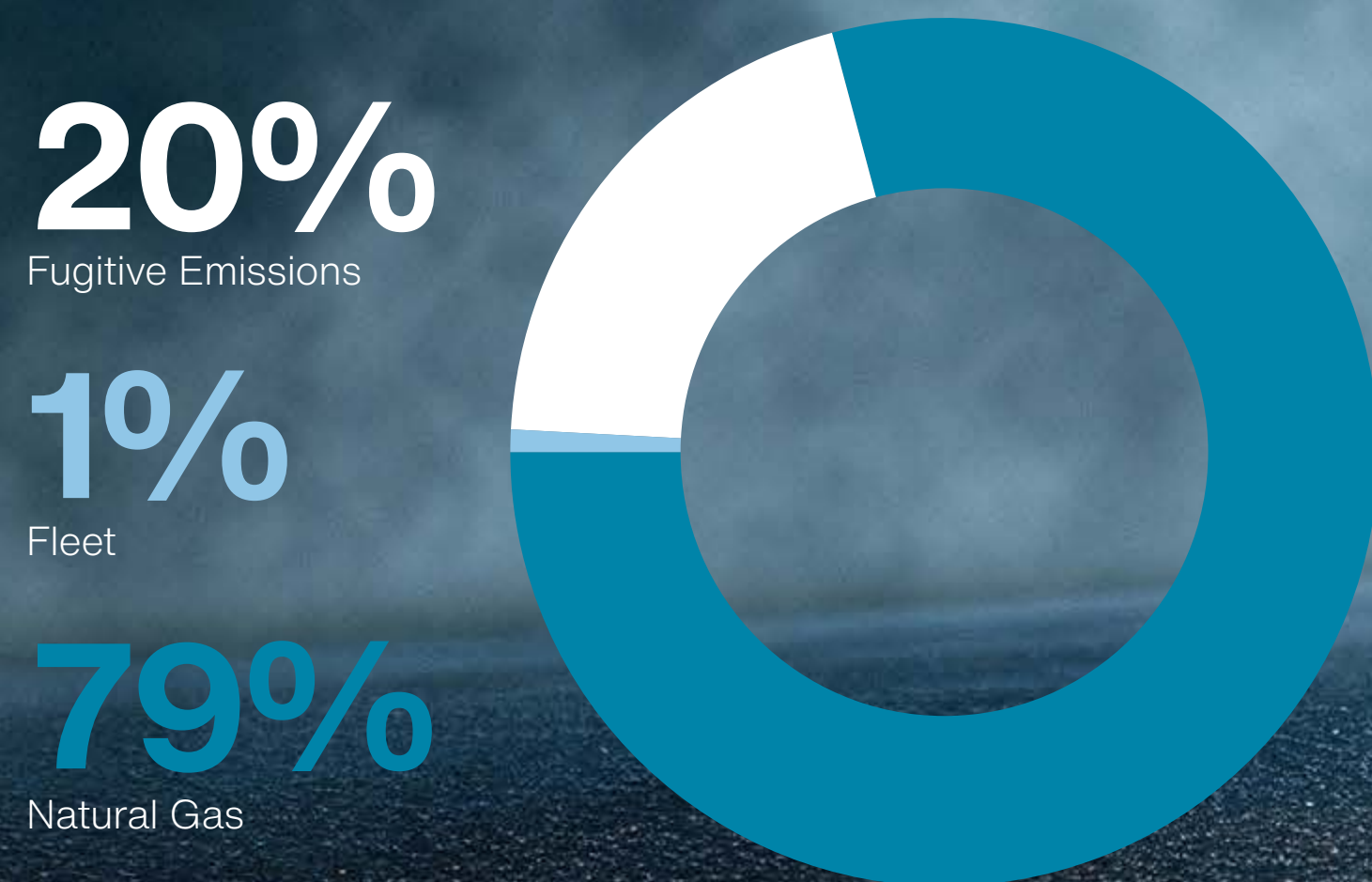


Planet: Transitioning our business to net zero cont.

Scope 1 & 2 emissions

Our operational emissions are concentrated. Our market-based scope 2 emissions are zero, so our operational emissions footprint is split between natural gas used for heating and fugitive emissions from the use of HVAC systems, coolers, and water chillers.

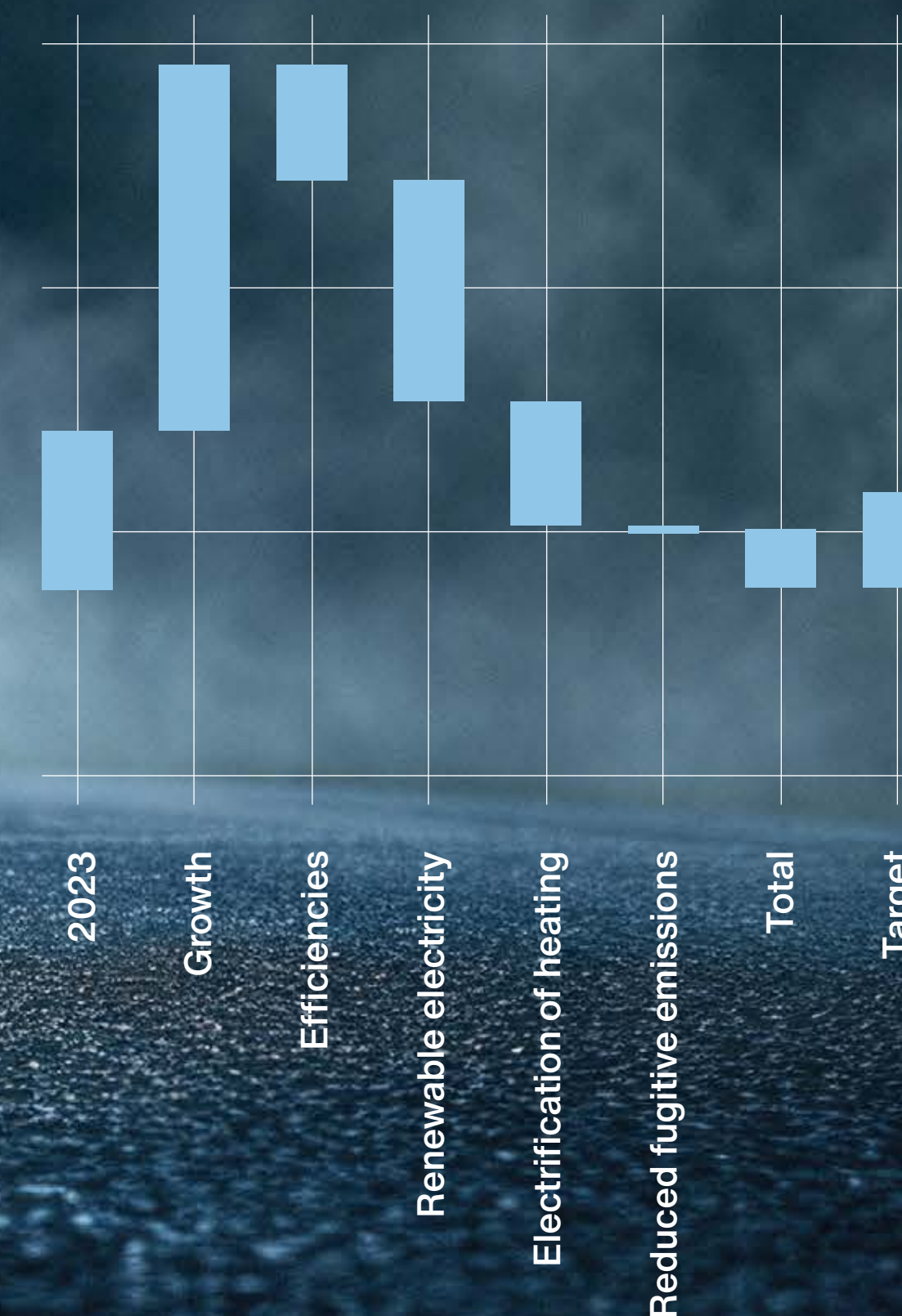
Scope 1 & 2 emissions, 2023 (market-based)



Our primary focus is to maximise energy efficiency and reduce our energy demand. Whilst no reduction in electricity is required to meet our targets, several efficiency measures have been identified, which in aggregate produce a meaningful reduction in electricity use over time. These include behaviour and process changes, installs and upgrades, smart metering and intelligent controls. We then plan to install solar panels for renewable self-generation where we can, thereby reducing our exposure to the grid and the use of REGOs.

The same is true for heating and cooling (scope 1 emissions), where a number of efficiencies have also been scoped and ranked, including the use of timers, smart sensors, seasonal adjustments to space use, altering the temperature of freezers and use of reflective films on windows. Larger scale upgrades include the replacement of low efficiency cooling units, switching natural gas heating to heat pumps and replacing cooling units with those that use refrigerants with lower global warming potential refrigerants. The commercial availability of zero emissions refrigerants is expected to be beyond our near-term target window. Our project team will be phasing these larger scale upgrades over time, in conjunction with our landlords where required, taking into consideration our equipment upgrade cycle and our buildings strategy.

Our scope 1 & 2 emissions pathway

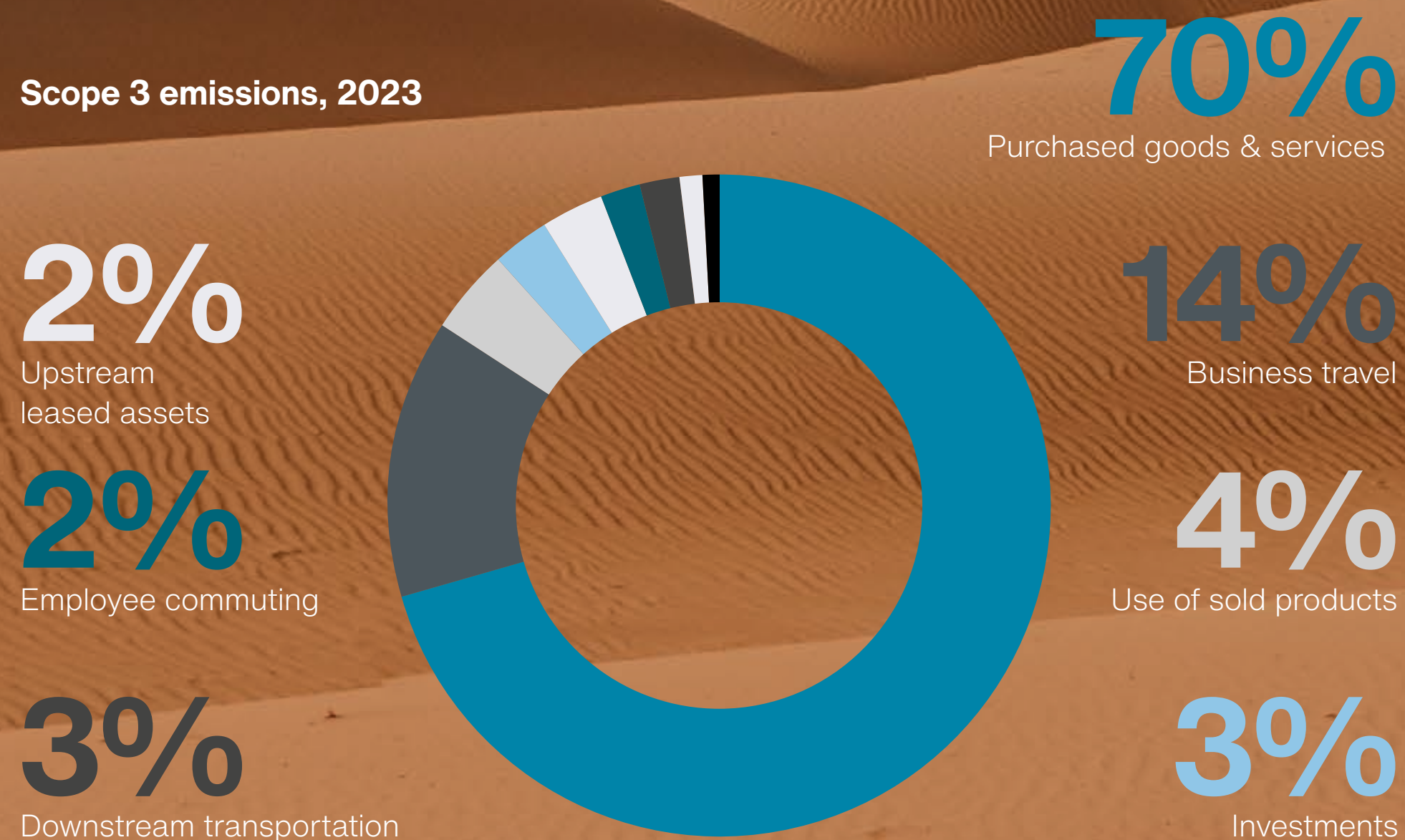


Planet: Transitioning our business to net zero cont.

Scope 3 emissions

Our value chain emissions footprint is dominated by emissions from Purchased Goods and Services, which are those embedded in the goods directly linked to the production and delivery of products, as well as emissions from the providers of services to our business. Other less meaningful scope 3 emissions relate to business travel, employee commuting and downstream transportation of our products.

Scope 3 emissions, 2023



Reduction in our purchased goods and services emissions is key to our net zero ambition, which has led us to improve dialogue with our supply chain and develop a long-term strategy for emissions. This year, we introduced supply chain management software to provide additional data on the carbon impact of our suppliers to help focus our efforts. We will work with our suppliers to identify specific improvements they can make. We may investigate collaboration with other customers of our larger suppliers via multi-sector working groups to coordinate our ambition for improved environmental performance. Suppliers' environmental performance is already a feature of our procurement process, including within the selection and review of suppliers. We believe that our suppliers will be receptive to any engagement that takes place to improve our joint environmental impact. However, if there is continued disengagement on such matters, we may consider the viability of other suppliers. We also factor in background trends into our plan such as the decarbonisation of global electricity grids, which will benefit our suppliers' emissions profiles over time.

In addition, through our own internal product development processes, we have the ability to design for lower carbon in our products, such as via lightweighting or the use of alternative materials and we will investigate these, cognisant that there may also be trade-offs between product price and performance.

We will also be looking at controlling our smaller emissions sources. We will assess our logistics strategy to identify opportunities for reducing the overall emissions footprint associated with product logistics. We are continuing to seek reduction opportunities from business travel and employee commuting, making full use of technology to reduce the need for travel and encouraging low carbon travel options.

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