

Sustainability Report

2023





About this report

This is our ninth annual Sustainability Report, outlining our approach and progress from 1 January to 31 December 2023, unless otherwise stated.

Our Sustainability Report is prepared on a consolidated basis – all of our business operations worldwide are in scope regardless of their function, unless otherwise stated.

In 2023, the Sustainability Report remains aligned with the materiality assessment we conducted in 2021. In 2024, there will be changes to our sustainability reporting in accordance with new requirements including the EU Corporate Sustainability Reporting Directive and a new materiality assessment.

AstraZeneca has reported the information cited in this GRI content index for the period from 1 January 2023 to 31 December 2023, with reference to the GRI Standards.

Annual Report 2023

 www.astrazeneca.com/annualreport2023

AstraZeneca sustainability resources

 <https://www.astrazeneca.com/sustainability/resources.html>



What science can do

Cardiovascular, renal and metabolic (CVRM) diseases

CVRM diseases are complex and interconnected. It's by understanding their interconnections and targeting the mechanisms that drive them that we'll be able to detect, diagnose and treat people earlier and more effectively. Stop disease progression and, ultimately, improve and save the lives of the millions of patients living with these diseases.

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Assurance

Bureau Veritas has provided limited assurance for sustainability activities reported in the [sustainability data annex](#) and in the [Annual Report 2023](#). Details are described in the [Letters of Assurance](#), which are publicly available. Assurance is in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information and with International Standard on Assurance Engagements 3410 – ‘Assurance Engagements on Greenhouse Gas Statements’ (‘ISAE 3410’), issued by the International Auditing and Assurance Standards Board.



Chief Executive Officer's statement



CEO Pascal Soriot during London Climate Week 2023.
Photograph: Sophia Evans.

When we come together, we can transform the delivery of healthcare to become more resilient, equitable and net zero.

Healthcare is our common foundation. It's the bedrock of society, and when we're healthy, communities thrive and economies prosper. Yet, with ageing populations, the rising burden of chronic disease and the growing impact of the climate crisis on health, health systems are struggling to meet people's health needs. And around the world, inequities in healthcare are growing from low- to high-income countries, with vulnerable populations the most affected.

We must recognise the strong correlation between healthy people and a healthy planet – the science is clear. The number of heat-related deaths could more than triple by 2050 without significant action, and we're witnessing a steep rise in heart and metabolic conditions, cancers and respiratory illnesses linked to environmental factors. The [COP28 Declaration on Climate and Health](#) was a milestone moment in recognising the urgent need to tackle the global climate-health crisis in 2023.

With the healthcare sector responsible for around five per cent of global emissions, we must significantly reduce our environmental footprint. At AstraZeneca, we're driving deep decarbonisation across our value chain through our flagship [Ambition Zero Carbon strategy](#). We're investing \$1 billion to reduce emissions from the lab to the patient and are integrating more circular approaches into the discovery, development and delivery of medicines with the latest digital technologies and innovation.

We're also restoring nature and supporting biodiversity through our [AZ Forest](#) programme, which expanded in 2023 to a [\\$400 million initiative](#) to plant and maintain 200 million trees by 2030. Learning from scientific and ecological experts and local communities is central to our approach, with 19.9 million trees planted to date.

We embed this collaboration mindset across all of our sustainability efforts, recognising that when we come together, we can transform the delivery of healthcare to become more resilient, equitable and net zero. We want people to live their healthiest lives, wherever they live.

The [Sustainable Markets Initiative Health Systems Task Force](#) is a public-private partnership we're proud to convene which focuses on accelerating the transition to net zero health systems. In 2023, we launched [joint environmental targets for suppliers](#), saw the establishment of a [China Health Working Group](#), and recently concluded a [multi-party agreement](#) to access renewable power in China.

The [Partnership for Health System Sustainability and Resilience](#) is a further example of our commitment. Together with partners, we're delivering evidence-based recommendations which are leading to policy

reforms to strengthen health systems. For example, in Italy, clinical pathways for chronic diseases are being reviewed to identify the investments needed; in Japan, a digital medical information platform is being prioritised; and in Brazil, the improvement of community-based prevention and disease management services is now a key area of focus. These are three of the 40 countries in which our [Young Health Programme](#) is active. Here, we're empowering young people to make healthier choices and have directly engaged over 15 million young people on non-communicable disease risk factors since 2010.

Improving health system sustainability is also central to our flagship [Healthy Heart Africa](#) programme. In collaboration with nine African governments and partners, we're working to prevent and control hypertension and decrease the burden of cardiovascular disease. Over nine million people with elevated blood pressure have been identified to date, helping reduce the pressure on health services.

At AstraZeneca, we're guided by our [Values](#) and commitment to ethics and transparency. We champion a culture of inclusion and belonging, recognising the power of diversity in driving innovation around the globe. In our latest employee survey, 87 per cent said they understand how they can contribute to AstraZeneca's sustainability priorities, which fills me with both pride and hope.

In 2024, we remain focused on our commitment to delivering positive impact for the health of people, society and our planet. A sustainable future starts with health.

Pascal Soriot

AstraZeneca Chief Executive Officer

2023 recognition

As a global business we have a responsibility to lead. We are committed to using our capabilities to help tackle some of society's greatest challenges.



Rating of AA in the
[MSCI ESG Ratings](#)
assessment

Member of
**Dow Jones
Sustainability Indices**

Powered by the S&P Global CSA

DJSI Top 20% of 2,500 of
the world's largest companies
and Europe Index constituent



Forbes 2023 World's
Top Companies for
Women



Performance highlights



Sustainability overview

15

global leaders from the public and private sectors are members of the Sustainable Markets Initiative Health Systems Task Force, chaired by AstraZeneca CEO Pascal Soriot to accelerate the transition to net-zero health systems

87%

of employee survey respondents say that they understand their contributions to our sustainability priorities

25/27

sustainability targets in sustainability data annex are 'On plan'



Contributing to the Sustainable Development Goals (SDGs)

Access to healthcare

127,384

healthcare workers trained since 2010 (cumulative)

66.4m

people reached through access to healthcare programmes (cumulative)

13.6m

people reached through patient access programmes (cumulative)

SDG 3 Good health and wellbeing
SDG 17 Partnerships for the goals

Environmental protection

67.6%

reduction in Scope 1 and 2 greenhouse gas (GHG) emissions since 2015

19.5%

reduction in water use from 2015

13.2%

reduction in waste from 2015

SDG 6 Clean water and sanitation
SDG 7 Affordable and clean energy
SDG 12 Responsible consumption and production
SDG 13 Climate action
SDG 15 Life on land
SDG 17 Partnership for the goals

Ethics and transparency

50.1%

senior middle management roles held by women

10 countries

with supplier diversity programmes outside the US

83%

of employee survey respondents feel we have a 'speak up' culture

SDG 3 Good health and wellbeing
SDG 5 Gender equality
SDG 8 Decent work and economic growth
SDG 17 Partnership for the goals



Our Values

About us

Our Purpose

We push the boundaries of science to deliver life-changing medicines.

Inspired by our Values and what science can do, we are focused on accelerating the delivery of life-changing medicines that create enduring value for patients, society, the planet and our shareholders.



We follow the science



We put patients first



We play to win



We do the right thing



We are entrepreneurial

Our business model

We are a global pharmaceutical business with a science-led and patient-focused value proposition committed to excellence in the research, development, manufacturing and commercialisation of prescription medicines.

We are also committed to operating sustainably, in a way that recognises the interconnection between business growth, the needs of society and the limitations of our planet. We invest resources to create financial and non-financial value that benefit patients, society, the planet and our business.

Our strategic priorities

Our priorities reflect how we are working to deliver our growth through innovation strategy and achieve our Purpose:



Science & Innovation



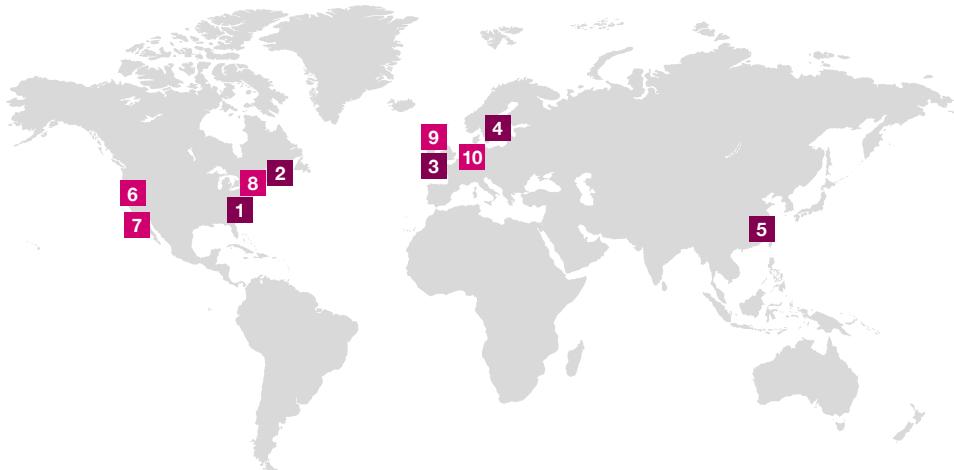
Growth & Therapy Area Leadership



People & Sustainability

Our global business

We work to meet our goals through innovation and commercial excellence. We have an active presence in 85 countries and sell our products in more than 125 countries.



Employees by reporting region



- Emerging markets 38%
- Europe 35%
- US 20%
- Established rest of the world 7%

89,900
employees worldwide

■ Global Research & Development (R&D) centres

1. Gaithersburg, MD, US
2. Boston, MA, US
3. Cambridge, UK (HQ)
4. Gothenburg, SE
5. Shanghai, CN

■ Other R&D centres with discovery research labs

6. San Francisco, CA, US
7. Santa Monica, CA, US
8. New Haven, CT, US
9. Macclesfield, UK
10. Amsterdam, NL



Governance

Our Senior Executive Team (SET) takes the lead in developing our sustainability strategy with governance and oversight provided by our Board of Directors and relevant Board Committees. Whilst all Board Committees consider sustainability in their work, three Board Committees have delegated authority from the Board for oversight and decision-making in connection with specific sustainability-related matters: the Sustainability, Audit and Remuneration Committees.

Board of Directors

The Directors are collectively responsible for the success of the Group. The Board maintains and periodically reviews a list of matters that can only be approved by them. Matters that have not been expressly reserved to the Board in this way are delegated to the Chief Executive Officer (CEO) or one of the Board's five Committees.

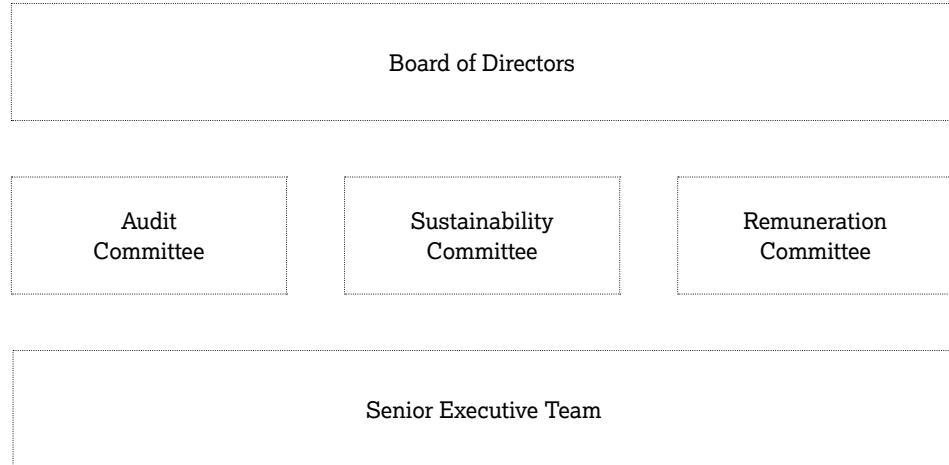
The Board's responsibilities include approving our sustainability strategy and policies, overseeing risk and corporate governance and monitoring progress towards meeting our objectives and annual plans. The Board is accountable to our shareholders for the proper conduct of the business and our long-term success and seeks to represent the interests of all our stakeholders.

On our Board, we have
46% female representation
and **31% ethnic minority representation.**

The Sustainability Committee

Established in 2021, the Board's Sustainability Committee assesses progress on the implementation of our sustainability strategy, oversees communication of sustainability activities with stakeholders, provides input to the Board and other Board Committees on sustainability matters, and helps ensure we move forward in the most impactful way.

During 2023, the Committee held two formal meetings and considered topics such as sustainability reporting, product sustainability, development of the Company's health equity strategy, the ongoing double materiality assessment and the Company's investment in sustainability. At each meeting, the Committee received sustainability updates from the Company's Corporate Affairs, Investor Relations and other relevant functions, including progress on Ambition Zero Carbon.



The newly created Sustainability Steering Committee reports on progress to the Audit and Sustainability Committees and keeps SET updated on current developments.

The Audit Committee

The Board's Audit Committee is responsible for overseeing sustainability-related disclosures that are linked to the Financial Statements, including the Task Force on Climate-related Financial Disclosures (TCFD) Statement and the EU Taxonomy disclosures in the Annual Report and the extended TCFD Statement, published separately and reviewed by the Board's Sustainability Committee.

The Audit Committee is kept informed about regulations that could impact our financial and sustainability reporting. In 2023, the Committee received updates regarding adopted and proposed sustainability reporting regulations in the US, EU and UK, and potential new audit requirements.

The Remuneration Committee

The Remuneration Committee, working alongside the full Board, seeks to ensure that the remuneration of our Executive Directors and our wider workforce reflects the underlying performance of the business and incentivises the delivery of our strategy. When approving the Annual Bonus outcomes for the Executive Directors, the Remuneration Committee considers enterprise achievements over the performance period, including financial and scientific delivery, and the experience of shareholders and other stakeholders. The Committee also considers the individual's performance, including environmental, social and governance (ESG) achievements. Ambition Zero Carbon has been included as a performance measure within the Performance Share Plan (PSP) since 2021. The Remuneration Committee works with the Sustainability Committee when it sets the targets for the

Ambition Zero Carbon measure within the PSP and when considering the potential for other ESG performance measures. Performance outcomes under the Ambition Zero Carbon measure are assessed and validated by the Sustainability Committee and shared with the Remuneration Committee for its consideration.

Sustainability Steering Committee

In 2023, we established an internal Sustainability Steering Committee (SteerCo) comprised of leaders representing functions relevant to the sustainability strategy. The SteerCo is responsible for monitoring key sustainability impacts, risks and opportunities, including reporting and compliance, and ensuring (1) appropriate mitigation measures, (2) sustainability data quality and transition to reasonable assurance and (3) that cross-functional teams are in place to manage ESG risks, regulatory reporting compliance and ESG ratings. The SteerCo is co-chaired by the SVP Finance, Group Controller and Head of Global Finance Services and the VP Global Sustainability and SHE.

For further details on Corporate Governance, please see pages 75-138, in the Annual Report 2023.

Other governance information relating to specific priorities is included in the overview sections of this report.



What sustainability means at AstraZeneca

We seek to create value beyond the impact of our medicines by embedding sustainability into everything we do – from the lab to the patient. We are committed to contributing to a more sustainable future for people, society and planet.

As a global organisation, we are committed to operating ethically and responsibly. We are helping tackle the biggest challenges of our time, such as climate change, biodiversity loss, health equity and health system resilience.

We believe these challenges are interconnected and require collaboration within and beyond the health sector. Through science-based solutions, we believe we can drive positive change and a healthier future.

Materiality assessment

We currently have nine material focus areas, each with their own targets, grouped under three interconnected priorities. We conduct materiality assessments to identify the sustainability issues that matter most to AstraZeneca and our stakeholders and show where we can have a positive impact. We assess the relevance of our strategy and material focus areas annually, through continuous dialogue with our stakeholders and horizon-scanning for emerging sustainability topics. This process has confirmed that our existing focus areas remained a priority in 2023.

Our sustainability strategy

We have nine material focus areas, each with their own targets, grouped under three interconnected priorities:

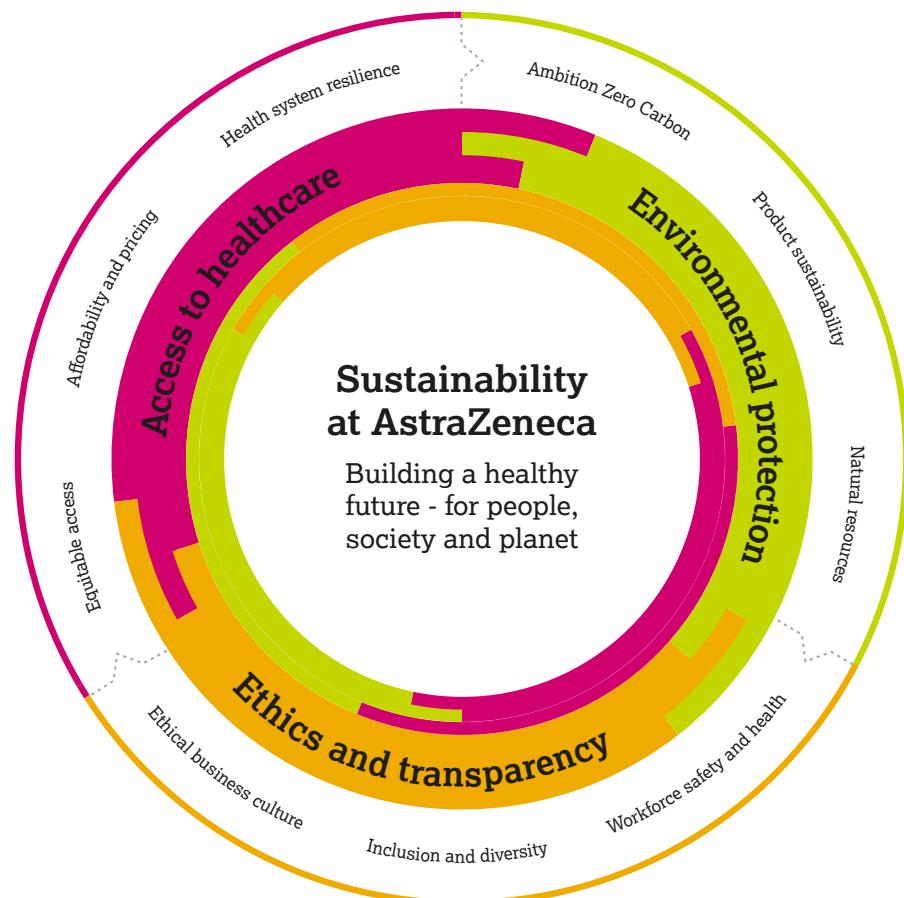
- Access to healthcare
- Environmental protection
- Ethics and transparency

Our ambitions

Promoting prevention, increasing access to life-saving treatments, and strengthening health system resilience and sustainability.

Accelerating the delivery of net-zero healthcare, proactively managing our environmental impact across all activities and investing in nature and biodiversity.

Ensuring ethical, open and inclusive behaviour across our organisation and value chain.





Our value chain

Following the science, we have disease area-focused R&D organisations that are responsible for discovery through to late-stage development for Oncology, BioPharmaceuticals and Rare Disease. Two commercial units, one for Oncology and one for BioPharmaceuticals, align product strategy and commercial delivery across our US and Europe-Canada regions. Our International Commercial region has responsibility for emerging markets, including China, as well as Australia and New Zealand. Japan reports separately. Our Operations function plays a key role in developing, manufacturing, testing and delivering our medicines to our customers. Our Rare Disease group, in addition to R&D, also manages the commercial and operations functions for our rare disease portfolio in established markets.

Our global supply chain supports key operational areas of our business with a wide range of goods and services, including raw materials and equipment. Many of our business-critical operations have also been outsourced to third party providers. For more information on our business structure, workforce, and operations please see pages 10-11 in our Annual Report 2023.

Suppliers and raw materials

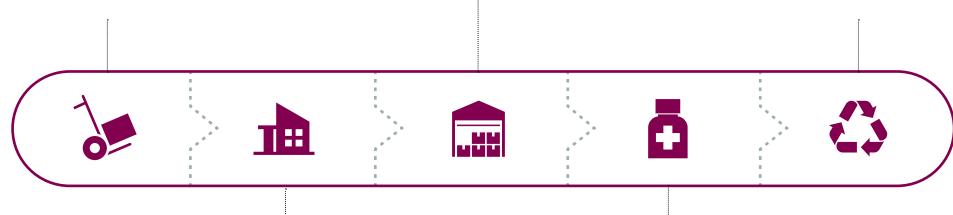
Sourcing and supplying raw material and manufacturing medicinal products

Downstream distribution

Distributing our medicines to consumers and patients

Disposal

Disposal of waste products and packaging by AstraZeneca, consumers and patients



AstraZeneca own operations

R&D, manufacturing and marketing of our medicines

Patients

Use of our medicines by consumers and patients

Stakeholder engagement

Considering the interests of our stakeholders is fundamental to our sustainability strategy.

Foremost among our stakeholder groups are our patients – including patient communities and advocacy groups.

Other priority stakeholders include governments, particularly in relation to access to healthcare and health systems, the investor community on ESG matters, and healthcare professionals (HCPs) regarding the development and delivery of medicines.

We also work closely with academia and R&D partners across the healthcare and environmental fields, as well as our industry peers and other major companies with a shared ambition to tackle sustainability challenges, through global forums and collaborations.

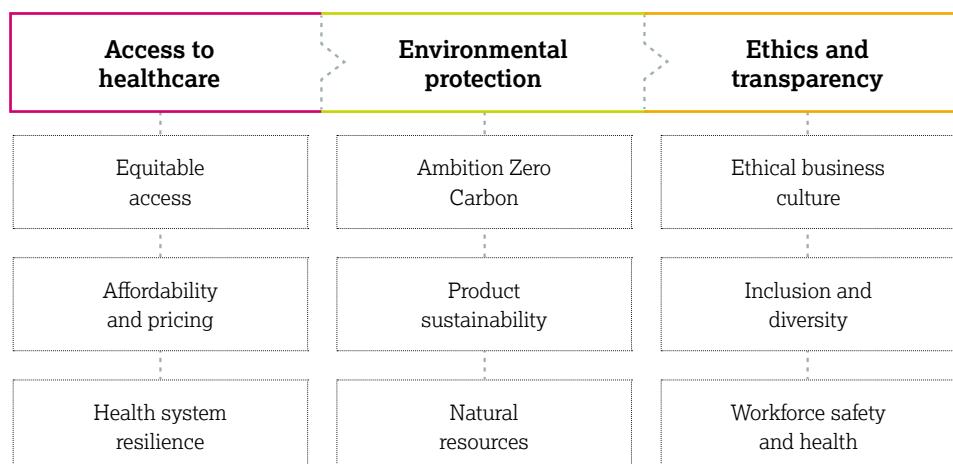
We partner with a wide range of governmental and non-governmental bodies across our sustainability priorities. In addition, our suppliers are key to achieving many of our environmental targets and our commitments to ethical behaviour and transparency.

We also aim to have a positive impact in the communities where we operate, often through collaborations with others facing shared local challenges.

Finally, we have an extensive process of communication and engagement with our employees, who are critical to the achievement of our sustainability goals.

For more details on the interests, engagements and outcomes of contact with these and other stakeholder groups, please see ‘Connecting with our stakeholders’ in the Corporate Governance section of our Annual Report 2023 (pages 84-86).

The remainder of this report is organised by our strategic priorities and focus areas, followed by the data annex section for details of performance against targets and progress on our priorities.





Access to healthcare

Good health is at the heart of a sustainable future



Our ambition

Promoting prevention, increasing access to life-saving treatments and strengthening health system resilience and sustainability.

Connection to health

Innovative and sustainable healthcare solutions are essential to improving global health outcomes.

Our material focus areas

- Equitable access
- Affordability and pricing
- Health system resilience

2023 performance

66.4m

people reached by access to healthcare programmes (cumulative)

13.6m

people reached by patient assistance programmes (cumulative)

127,384

healthcare workers trained (cumulative)

4,157

health facilities activated (cumulative)

Health should not be determined by who you are, where you live or where you were born. We are working to remove barriers to healthcare and give everyone the chance to be as healthy as possible.



Access to healthcare overview

We are transforming healthcare to secure a future where all people have access to affordable, sustainable and innovative care.

The big picture

Everyone should have access to healthcare, no matter who they are or where they live. This is critical across the patient care pathway – from prevention, early detection and diagnosis to the effective treatment of disease.

Integration with our strategy and business model

We are working to identify barriers to access and are innovating to deliver our life-changing medicines in a sustainable and equitable way, through global, regional and local partnerships.

Central to this is our commitment to promoting prevention, increasing access to diagnostics and treatments, and strengthening health system sustainability and resilience.

We are focused on:

- Innovating to deliver life-changing medicines and future-proof global health systems
- Partnering to improve health equity for patients now and in the long term
- Transforming healthcare to secure a future where all people have equitable access to treatment

Governance

Overall responsibility for Access to healthcare is at Board-level, where progress is tracked against our Group People and Sustainability strategic priority, including our ESG goals.

We incentivise select senior executives and in-country managers to perform on access initiatives with financial and non-financial rewards. Our CEO also has access-related incentives linked to the company's ESG performance.

We publicly disclose outcomes of our access activities, including progress on our commitments, measurable goals, objectives and targets for improving health equity for patients in the countries where we operate.

We collaborate on our Access to healthcare material focus areas on a cross-functional basis to deliver our strategy and measure progress.

We also have a dedicated team within Global Corporate Affairs who oversee progress against targets and report on these to the Board Sustainability Committee, along with the development of our health equity strategy and expansion of our access programmes.

Equitable access

Scope of this focus area

To drive equitable access to healthcare by embedding practices across the product portfolio - including digital health, clinical trial diversity, patient centricity, investing in rare diseases, open innovation and intellectual property (IP) sharing arrangements.

Why it matters

Health should not be determined by who you are, where you live or where you were born. We are working to remove barriers to healthcare and give everyone the chance to be as healthy as possible. Economic and supply barriers, as well as geographic impediments, inhibit universal access to high quality, evidence-based healthcare.

Additionally, in developing countries there is an epidemiological shift from the prevalence of communicable to non-communicable diseases (NCDs), however local healthcare provision varies in quality and the systems may not be in place to tackle this growing burden. Programmes to control priority public health conditions also need to recognise the importance of the economic and social determinants of health.

We have therefore aligned our access initiatives to improve health equity by addressing local needs. To do this, we are:

- Creating integrated approaches including through collaboration with governments and utilising local expertise to identify and address shared priorities
- Collaborating in cross-sector partnerships to improve health outcomes

Strategic approach

We are committed to improving equitable access to healthcare for patients globally, including to our innovative product portfolio. Our approach includes integrating programmes into local systems and delivering affordable medicines to patients. We seek to drive positive global health outcomes by:

- Addressing unmet medical need and barriers to access
- Increasing the speed and breadth of patient access
- Driving excellence in product life-cycle management
- Understanding the long-term impacts of scientific advances

We are playing our part to address health inequities and eliminate discrimination from the delivery of healthcare. As a company at the forefront of scientific and medical innovation, we are also harnessing the latest digital technologies to support improved access. This includes using the power of data and analytics for early diagnosis and expanding access to the latest medical research and training for healthcare professionals.

We are committed to improving equitable access to healthcare for patients globally, including to our innovative product portfolio.



Actions – key initiatives:

Diversity in clinical trials

We are committed to designing clinical programmes with equity at the forefront – from idea inception to patient care. Our approach is patient-centric, data-driven and science-led. We are improving the diversity of clinical trial participants with strong data foundations, tools and standards to align and track progress, and external partnerships. We work with industry groups, regulatory agencies and local community groups to shape clinical trial diversity policies of the future while delivering for patients today.

Reducing time to diagnosis and engaging policymakers are **critical to advancing equitable access** for rare disease patients.

Rare diseases

There are more than 10,000 known rare diseases, and the vast majority (>90%) do not have an approved treatment. This means that rare disease patients also face unique challenges in pursuing equitable access to healthcare, such as significant delays in diagnosis, greater chances of hospitalisation from preventable conditions, scheduling and travelling to appointments, and accessing available treatments.

We believe people with rare diseases deserve the same attention and investment to find and access therapies as anyone else. As we expand the geographies where our rare disease medicines are available, we continue to build relationships with patient communities early in our development programmes to better understand their needs. We focus on: increasing clinical trial diversity; developing improved data collection processes to enhance our understanding of how rare diseases affect specific patient populations; improving access

to diagnostic tools; and supporting efforts to improve the experience of those participating in our clinical trials. We also supply medicines for rare diseases through our patient support and expanded access programmes.

Intellectual property

AstraZeneca recognises our role in helping to make our products accessible and affordable to patients in need. Our Commitment to Deliver Our Science to Patients details our efforts to address barriers our patients face – financial or otherwise – in developing and developed markets. Those efforts include our approach to IP. AstraZeneca seeks to protect innovations worldwide, and we prioritise the countries where we seek patent protection. AstraZeneca does not file patent applications in any low-income countries (LICs) or least developed countries (LDCs). AstraZeneca also does not file in a number of low- to middle-income countries (LMICs) and medium human development countries (MHDCs).



Targets and progress

Equitable access

See data annex for full metrics

Target

Reach 50 million people (cumulative) through Healthy Heart Africa (HHA), Young Health Programme (YHP), and Healthy Lung programmes by 2025.

Progress

More than 66.4 million people reached (cumulative) through HHA, YHP and Healthy Lung programmes.

● Status: Target met

\$115.4m

Total community investment

(not including patient assistance programmes).



Affordability and pricing

Scope of this focus area

To drive accessibility of medicines for diverse, equitable and inclusive patient groups, through company policy and programming, including core pricing principles and access programmes.

Why it matters

We are committed to addressing barriers to access and affordability. Our industry, policymakers and payers need to work together to identify solutions. Through collaborations, partnerships and stakeholder coalitions we are working to ensure essential and innovative medicines become more widely available. As a global business, there are challenges that affect our flexibility to provide access to our medicines. These include pricing controls, reimbursement mechanisms, taxation and mark-up systems, plus a high frequency of regulatory changes. In addition, supply chain complexity can increase costs, and the economic downturn is adversely affecting ability to pay (where applicable).

While we are thoughtful in our pricing approach, we understand the challenges that healthcare systems and patients face in terms of equity and affordability. Recognising our shared responsibility, we take a broad, flexible approach to pricing to reflect the variation in healthcare systems. We are committed to working in partnership with patients, policymakers, payers and the wider healthcare community to ensure access is as equitable, widespread and as sustainable as possible.

Strategic approach

AstraZeneca has adopted four key pricing principles that are designed among other things to support our affordability efforts globally:

- **Sustainability:** of both the healthcare system and our research-led business model
- **Value:** reflects the clinical benefit of our medicines to patients and the broader impact on society, along with the positive economic impact to the healthcare system by reducing the need for additional medical intervention
- **Access:** collaboration with payers and providers on solutions to enable sustainable access to our medicines
- **Flexibility:** in pricing to reflect variation in health system needs and ability to pay

Tiered pricing

We believe tiered pricing is a key enabler for broader and accelerated patient access in LMICs. We do this by linking the cost of medicines with government and patient ability to pay based on macroeconomic indicators of local affordability (such as Gross National Income per capita, national healthcare budgets and other relevant health economics considerations).

Value based agreements

Value-based agreements, across multiple therapy areas, enable patient access while reducing uncertainty for payers (clinical or economic) by linking access, reimbursement or price to real-world clinical benefit or other agreed terms.

We work closely with governments, private and public payers, and in some cases individual patients, to create patient access opportunities using local real-world data tailored to address unmet needs.

Actions – key initiatives:

Patient access programmes

Our patient access programmes, including patient assistance programmes, use fully donated products, without expectation of payment from the patient for any portion or to access the programme. Our largest patient assistance programme is AZ&Me in the United States, which provides eligible patients with AstraZeneca medicines free of charge.

Patient affordability programmes

Patient affordability programmes (PAPs) aim to close the gap in the ability to pay of patients who fund their own medicines, and sometimes close a funding gap between capped, government-sponsored funding and the patient's ability to pay once funding from government ends. We track PAPs in 25 countries, most of which are LMICs where we adopt different programme types. Examples include fixed PAP schemes, tiered PAPs, co-pay support, micro-financing and bridging programmes.

We are committed to addressing barriers to access and affordability. Our industry, policymakers and payers need to work together to identify solutions.



Targets and progress

Affordability and pricing

See data annex for full metrics

\$4,778.8m

in product donations through patient assistance programmes.

862,632 people

reached by patient access programmes.



Health system resilience

Scope of this focus area

To strengthen health systems, by:

- Partnering with stakeholders in the development of research-based recommendations, advocating for health system policy reform and building capabilities to strengthen the delivery of health services.
- Improving access to quality healthcare and providing solutions along a continuum of care – from prevention, awareness, diagnosis and treatment to post-treatment and wellness.
- Supporting the continuity of integrated and essential quality healthcare in communities affected by humanitarian emergencies through disaster relief.

Why it matters

The shifting burden of disease, geopolitical fragmentation and the frequency of extreme weather events linked to the climate emergency all put pressure on health systems. The COVID-19 pandemic tested health systems' ability to respond to sudden shocks and crises while ensuring continuous access to healthcare services for patients.

Health system capacity remains under pressure at global, regional and local levels, with outbreaks of infectious diseases such as respiratory syncytial virus (RSV) and influenza, as well as the increasing prevalence of NCDs, exacerbated by the growing impacts of climate change and ecosystem degradation on human health. Health system resilience and capacity must be strengthened.

We are working towards a future where:

- Resilient health systems can respond and adapt effectively to crises while managing ongoing population health needs
- Equitable health systems ensure everyone is able to live their healthiest life, by removing barriers to early disease detection, accurate diagnosis, access to clinical trials and high-quality therapies
- Net-zero health systems improve patient outcomes and limit the environmental impact of care

Strategic approach

Sustainable healthcare for all requires investment in strengthening health systems with the infrastructure required to be responsive to population needs. Our integrated approach puts health at the centre of a sustainable future by advocating for more strategic investment in health, earlier action on disease and enhanced use of digital, data and technology.

As shown by the COVID-19 pandemic, where we learned what can be achieved when we collaborate at speed and at scale, partnering with stakeholders across the healthcare ecosystem is key to our shared success. We are investing in ground-breaking global collaborations, company initiatives, local partnerships and fast-tracked innovation to give access to higher quality healthcare for more people worldwide.

Specific activities include:

- Improving preparedness for future shocks and enhancing international coordination on scenario planning, response protocols and reserve capacities
- Optimising the location and focus of patient care through digital technologies
- Addressing the social, economic, and ecological costs of disease through targeted prevention measures that are optimised to address risk factors and local challenges, while leveraging our experience in health programming
- Improving the effectiveness of care for chronic diseases through defining, implementing and monitoring improved quality of care standards

We aim to build the capabilities of health systems to best respond to patient needs by:

- Ensuring programming is locally and culturally relevant
- Using our footprint to scale partnerships and collaborations
- Establishing mechanisms for collaboration with our partners, for example through joint coordination, planning, follow-up and alignment on key performance indicators
- Considering the long-term sustainability of our partnerships to effectively transfer resources, skills and capabilities, and enable local ownership
- Keeping the communities we serve at the heart of our partnerships by involving them in the design and delivery of programmes

Actions – key initiatives:

Partnership for Health System Sustainability and Resilience (PHSSR)

The PHSSR is a non-profit, multi-sector, global collaboration established in 2020 by the London School of Economics, the World Economic Forum and AstraZeneca, with a unified goal to improve global health by building more sustainable and resilient health systems. The partnership has since been joined by other members including Philips, KPMG, the Center for Asia-Pacific Resilience and Innovation (CAPRI) and the WHO Foundation alongside additional organisations at regional and national levels. It is now active in more than 30 countries worldwide.

With its unmatched collective expertise spanning health research, policy and innovation, the PHSSR has built, and continues to expand upon, one of the largest bodies of work on the sustainability and resilience of health systems globally. Global experts work with national academics and policymakers to understand domestic challenges and develop tailored recommendations that can be actioned. In 2023, PHSSR published its second summary report, capturing research conducted in 18 countries, a regional EU report featuring recommendations on tackling the growing burden of NCDs and several country-specific reports.

The PHSSR is activating global leaders and partnering with national stakeholders to drive focused interventions and policy change. In 2023, PHSSR has engaged with over 40 national and multilateral platforms and events, including the World Health Assembly, the World Health Summit and at the European Parliament.



Healthy Heart Africa

Our Healthy Heart Africa (HHA) programme is committed to reducing hypertension and the burden of cardiovascular disease, aiming to reach 10 million people with elevated blood pressure across Africa by 2025. We work with local and global partners to raise cardiovascular awareness and offer training, screening and reduced cost treatment, where applicable. By the end of 2023, the programme had conducted more than 47.9 million blood pressure screenings and trained more than 11,300 healthcare workers since launch in 2014. Also in 2023, the programme launched in eight of 10 new countries planned by 2024, working with implementing partners the African Christian Health Association Platform (ACHAP) and PATH, in addition to the existing nine countries of operation.

Young Health Programme

Our Young Health Programme (YHP) aims to empower young people to make more informed choices about their health and catalyse a

global, youth-led advocacy movement. It is now active in 40 countries worldwide, combining community programmes, research, advocacy and supporting the development of young leaders, with a focus on vulnerable and under-resourced communities. Through partnerships with more than 60 non-profit partners around the world including UNICEF, the YHP has directly reached more than 15 million young people and trained more than 580,000 youth as Peer Educators since its launch in 2010. In 2023, the YHP reached more than five million young people through prevention and education programmes.

Community investment

Community investment at AstraZeneca is built upon the principles of equity, transparency and partnership, and working together to build healthy and resilient communities. In 2023, we contributed \$115.4 million in financial and non-financial donations (including product donations), to more than 810 non-profit partners across 76 countries. We also donated

\$4.7 billion of medicines through patient assistance programmes around the world, the largest of which is our AZ&Me Prescription Savings program in the US.

Sustainable healthcare for all requires investment in strengthening health systems to deliver an infrastructure designed to be responsive to the needs of the population it serves.



Targets and progress

Health system resilience

[See data annex](#)
for full metrics

Target	Progress
Train 170,000 healthcare workers (cumulative) to strengthen health systems throughout the world through our Healthy Heart Africa, Healthy Lung and Phakamisa programmes by 2025.	More than 127,300 healthcare workers trained (cumulative). ● Status: On plan

1,516
healthcare facilities

were activated through our Healthy Heart Africa programme (cumulative).



Environmental protection

Recognising the interconnection between a healthy planet and healthy people



The conservation and sustainable use of natural resources and the protection and restoration of ecosystems are vital to shape a healthy future with resilient people and communities, building harmony between society and the natural environment.

Our ambition

Accelerating the delivery of net-zero healthcare, proactively managing our environmental impact across all activities, and investing in nature and biodiversity.

Connection to health

Supporting a healthy environment is critical to the health of people, society, and the planet. We aim to improve health outcomes and help tackle the increasing prevalence of diseases linked to the impacts of climate change. We are also investing in nature and biodiversity, recognising the strong interconnection with population health.

Our material focus areas

- Ambition Zero Carbon
- Product sustainability
- Natural resources

2023 performance

67.6%

reduction in Scope 1 and 2 GHG emissions since 2015, a reduction of 420 kilotonnes CO₂e

>19.9m

trees planted in Australia, Brazil, Ghana, India, Indonesia, Rwanda, the UK, and the US since 2020

97.6%

of paper-based product packaging materials used supplied from sustainable sources, achieving the 2023 target

750+

material suppliers with a critical role in patient supply screened to understand climate vulnerability in the upstream value chain



Environmental protection overview



Beyond the benefits of our medicines to patients, our contribution to society must respect our environment and ensure that our use of the planet's finite natural resources is sustainable. We know that a healthy environment is critical for human health.

The big picture

Climate change, pollution and the degradation of ecosystems are already impacting human health – including through a rise in NCDs such as heart disease, stroke, lung cancer and respiratory diseases – and undermining the capacity of health systems. Bold climate action and investments in nature and biodiversity are vital to improve health outcomes. The environmental challenges we face are multifaceted and ecosystem issues are interconnected. Systems-level thinking is needed to deliver better health outcomes with a lower environmental footprint.

There is increasing focus on the environmental footprint of goods and services across the whole value chain. Companies are also under greater scrutiny, reinforcing the need to have robust scientific evidence underpinning environmental targets, performance reporting and the solutions being implemented.

Integration with our strategy and business model

We manage our Environmental protection material focus areas in an interconnected way. Sustainable product design, sourcing and manufacturing aim to achieve lower natural resource use, reduced chemical and water demand, and generate less waste and pollution, as well as a lower GHG emissions footprint.

We follow the science to lower the economic and environmental burden of healthcare, while improving health outcomes and reducing our exposure to environmental risks. To achieve this, we are accelerating the delivery of net-zero healthcare, proactively managing our environmental impact across all

activities, investing in nature and biodiversity, and assessing and managing both risks and opportunities. At AstraZeneca, we are demonstrating that this can be achieved alongside business growth, but there is more to do. By investing in new ways of working and through innovative collaborations, we can maximise the efficiency of how we use natural resources to further reduce our footprint.

Natural Resource Efficiency Fund

To drive our climate action initiatives and meet our environmental targets, we have a dedicated Natural Resource Efficiency Fund (NREF), which has invested approximately \$175 million in environmental efficiency projects since 2015. This, together with other central capital investments, has seen a further \$36.6 million spent in 2023, including 72 new projects.

Task Force on Climate-related Financial Disclosures (TCFD)

We support the Task Force on Climate-related Financial Disclosures (TCFD) framework, which we have applied annually since 2020. All our business operations worldwide are in scope, unless otherwise stated. The framework applies a risk-based approach, focusing on the most material physical and transitional risks and opportunities. We will build resilience across the value chain through adaptation and business continuity planning.

A TCFD Steering Group with cross-functional membership has oversight of the physical and transitional risks and opportunities posed to AstraZeneca by climate change. The identification and assessment of climate risk forms part of our existing risk management processes. In many cases, mitigation measures are already in place, including for the risks and opportunities presented by the transition to a low-carbon economy and the provision of net-zero healthcare. Based on current assessments, physical and transitional climate-related risks are included within a specific risk in the Group's risk landscape 'Failure to meet regulatory or ethical expectations on environmental impact, including climate change', which is not currently considered to be a Principal Risk for the Group.

For further details on TCFD please see pages 51-53 in the Annual Report 2023 and our TCFD Report on www.astrazeneca.com/annualreport2023.

Environmental Management System

Our Code of Ethics guides our behaviours and states that we operate in an environmentally responsible manner, working to minimise our reliance and impact on natural resources and promote environmental sustainability, as well as minimising the environmental impact of our products from discovery to disposal. The guide for our Environmental Management System is embedded in our Code of Ethics supported by our Safety, Health, and Environment (SHE) Standard. This Standard sets out the principles central to our workplace under AstraZeneca's Code of Ethics and Global Policy Framework (GPF), together with our OneSHE Framework of internal standards, procedures and guidelines.

Our SHE management system is implemented in line with recognised international standards such as ISO 14001 and 50001. It ensures the environmental risks of our activities are assessed, operational controls are in place, checks are completed through a risk-based audit programme guided by an independent organisation and there is an annual management review process.

Governance

Our executive-led Ambition Zero Carbon Governance Group is accountable for the delivery of Ambition Zero Carbon across all three of our Environmental protection focus areas. In 2023, this Governance Group included our CEO, CFO, and the EVP, Global Operations, IT & Chief Sustainability Officer.

Since 2021, delivery of Ambition Zero Carbon Scope 1 and 2 commitments has been included in our executive incentive arrangements for the Performance Share Plan (PSP), with a weighting of 10% of award. This measure reflects the importance of reducing our Scope 1 and 2 GHG emissions on the way to achieving our verified science-based target of a 98% reduction by 2026 from the 2015 baseline. GHG emissions are calculated in line with the World Resources Institute/World Business Council for Sustainable Development GHG Protocol methodology for accounting and reporting of our emissions footprint. The PSP is determined by the Board's Remuneration Committee and approved by the Annual General Meeting.



Ambition Zero Carbon

Scope of this focus area

Across our value chain:

- To achieve net zero by avoiding GHG emissions through our product and facility design, optimising energy efficiency, shifting to renewable energy sources, transitioning to a battery electric vehicle (BEV) fleet, and investing in nature-based removals to compensate for any residual GHG footprint
- To build resilience by managing the physical (sites, supply chain) and transitional (regulatory, technological, market and reputational) risks and opportunities arising from climate change and in a low-carbon economy, through adaptation and business continuity planning

Why it matters

We are working to deliver net-zero healthcare, acknowledging that approximately 5% of GHG emissions are from the healthcare sector.

A significant proportion of our value chain footprint results from our product lifecycle, from raw material extraction to manufacturing,

packaging, distribution, patient use and disposal. Pharmaceutical products have a long development cycle, which makes it critical to design in and embed climate considerations at an early stage. To achieve our goals, we must also tackle emissions from our existing commercial portfolio, which creates challenges with heavily regulated production processes and materials.

To develop an effective response, we need to increase a shared understanding with our suppliers, investing time to help align with our expectations across our supply chain. By enabling suppliers to reduce their GHG emissions, we can reduce our own Scope 3 emissions and achieve our net-zero targets.

Other challenges include difficulties in accessing renewable sources of heat, exacerbated by the energy crisis and the relative immaturity of commercial-scale clean heat solutions. The global transition to BEVs is being impeded by a lack of vehicles and charging infrastructure in some markets, although the supply of vehicles has improved and we are on plan to transition by the end of 2025 where technically feasible.

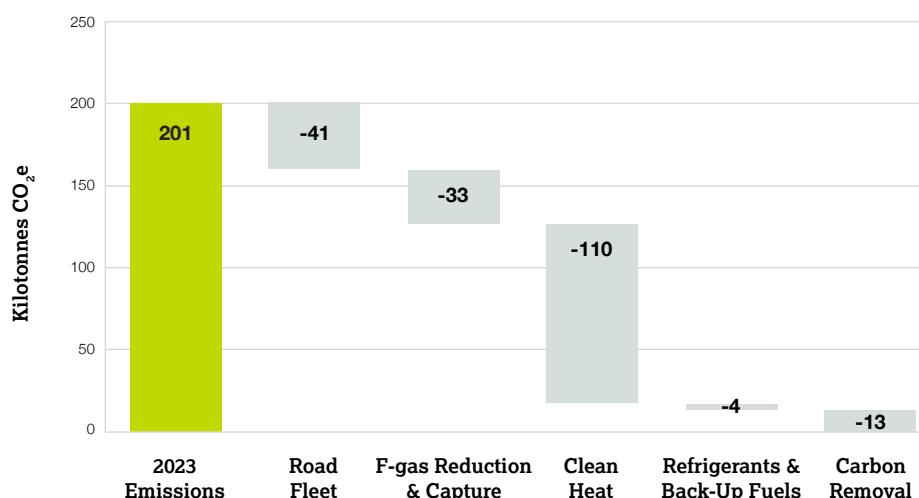
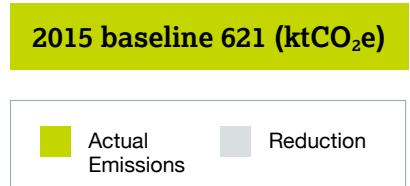
Strategic approach

Through our Ambition Zero Carbon strategy, we are pursuing ambitious science-based decarbonisation targets, accelerating our progress towards net zero, and managing

the risks and opportunities presented by climate change:

- We follow the science to understand the climate and health nexus and set our targets
- We follow a hierarchy to address each emission source (eliminate-reduce-substitute)
- We recognise the importance of our supply chain and suppliers, whom we engage with, educate, support and incentivise to act
- We partner with our sector peers, including at a high-level through the SMI Health Systems Task Force and in addressing key emissions sources through the Energize and Activate collaborations
- We are transparent about our performance, methodologies, transition plan and assessment of climate-related risks and opportunities presented by a low-carbon economy and net-zero healthcare
- We have nature-based and technical measures in place to identify and address physical climate risks at site level and in local business continuity planning
- We focus on delivering absolute reductions in all our direct and indirect GHG emissions sources across the value chain – Scopes 1, 2 and 3

Scope 1 & 2 emissions, strategic approach



Scope 3 emissions, strategic approach



For more detail, see Ambition Zero Carbon infographic.



Actions – key initiatives:

Energy efficiency and renewable energy

In 2023, we invested \$33.7 million in energy efficiency and on-site renewable energy through the NREF, together with other central capital investments, to progress towards our targets. We have achieved a 17.5% absolute reduction in total energy consumption from our 2015 baseline and we are committed to using 100% renewable energy sources to meet all our needs by the end of 2025. As part of our renewable energy strategy we investigated how to maximise the positive impact of our renewable energy procurement and identified three focus areas for development to align with our ambition to lead in sustainability:

- **Additionality** – investments and energy purchase agreements that deliver on-site or new-to-grid renewable energy capacity. We are aiming for over half of our renewable energy globally to come from new sources
- **Geographic relevance** – energy purchase agreements that deliver real world GHG emissions reductions by displacing fossil energy sources in the grid systems where we consume that energy
- **Temporal relevance** – energy attribute certificates (EACs) that are tagged with the time and date of generation can improve the utilisation of renewable energy sources and deliver real world GHG emissions reductions. We are aiming to better understand, disclose and improve the alignment between when our energy is generated and consumed

Clean power

In 2021, we transitioned to 100% imported electricity from certified renewable sources through purchasing certificates from the same country, and same year, as our consumption. As we were unable to purchase renewable electricity certificates for Russia in 2022, this reduced to 99% and has been maintained in 2023. We are members of the Eurelectric-led 24/7 taskforce to learn about measuring and improving the temporal relevance of our energy procurement.

We recognise the many benefits of self-generated renewables to site energy costs, resilience, temporal relevance and employee engagement, and have spent \$19.4 million from 2022 to 2023 on on-site solar photovoltaic (PV) installations at nine locations in seven countries.

Once operational, the total output from all our on-site solar PV will be 32 gigawatt hours (GWh) of electricity, equivalent to over 4.1% of our global electricity use. There is a limit to the scale that can be achieved through on-site solar PV, and so to deliver additional renewables with geographic and temporal relevance, as outlined above, we are aiming to meet most of our electricity needs in our primary locations – Sweden, UK and US – through new power purchase agreements (PPAs) in the grids where we operate.



To this end, in 2023 we entered into a 10-year PPA agreement with Statkraft, Europe's largest renewable energy producer, to source electricity from a wind farm in Sweden that will supply 200 GWh per year from a new-to-grid project. This provides additional zero carbon electricity to the grid and will correspond to approximately 80% of our total electricity needs at our Gothenburg and Södertälje sites.

Clean heat

Access to certified low- and zero-carbon fuels and imported heating and cooling sources globally is very limited.

We are striving to develop new sustainable sources of energy to achieve our Ambition Zero Carbon targets.

Our approach to each of our locations prioritises demand reduction in the first instance and the assessment of electrification options, such as heat pumps and electric boilers, while also looking at substitution of fossil fuels (mostly gas) with sustainable alternative fuels and a preference for innovative and new-to-grid solutions.

Since 2022, we have been developing a solution for our US sites, which are collectively our largest-consuming market for fossil gas globally. In 2023, we collaborated with Vanguard Renewables to enable the delivery of renewable natural gas (RNG – biomethane) to all our sites in the contiguous US by the end of 2026. From June 2023, we began purchasing

RNG produced by Vanguard Renewables for our Newark campus in Delaware, and by 2026, this collaboration will enable up to 190 GWh per year of RNG to be used across AstraZeneca's US sites, equivalent to 36% of our total global gas consumption.

In 2023, we entered into a 15-year agreement with Future Biogas to establish the first unsubsidised industrial-scale supply of biomethane in the UK. This supply of green gas will contribute to heat for our sites in Macclesfield, Cambridge, Luton and Speke. The new biomethane plant will add renewable energy capacity to existing UK infrastructure and supply more than 100 GWh of biomethane, equivalent to 19% of our total global gas consumption. Using crops grown locally as part of diverse crop rotations, the plant will also contribute to the development of a circular economy, supporting UK farms with sustainable land management practices.

We need to increase shared understanding with our suppliers, investing time to help align with our expectations, across our supply chain.



Value chain collaboration

Through the SMI Health Systems Task Force, convened by AstraZeneca CEO Pascal Soriot, we are partnering across the healthcare sector to accelerate the delivery of net-zero health systems, including through supply chain decarbonisation and patient care pathways, and the use of digital innovation in clinical research.

Ahead of COP28 in November, to accelerate the transition to net-zero health systems, it was announced that global healthcare leaders from the Task Force were in advanced discussions with energy providers in China and India to scale renewable power across their supply chains, in an industry-first initiative in these countries. China and India are key markets for pharmaceuticals manufacturing, estimated to account for up to 50% of materials for medicines.

In January 2024, it was announced that AstraZeneca was one of five global healthcare leaders – including four members of the SMI – to sign an industry-first renewable power agreement in China, with leading renewable

energy company Envision Energy, resulting in potential annual carbon dioxide equivalent savings of approximately 120 kilotonnes.

In March 2023, the Task Force announced joint, minimum climate and sustainability targets for suppliers, to address emissions across the value chain and reduce the complexity of multiple asks for suppliers. In July 2023, AstraZeneca's CEO was one of seven global healthcare leaders in the Task Force who signed an open letter, calling on suppliers to sign up to these targets and play their part in decarbonising the healthcare value chain.

We also joined other global pharmaceutical companies in accelerating the decarbonisation of active pharmaceutical ingredient (API) supply chains, helping suppliers gain access to green funding and support through the Activate Programme.

We were a founding member of Energize, a collaboration between Schneider Electric and 19 global pharmaceutical companies to facilitate access to renewable power at

scale for our suppliers, with the programme's first PPA buyers' cohort to purchase 2 TWh renewable electricity announced in November 2022. To date, 286 AstraZeneca suppliers have registered with the programme. In 2023, a partnership was announced between Energize and the Pharmaceutical Supply Chain Initiative (PSCI) to accelerate the adoption of renewable energy across the pharmaceutical sector supply chain to support the transition to net zero.

We are tackling 20% of our Scope 3 footprint through our commitment to developing a next-generation pressurised metered-dose inhaler (pMDI) using the propellant HFO-1234ze(E), which has a near-zero Global Warming Potential (GWP) – see details below in Product sustainability key initiatives.

We are working to build transparent supply chains by asking our partners to assess and disclose their GHG emissions to the CDP Supply Chain Programme, with 708 suppliers (59% of in-scope spend).



Photograph: Todd Balfour.

Targets and progress

Ambition Zero Carbon

See data annex
for full metrics

Target

Reduce absolute Scope 1 and 2 GHG emissions by 98% by 2026, from a 2015 base year.

Progress

Reduced Scope 1 and 2 GHG emissions by 67.6% since 2015, a reduction of 420 kilotonnes CO₂e.

● Status: On plan

Reduce absolute Scope 3 GHG emissions by 50% by 2030 and 90% by 2045, from a 2019 base year.

Total Scope 3 increased by 18.6% from a 2019 baseline and Scope 3 intensity reduced by 24%. Significant increase in use of primary data and suppliers setting science-based targets (SBTs) will support future absolute emissions reductions towards 2030 target.

● Status: On plan



Product sustainability

Scope of this focus area

To follow processes throughout the life cycle of our products with the aim of understanding and addressing their environmental impact, from discovery through development and production, to launch of a new product and to end of product life.

Why it matters

People and the planet will benefit from those medicines which have the smallest possible environmental impact yet maintain the highest medical efficacy and safety standards. As technologies and healthcare systems evolve, so should solutions to reduce energy, water, material use, waste and pollution generated from designing, manufacturing and delivering medicines to patients. We know that the GHG emissions from our product value chains are the most significant contribution to our company Scope 3 emissions, and we are addressing these across our business using a data-driven approach.

Pharmaceuticals enter the environment mainly from patient use, where some can pass through our bodies and into waterways. APIs are biologically active molecules and may interact with and impact wildlife when in the environment. Drug manufacture and the improper disposal of unused medicines can also add to the trace levels of pharmaceuticals in rivers, lakes, soils, and sometimes drinking water. We recognise that, even in very low concentrations, the risks associated with Pharmaceuticals in the Environment (PIE) should be determined and managed. With increased access to medicines worldwide and an ageing population, potentially more patients will pass pharmaceutical residues into the environment.

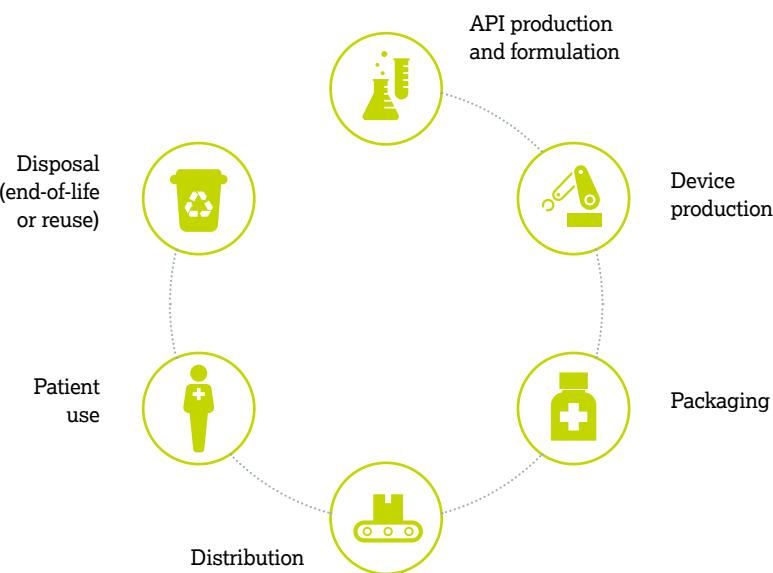
More details of our approach can be found in our position statement on [Pharmaceuticals in the Environment \(PIE\)](#).

Strategic approach

To deliver medicines that improve patient outcomes and minimise the burden on the planet, we evaluate and aim to address the environmental impact of materials and processes across the entire product value chain.

We have implemented an internal Product Sustainability Index (PSI) to understand the environmental impacts of our products and inform improvement plans. We also lead our industry in the management of PIE and promote responsible product stewardship.

We follow a life cycle approach that covers all stages of our products



Sustainable decision-making and environmental improvements are embedded across the product life cycle:

- Integrated business processes to ensure safety, health and environmental aspects are considered throughout drug development, with guidance on environmental assessment of API manufacturing, formulation, packaging and devices
- Targets for API manufacturing emissions from both AstraZeneca and our external supply sites
- We conduct, fund and support research on the environmental impact of our products and apply the principles of green chemistry in our business
- Our life cycle assessment (LCA) programme determines the type and magnitude of environmental impacts across our product value chains and is in line with ISO standards 14040 and 14044
- We invest in new science and disruptive technologies, allowing design of shorter chemical sequences to our APIs, and improve processes for our new modality medicines, significantly reducing environmental impact
- We are working on redesigning our packaging to make it more sustainable
- We are a leading partner in collaborations to drive common standards for illustrating environmental footprints of our medicines

Actions – key initiatives:

F-gas regulatory developments and next-generation pressurised metered-dose inhaler (pMDI)

Essential medicines for respiratory diseases include pMDIs which rely on fluorinated gases (F-gases) as propellants. Driven by the Kigali Amendment to the Montreal Protocol, governments are developing legislation to phase down the use of hydrofluorocarbons (HFC), a type of F-gas. AstraZeneca supports the phase down of these high Global Warming Potential (GWP) propellants and recognises the significant positive impact it could have on climate and health. It is critical, however, that legislation avoids the risk of limiting access to life-saving inhaled medicines for patients, thereby protecting both people and planet.

An important product-related element of our Ambition Zero Carbon strategy is our commitment to developing a next-generation pMDI using the propellant HFO-1234ze(E), which has near-zero GWP. In 2023, project milestones achieved include further Phase III investment decisions, a harmonised development programme defined globally, readouts of pivotal studies and initiation of key studies needed to file for regulatory approval.



European Union (EU) pharmaceutical and chemicals regulatory developments

As part of the European Commission's pollution reduction strategy, updates and changes to pharmaceutical and chemical regulations could influence the way medicines are manufactured and approved in future. Monitoring these regulatory risks, providing evidence-based responses to ongoing consultations, and proactively managing the chemicals used in our processes, including those categorised as per- and polyfluoroalkyl substances (PFAS), will help minimise the impact on supply of medicines to patients.

Life cycle assessments for pharmaceuticals

Recognising the importance of a harmonised method to measure and report the environmental impact of medicines and healthcare products, the SMI Health Systems Task Force has worked with the Pharmaceutical Environment Group (PEG) through a newly created consortium and NHS England to support the development of a sector-wide standard for medicines LCA. The consortium and NHS England intend to work with the British Standards Institution (BSI) to reach a

consensus among the sector's stakeholder groups including healthcare systems, providers and professionals, representative bodies, academics and patients to establish the standard. With support from experts including Quantis, the delivery of this LCA standard will improve transparency and support the assessment and reduction of the environmental impact of medicines across their manufacture, supply, use and end of product life.

Ecopharmacovigilance (EPV)

Ecopharmacovigilance (EPV) is our approach to understanding pharmaceuticals in the environment. Our EPV process reviews emerging science and literature, looking for new information that might change the way we assess the environmental risks associated with our APIs. Our industry-leading dashboard, where users can visualise the relative risks of our APIs that are found in the environment, is available on our [website](#).

Innovative Health Initiative (IHI) PREMIER

As part of our commitment to drive thought leadership and innovation to manage PIE, we are the industry lead of the IHI [PREMIER](#)

consortium, a public-private partnership between the European Commission and the European Federation of Pharmaceutical Industries and Associations (EFPIA). We are helping develop tools to identify potential environmental risks of APIs and make these tools and data more accessible to all stakeholders. In 2023, PREMIER published an [evidence-led prioritisation](#) for environmental data generation, an important step aimed at significantly reducing reliance on fish studies.

As part of our engagement with the IHI, AstraZeneca has joined a coalition of pharmaceutical companies to co-fund a [major initiative](#) to progress the sustainable manufacture of healthcare products and their quantitative environmental impact, due to start in 2024.

We are part of the [HORIZON ETERNAL](#) consortium that brings 17 different companies, universities and institutes together from across the EU to contribute to sustainable development of pharmaceutical manufacture, use and disposal.



Targets and progress

Product sustainability

See data annex for full metrics

Target

Ensure 90% of total syntheses meet resource efficiency targets at launch by 2025.

Progress

64% of total syntheses met resource efficiency target at launch. For the remainder, continuous improvement work is ongoing in process development functions to maximise resource efficiency. We work to balance the priority to provide medicines to patients at the earliest opportunity with minimising their environmental impact.

○ Status: Lagging

Ensure 100% of AstraZeneca site discharges and ≥90% of supplier site discharges are in compliance with safe API discharge concentrations.

99% of API discharges from AstraZeneca sites and 94% of discharges from direct suppliers were in compliance. Out of 42 measurements for one API, at a single site, one sample marginally (1.4-fold) exceeded our safe discharge target. This exceedance lasted less than 5 days and, based on available data, was not considered to impact the environment. The cause has been identified and site improvements have been agreed.

○ Status: Lagging



Natural resources

Scope of this focus area

Natural resources, and the benefits that humans receive from nature, are essential to produce our medicines and operate our sites.

We are committed to:

- Reducing our impact on the planet through responsible sourcing and efficient, circular use and disposal of natural resources across the value chain
- Protecting and restoring ecosystems to improve health outcomes and tackle environmental drivers of disease, such as water and air quality, through our focus on water stewardship and biodiversity

Why it matters

We recognise that a healthy environment is inextricably linked to the health of people and society, and we need to operate within our planetary boundaries for a healthy planet. We are taking action to protect and restore ecosystems by limiting environmental impacts across our value chain, investing in nature and water stewardship, and protecting biodiversity on and around our sites. The conservation and sustainable use of natural resources and the protection and restoration of ecosystems are vital to shape a healthy future with resilient people and communities, building harmony between society and the natural environment.

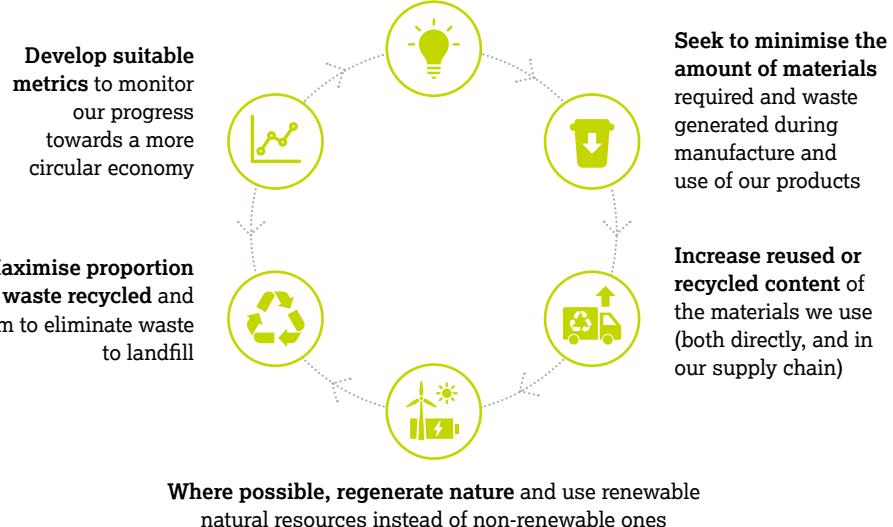
Supply chains from the pharmaceutical sector are highly complex, making it difficult to define our impacts and dependencies on nature and prioritise mitigating actions, especially because local conditions often necessitate unique solutions for shared challenges. Many materials needed to produce medicines are hazardous in nature and difficult to replace, generating waste streams that are challenging to reuse, recycle or repurpose. These factors mean cross-sectoral collaboration with suppliers, regulators, and other companies and organisations are needed to address the growing threats and changes to local ecosystems that our business relies upon.

Strategic approach

We are committed to reducing our impact on the planet and investing in nature and biodiversity to benefit planetary and societal health. We recognise that adopting circular business approaches and implementing efficient processes to develop and produce our medicines are key to reducing natural resources used in our value chains.

Our circular economy approach

Incorporate the principles of the circular economy into the design of all our processes and products, from initial research and development through to production



To do this, we are leveraging our experience with lean manufacturing, which includes tools to enhance efficiency and eliminate waste, and embedding recognised best practices from partners such as My Green Lab into our business as usual. These efforts empower employees across our global network to identify and implement ideas that contribute to our environmental targets.

Our key targets aim to decouple water use and waste generation from business growth, supported by efficiency projects, partnership, and engagement with suppliers, and designing out waste and pollution in support of water security and minimised environmental impact where we operate.

Moving beyond efficiency within our direct operations, we are working in collaboration with key stakeholders, including our ongoing collaboration with the World Wide Fund for Nature (WWF) Sweden, to make positive contributions to nature and local communities near our sites while mitigating risks from a changing climate. We are also working to embed emerging best practice into our own operations and across our supply chain, for example using tools and guidance that Science Based Targets for Nature (SBTN) is developing, to set long-term, science-led water and biodiversity targets that are informed by local context by 2025.

Recognising that our supply chains have the potential to impact biodiversity, we have committed to developing a framework to systematically assess biodiversity risks and dependencies across our value chain during 2024. We will build on this knowledge to ensure all agricultural, forestry and marine-derived materials used in our products and research activities are sustainably sourced by 2028. We are also committed to demonstrating key forest risk commodities are free from deforestation and ecosystem conversion by 2025.

More details can be found in our position statements on [Water stewardship](#) and [Biodiversity](#).

We are also furthering our commitment to assess and minimise environmental impacts from our supply chain. While making progress on our existing responsible sourcing targets to create action plans for identified key raw materials of natural origin, we are building a risk-based approach to assess additional new and existing materials' impacts and dependencies on nature. This is helping prepare us for future reporting to the Taskforce on Nature-related Financial Disclosures (TNFD) framework, where we have announced we will be an [early adopter](#).

More details of our approach can be found in our [Raw Materials Responsible Sourcing Framework](#).



Actions – key initiatives:

AZ Forest

In 2023, we announced an expansion of our AZ Forest programme, raising our commitment to plant and ensure the long-term survival of 200 million trees by 2030, bringing our investment to \$400m. This includes new or expanded projects in Brazil, India, Vietnam, Ghana, Rwanda and Kenya that will contribute to our climate action, restore nature, promote biodiversity and build ecological and community resilience, spanning over 100,000 hectares worldwide. In addition, the AZ Forest programme will deliver benefits to local communities, positively impacting an estimated 80,000 livelihoods.

The investment builds on our initial AZ Forest commitment, announced in 2020. Since launch, planting has progressed at pace, with over 19.9 million trees planted across Australia, Brazil, Ghana, India, Indonesia, Rwanda, the UK, and the US, using over 300 different tree species, allowing the restoration of biodiversity and natural habitats.

AZ Forest projects are co-designed with planting experts, local communities and governments to deliver natural forest restoration and agroforestry. Co-benefits include the creation of new skills and jobs, the protection and recovery of threatened and endangered species and improved public health. Projects will be audited and assessed by world-leading delivery partners and independent third-party experts, including the European Forest Institute (EFI).

As part of our commitment to reforestation, we have also partnered with the EFI and the Circular Bioeconomy Alliance (CBA) to publish

an innovative, science-based framework for sustainable, resilient and locally appropriate landscape regeneration. The [CBA Principles for Regenerative Landscapes](#) support the development of projects which promote community and ecological resilience, mitigating the risks which the landscapes will face over the coming decades.

AZ Forest contributes to the World Economic Forum's 1t.org initiative, a public-private partnership to conserve, restore and grow one trillion trees by 2030.

Site waste circularity rate metric

In 2023, we introduced a new site waste circularity rate metric across our sites. Applied together with our global waste reduction target, this new metric will focus efforts at the top of the waste hierarchy and drive improvements in circularity through increased recycling and the external re-use or repurposing of waste materials.

Taskforce on Nature-related Financial Disclosures (TNFD)

We are beginning to identify our impacts and dependencies on nature across our value chain as we prepare for the Locate, Evaluate, Assess and Prepare (LEAP) model from TNFD. We are discovering further opportunities for local collaborations to make a positive impact on locations of global importance to us. Starting in 2024, we will invest \$5 million per year to fund nature restoration and water stewardship projects in the communities where we operate.

We need to operate within our planetary boundaries for a healthy planet.

Site waste circularity rate metric



Site waste circularity rate



Targets and progress

Natural resources

See [data annex](#) for full metrics

Target

Reduce water use by 20% below the 2015 baseline by 2025.

Progress

Water footprint was 3.59 million m³, a 19.5% reduction from 2015.

● Status: On plan

Reduce waste by 10% below the 2015 baseline by 2025.

Total waste was 26,213 tonnes, representing a 13.2% reduction from 2015.

● Status: On plan



Ethics and transparency

Ethical and transparent business delivers positive impacts for patients and society



Our ambition

Ensuring ethical, open and inclusive behaviour across our organisation and value chain.

Connection to health

Fostering a culture of doing the right thing across our value chain promotes health and wellbeing.

Our material focus areas

- Ethical business culture
- Inclusion and diversity
- Workforce safety and health

2023 performance

50.1%

senior middle management roles are held by women

10

countries with supplier diversity programmes outside the US

83%

of employee survey respondents feel we have a 'speak up' culture

AstraZeneca respects the rights of all people. We are committed to treating everyone with dignity and respect and to ensuring the third parties we work with do the same.



Ethics and transparency overview

We seek to create positive societal impact and embed ethical behaviour in all our business activities, markets and value chain. We promote ethical, transparent and inclusive policies internally as well as with our partners and suppliers.

The big picture

It is important that we create value beyond the impact our medicines have on patients. We need to ensure that we retain and increase trust across all our stakeholder groups to deliver life-changing medicines to patients.

Integration with our strategy and business model

Building trust by demonstrating integrity, transparency and fair treatment is central to everything we do, and supports our ability to operate, to innovate and to bring healthcare

solutions to more people. Our shared Values underpin all our activities and serve as a compass to guide us.

Governance

As outlined in our [Code of Ethics](#), we are committed to driving the highest ethical standards. As members of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), and the EFPIA, we adhere to their codes.

We value speaking up as part of our ethical business culture. We want anyone who has a concern about our ethics or conduct to report it without delay. With our [AZethics](#) platform, we are making it easier for individuals to make a report using a simple, one-step intake form and the option to remain anonymous where permitted by local law. Internally, we also encourage a culture of transparent reporting of concerns to the relevant manager, Human Resources or Compliance functions. We are committed to investigating and responding to all concerns of alleged misconduct or breaches of law or policy that are raised to us.

Our Code of Ethics and its supporting Standards are designed to help protect against unlawful discrimination on any

grounds, including disability. The Code and its supporting Standards cover recruitment and selection, performance management, career development and promotion, transfer, training (including, if needed, for people who have become disabled), and reward.

AstraZeneca embraces the cognitive differences of neurodivergent employees and supports employees with both seen and unseen disabilities in line with their country-specific laws and regulations. Where risk assessments can be performed, we will consider accommodating adjustments to the working environment that support an inclusive and safe workplace. Our Global Standard for Inclusion and Diversity sets out how we foster an inclusive and diverse workforce where everyone feels valued and respected because of their individual abilities and perspectives.

Building trust by demonstrating integrity, transparency and fair treatment is central to everything we do.

Our Values



We follow the science



We put patients first



We play to win



We do the right thing



We are entrepreneurial

Ethical business culture

Scope of this focus area

Drive the highest standards of conduct and accountability beyond compliance including, but not limited to, anti-bribery and anti-corruption, product safety, use of human tissue and animals for research, human rights and building supplier capabilities to uphold high social standards.

Why it matters

An ethical business culture is essential to successful risk management, and we are committed to increasing public trust in our industry.

Recently, Norway, Canada and Germany have implemented legislation mandating human rights due diligence and greater transparency. The EU Corporate Sustainability Due Diligence Directive and Corporate Sustainability Reporting Directive also requires companies to consider social and environmental impacts, with a focus on transparency. This new legislation will require additional reporting on our supply chain.

The expanded interest in and use of Artificial Intelligence (AI) creates opportunities for improved patient engagement and data analysis but also increases data privacy and data use concerns. We must ensure that we meet regulatory and stakeholder expectations around responsible use of AI, as well as data protection and security in this evolving environment, achieved through our Global Privacy Standard, our Global Standard on the Ethical Use of AI and our internal data and AI governance committees.



Strategic approach

The key elements of our commitment to an ethical business culture are:

- Our Code of Ethics and Values – which guide everything we do and ensure that we deliver life-changing medicines in a responsible way. We reinforce our commitment to ethical business conduct through annual Code of Ethics training, delivered to all employees and relevant third parties
- Values-based decision making – we emphasise values-based decision making, and encourage our workforce and suppliers to adopt a sustainability mindset that embraces our core Values
- Visibility and transparency – being visible and transparent about our business supports learning and development for our employees, suppliers and partners, which is fundamental to meeting the expectations of patients, investors and broader society

Human rights

AstraZeneca respects the rights of all people. We are committed to treating everyone with dignity and respect and to ensuring the third parties we work with do the same. Our commitment to human rights arises from our Values, which is the basis of our Code of Ethics, and is formalised in our Code, Global Standard on Expectations of Third Parties, Modern Slavery Statement, sustainability initiatives, and other requirements, procedures and practices. We are guided by international human rights principles in the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and the United Nations Guiding

Principles on Business and Human Rights, which we have committed to as signatories to the UN Global Compact (UNGC).

We continue to benchmark and improve our approach to Human Rights through industry working groups including PSCI, Business for Social Responsibility (BSR) and Fair Wage Network with particular focus on due diligence, new legislation and responsible sourcing initiatives.

Responsible supply chain

We expect all employees and contractors to follow our Global Standard for the Procurement of Goods and Services. We monitor compliance through assessments and improvement programmes, and all our suppliers and partners must meet our Global Standard on Expectations of Third Parties. We conduct audits on high-risk commercial suppliers (external manufacturing partners) to ensure appropriate practices and controls.

Anti-bribery and anti-corruption

We do not tolerate bribery or any other form of corruption. Prevention of bribery and corruption is a focus of our third-party risk management and due diligence processes, as well as our monitoring and audit programmes. We reinforce our commitment to ethical business conduct through our annual Code of Ethics training, which is delivered to all employees and relevant third parties.

Actions – key initiatives

Positive sourcing

Our Sustainable Procurement programme embeds responsible sourcing practices in end-to-end procurement processes and promotes ethical behaviour among our suppliers. Our

ambition is to achieve 100% ethical spend, ensuring we only work with suppliers that share our Values. Our approach fosters our suppliers' progress on sustainability, enables us to innovate together on challenges and accelerates supplier diversity. To achieve our goal, in 2023 we continued our partnership with EcoVadis to assess our suppliers' environmental, ethical, and social performance; of the 70% of our suppliers (by spend) that were assessed, 66% achieved an acceptable score of more than 45.

Animals in research

Animal studies remain a small but necessary part of discovering, developing and licensing medicines. AstraZeneca is committed to the 3Rs (Replacement, Reduction and Refinement of animals in research) and have programmes to accelerate the development of new approach methodologies (NAMS), which have potential to reduce and eventually replace the need for animals. We focus on robust experimental design and analysis, to ensure the fewest animals are needed to achieve scientific objectives, with our scientists' refining procedures and applying high standards of animal care. We extend our focus on animal welfare with an assurance programme that ensures research conducted by our third parties meets our high standards. Transparency is also a priority, and we are signatories to the Concordat on Openness on Animal Research (UK), the Openness Agreement on Animal Research and Teaching (Australia/New Zealand) and contribute to the U.S. Animal Research Openness Initiative.

For further details on Bioethics please see page 36 in the Annual Report 2023.



Targets and progress

Ethical business culture

See data annex
for full metrics

Target

Maintain 100% of active employees trained on the Code of Ethics.

Progress

100% of active employees trained on the Code of Ethics in 2023.

● Status: On plan

Improve the AstraZeneca global biennial human rights survey results and use Fair Wage Network data to more robustly assess our performance against local living wage data.

The biennial human rights survey has been completed in 2022 and action plans are in progress. The analysis of Fair Wage Network data has enabled us to ensure we continue to pay a fair living wage globally.

● Status: On plan



Inclusion and diversity

Scope of this focus area

To create a working environment where every employee has a sense of belonging and feels valued for the contribution they make, regardless of age, sex, disability, ethnicity, gender identity or re-assignment, nationality, pregnancy, race, religion, sexual orientation, country of origin or other forms of diversity. This includes equitable reward and opportunities for development and advancement. Additionally, our Inclusion and Diversity (I&D) priorities extend to AstraZeneca's value chain through supplier diversity efforts that enhance our socio-economic impact in local communities.

Why it matters

We believe that inclusion is a right and diversity is a strength. Both make a fundamental contribution to the success of our Company because innovation requires breakthrough ideas that only come from a diverse workforce empowered to challenge conventional thinking. Our ongoing commitment to I&D underpins our ability to maintain a sustainable workforce by ensuring that we continue to attract, develop and retain top talent from various backgrounds and with different experiences. Every component of our I&D mission is critical to our success.

Strategic approach

Our approach to I&D prioritises efforts in areas where we can drive lasting systemic change for our organisation and for society.

Our global I&D strategy includes three strategic focus areas that guide how inclusion, diversity, and belonging are embedded within the entire ecosystem in which AstraZeneca exists – from our employees to our patients and to local communities and beyond. They include:

- Inclusion: Cultivate inclusion and belonging
- Diversity: Build and sustain a diverse leadership and talent pipeline
- Impact: Advance societal change

We recognise that everyone plays a role, and our global I&D ecosystem engages a diverse cross-section of colleagues and suppliers. Our Global I&D Ambassador Group comprises senior and rising leaders who are representative of our global workforce and organisational structure, with our CEO Pascal Soriot as Executive Sponsor. This group is accountable for advising on and enhancing organisational progress towards our global I&D ambitions, as well as working with local leaders to ensure an approach that is tailored to meet local needs. I&D is central to our commitment to being a great place to work, for the benefit of our employees, our business and for society.

Actions – key initiatives

Global Power of Diversity

Each year we recognise, celebrate and learn more about the rich diversity within our organisation and the power we can unlock by utilising it. Since its inception in 2020, Power of Diversity has become an internal movement with global and local events, communications and initiatives taking place year-round engaging our entire workforce.

The power of our diversity drives innovation and allows us to push the boundaries of science to deliver life-changing medicines to patients.

Accelerating Supplier Diversity

Our Supplier Diversity Programme maximises opportunities for small and diverse businesses to be part of our value chain and supports their growth. This helps support local economies through job opportunities, enabling diverse supplier development through mentorship schemes (36 mentee companies in 2023), and making a positive socio-economic impact by supporting the growth of local businesses in underrepresented communities. Our programme aimed to launch in 10 countries outside of the US by 2025, and we reached this goal two years early. The programme is now active in 10 countries outside of the US, including Brazil, South Africa, UK, Australia, New Zealand, Poland, Sweden and most recently launched in Switzerland, Ireland and Canada in 2023.

To support our diverse suppliers to make progress on sustainability, in 2023 we extended our Diverse Supplier Sustainability Accelerator Programme and Climate Action Series to 230 small and diverse suppliers to help them increase their sustainability capabilities. Supplier diversity partnerships include WEConnect International, Minority Supplier Development UK, Social Enterprise UK, National Minority Supplier Development Council, NGLCC, National HubZone Council, WBEC East and WBEC Greater DMV, Disability:IN and the Diversity Alliance for Science. We were a founding member of the European Supplier Diversity Project (ESDP), a collaboration effort between MSD UK and 14 global companies to establish supplier diversity across Europe and empower ethnic minority-owned businesses across European markets.



Targets and progress

Inclusion and diversity

See [data annex](#) for full metrics

Target

Reach gender equality in management positions by 2025.

Progress

50.1% of senior middle management roles are occupied by women.

● Status: On plan

Launch supplier diversity programme in 10 countries (outside of US) by 2025.

Programmes launched in a total of 10 countries outside of US, with three countries being launched in 2023: Switzerland, Canada, Ireland.

● Status: Target met



Workforce safety and health

Scope of this focus area

To provide a safe and healthy working environment, based on a culture of learning and improvement rather than blame. This includes the application of human and operational performance principles, including training for leaders and managers, supporting employee health through flexible ways of working, access to disease prevention, treatment and mental health services.

Why it matters

To continue to deliver medicines to patients, we must foster an environment where people feel safe, energised and inspired. The resources we put into supporting the physical and mental health and safety of our workforce are an investment in society at large, the communities where we operate and their long-term economic health. Contributing to a safe and healthy environment is the right thing to do and can also have positive business impacts in terms of productivity.

Strategic approach

Through our Global Standards we are committed to maintaining or exceeding compliance with all local company, legal and regulatory requirements. Our (SHE) Standard, is covered by our Code of Ethics and supported by our OneSHE Framework and accompanying 'SHE: Everybody's Business' training, which establishes minimum standards and is

applicable to all employees, temporary staff and contractors across AstraZeneca sites and all business areas and functions. We work with regulators, vendors, and our own Legal function to ensure we maintain compliance within the various local regulatory frameworks that apply.

We manage SHE risks, opportunities, and performance by using effective management systems utilising a 'Plan, Do, Check, Act' process to ensure continuous improvement. This requires engagement throughout the organisation, effective leadership, open communication, and a commitment from every employee to themselves, our colleagues, our workplace, our community and our environment.

Our AZ SHE System provides a single, transparent source of SHE data across our enterprise. This drives innovation in the management and reporting of SHE events and sustainability metrics. By collecting data from 504 locations and 81 countries on SHE events (including near misses), SHE observations and SHE inspections in one system, we have quick notification of and response to events, and we can trend our safety, health, and environmental performance. This further enables us to ensure safety and health initiatives are focused on the right areas and implement corrective and preventive action plans.

Actions – key initiatives

SHE compliance with local legislation

In 2023 we have increased our focus to assure compliance with local SHE legislation as well as company Global SHE standards. We have partnered with an external vendor to scan for SHE regulatory changes and provide a platform for most of our Operations and R&D sites to document compliance.

Preventing serious injury and fatality at work

We launched a Serious Injury and Fatality Prevention and Mitigation Programme in 2021, led by our Global SHE team and guided by a senior-level steering committee. Process and life safety subject matter experts evaluate high-risk activities with the potential to result in a serious injury or fatality and prioritise these against internal audit findings and past events. In 2023 we implemented the final year of our three-year plan to address 12 high-risk areas, focusing on process safety management, explosive atmospheres and instrumented protective systems. Besides reviewing and uplifting existing standards and materials, followed by a gap assessment at site-level, we have now also included questions for leaders to ask during routine workplace interactions, to provide process confirmation. This involves leaders watching the process and engaging with those who do the work to learn if there are further improvement opportunities. The successful approach to focus on hazardous activities is now being built into existing ways of working, ensuring sustainable implementation and continuous improvement.

Drive Success driver safety campaign to protect employees and communities

As outlined in the Sustainability Report 2022, AstraZeneca responded to an increasing collision trend by developing a safe driving campaign and training programme endorsed by the Commercial SHE Executive Committee. This campaign continued into 2023 and has shown a positive impact on collisions per million kilometres (CPMK). In 2023 the CPMK was 1.96, exceeding the 2.5 target for the year and on course to meet or exceed the target for 2025 of 1.90.



Targets and progress

Workforce safety and health

See data annex for full metrics

Target	Progress
75% reduction in total injury rate from 2015 baseline by 2025.	59.6% reduction in total injury rate. ● Status: On plan
55% reduction in collisions per million kilometres driven from 2015 baseline by 2025.	52.5% reduction in collisions. ● Status: On plan



Data annex

Targets for a healthy future



We are committed to contributing to a more sustainable future for people, society and the planet.

We describe our targets and progress on our priorities in this data annex. Bureau Veritas has provided limited assurance for sustainability activities reported here and in the Annual Report 2023. Details are described in the [Letters of Assurance](#).

Selected metrics identified with the symbol (BV) have been prepared in accordance with the [AstraZeneca Sustainability Data Reporting Criteria 2023](#) and [Greenhouse Gas Methodologies 2023](#).



Data has been externally assured. See also letter of assurance and reporting criteria.

Access to healthcare

Focus areas: Equitable access, Affordability and pricing, Health system resilience

Target	Year	Progress	Status
Reach 50 million people (cumulative) through Healthy Heart Africa, Young Health Programme (YHP), and Healthy Lung programmes.	2025	More than 66.4 million people reached (cumulative) through Healthy Heart Africa, Young Health Programme and Healthy Lung programmes.	Target met
Train 170,000 healthcare workers (cumulative) to strengthen health systems throughout the world through our Healthy Heart Africa, Healthy Lung and Phakamisa programmes.	2025	More than 127,300 healthcare workers trained (cumulative).	On plan
People reached by access to healthcare programmes (cumulative, million)			
Healthy Heart Africa		23.741	32.078
Young Health Programme		6.25	9.119
Total people reached (all current and historic programmes)		33.427	44.633
Health facilities activated (cumulative)			
Healthy Heart Africa		958	1,258
Total (all current and historic programmes)		3,599	3,899
Healthcare workers trained (cumulative)			
Healthy Heart Africa		9,004	10,690
Total (all current and historic programmes)		124,998	126,684
Young Health Programme (cumulative)			
Peer educators trained		192,318	260,191
Healthcare workers and others trained		74,025	160,467
AstraZeneca HealthCare Foundation's Connections for Cardiovascular HealthSM (cumulative)*			
Total dollar amount given in grants (USD, million)		25.74	26.49
Participants tracked for progress		70,081	71,732
US-based non-profits funded		58	58

**Affordability**

		2021	2022	2023
People reached by patient access programmes (cumulative, million) <small>BV</small>		11.55	12.83	13.69
Product donation through patient access programmes (USD, million) <small>BV</small>		2,351.5	3,100.2	4,778.9

Philanthropy

		2021	2022	2023
Disaster relief product donation (total US wholesale acquisition cost value in USD, million) <small>BV</small>		23.3	12.10	7.54
Cash contributions (USD, million)		—	95.23	104.06
In-kind giving (USD, million)		—	0.72	1.33
Management overheads (USD, million)		—	4.61	1.69
Volunteer (USD, million equivalent)		—	0.56	0.82
Total community investment (USD, million) <small>BV</small>		112.9	108.06	115.44
Volunteerism hours		23,129	15,971	22,168
Non-profit organisations funded by AstraZeneca <small>BV</small>		1,220	1,107	811



BV Data has been externally assured. See also letter of assurance and reporting criteria.

Environmental protection

Focus area: Ambition Zero Carbon

Target	Year	Progress	Status
Reduce absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 98% from 2015 base year.	2026	Reduced Scope 1 and 2 GHG emissions by 67.6% since 2015, a reduction of 420 kilotonnes CO ₂ e.	On plan
100% electric road fleet where technically possible by the end of 2025.	2025	35% of our total road fleet are battery electric vehicles.	On plan
Reduce total energy consumption by 10% from 2015.	2025	Total energy use was 1,511,334 MWh, representing a 17.5% reduction from the 2015 baseline.	On plan
Double energy productivity from 2015.	2025	Energy productivity increased by 103% since 2015.	On plan
100% renewable electricity consumption globally by 2025.	2025	95% of all electricity use came from renewable sources in 2023.	On plan
Reduce absolute Scope 3 GHG emissions 50% by 2030 and 90% by 2045, from a 2019 base year.	2030 & 2045	Total Scope 3 increased by 18.6% from a 2019 baseline and Scope 3 intensity reduced by 24%. Significant increase in use of primary data and suppliers setting SBTs will support future absolute emissions reductions towards 2030 target.	On plan
Increase the share of primary activity data in Scope 3 reporting.	2025	52% of data used to calculate scope 3 came from primary sources.	On plan
95% of our suppliers by spend covering purchased goods and services and capital goods, and 50% of our suppliers by spend covering upstream transportation and distribution and business travel, will have SBTs.	2025	Purchased goods and services and capital goods (categories 1 & 2): 29% Upstream transportation and distribution (category 4): 27% Business travel (category 6): 32%	On plan
Launch a next-generation inhaler to treat asthma and Chronic Obstructive Pulmonary Disease (COPD) containing a near-zero Global Warming Potential (GWP) propellant.	2025	Project milestones achieved include further Phase III investment decisions, a harmonised development programme defined globally, readouts of pivotal studies and initiation of key studies needed to file for regulatory approval.	On plan

Scope 1, 2 and other greenhouse gas emissions (tonnes CO ₂ e)*	2015	2021	2022	2023
Scope 1 – Road fleet	92,539	48,346	61,508	47,758
Scope 1 – Site energy	167,441	145,368	127,045	92,569
Scope 1 – Site non-energy	38,519	45,754	49,150	40,571
Scope 1 – Total BV	298,498	239,468	237,703	180,898
Scope 2 – Market based BV	322,319	21,135	18,491	19,940
Scope 1 & 2 – Total BV	SDG 13.2	620,818	260,603	256,194
Scope 1 & 2 – Intensity (tCO ₂ e per million USD of revenue) BV	22.73	6.39	5.78	4.38
Scope 1 – F-gas emissions (100yr GWP) BV	38,245	45,577	49,014	40,363
Scope 1 – F-gas emissions (20yr GWP) BV	65,162	84,094	91,686	72,071
Scope 2 – Location based BV	266,372	189,395	180,403	183,332
Outside of scopes (CO ₂ of biological origin) BV	2,822	8,919	39,908	59,750

*Data has been restated due to a site divestment and change in GWP values.

**Solvent (VOC) consumption and emissions from AstraZeneca sites**

	2015	2021	2022	2023
Consumption (tonnes)	3,106	3,322	3,361	3,101
Emitted (tonnes)	250	163	127	203
Scope 1 GHG emissions (tonnes CO ₂ e)	273	176	135	208

Road fleet

	2015	2021	2022	2023
Total vehicles <small>BV</small>	17,661	17,766	18,550	20,149
Percentage of hybrid vehicles <small>BV</small>	0%	46%	43%	33%
Percentage of vehicles that are Plug-in Hybrid Electric Vehicle (PHEV) <small>BV</small>	0%	9%	10%	7%
EV100: Battery electric vehicles (BEVs) <small>BV</small>	0%	2%	10%	35%
GHG intensity (gCO ₂ per km driven)*	165	133	151	130

Energy management†

	2015	2021	2022	2023
Total energy use (MWh) <small>BV</small>	1,832,611	1,667,765	1,568,815	1,511,334
EP100: Energy productivity (million USD of revenue per GWh energy consumption) <small>BV</small>	SDG 7.3	14.90	24.44	28.27
Renewable energy use – electricity and heat (MWh)	130,301	711,874	712,438	802,658
Renewable energy use – electricity and heat <small>BV</small>	7%	43%	45%	53%
RE100: Renewable electricity use <small>BV</small>	SDG 7.2	15%	88%	90%
Onsite self-generated renewable electricity – on-site solar PV (MWh) <small>BV</small>	0	5,929	11,471	13,862
Onsite self-generated renewable electricity – Biomethane (MWh) <small>BV</small>	—	—	—	5,292
Onsite self-generated electricity from non-renewable sources (MWh)	68,445	93,626	67,285	34,869
Imported electricity – renewable (MWh)	122,143	671,636	669,752	701,392
Imported electricity – renewable <small>BV</small>	16%	100%	99%	99%

GHG Protocol Scope 3 category (tonnes CO₂e)§

	2019	2021	2022	2023
Category 1 Purchased goods and services <small>BV</small>	3,637,033	4,400,747	4,480,479	4,622,257
Category 2 Capital goods <small>BV</small>	76,941	88,762	76,863	81,938
Category 3 Fuel and energy related (not Scope 1 or 2) <small>BV</small>	80,556	51,333	57,975	52,634
Category 4 Upstream transportation and distribution <small>BV</small>	248,112	228,675	218,745	241,422
Category 5 Waste generated in operations <small>BV</small>	19,661	19,372	18,434	19,043
Category 6 Business travel <small>BV</small>	327,051	83,774	145,814	155,443
Category 7 Employee commuting <small>BV</small>	46,461	41,293	44,128	50,827
Category 8 Upstream leased assets <small>BV</small>	33,058	25,074	25,872	30,101
Category 9 Downstream transportation and distribution <small>BV</small>	133,627	129,078	118,800	135,689
Category 10 Processing of sold products <small>BV</small>			Assessed: Not relevant	
Category 11 Use of sold products <small>BV</small>	1,037,501	835,337	960,650	1,330,844
Category 12 End-of-life treatment of sold products <small>BV</small>	16,122	20,023	13,572	14,579
Category 13 Downstream leased assets <small>BV</small>	25,072	2,382	6,082	2,101
Category 14 Franchises <small>BV</small>			Assessed: Not relevant	
Category 15 Investments <small>BV</small>			Assessed: Not relevant	
Total scope 3 <small>BV</small>	SDG 13.2	5,681,194	5,925,850	6,167,415
				6,736,878

*Emission data is market-based from 2023.

†Data has been restated due to a site divestment.

‡Data has been restated due to methodology changes to improve data quality.



GHG Protocol Scope 3 category	2019	2021	2022	2023
Scope 3 intensity (tCO ₂ e per million USD of revenue)*	193.40	145.41	139.06	147.06
Scope 3 based on primary data [†]	20%	16%	38%	52%
Supply chain engagement (% spend with verified SBTs)	2021	2022	2023	
Category 1 – Purchased goods and services	7%	12%	29%	
Category 2 – Capital goods				
Category 4 – Upstream transportation and distribution	—	19%	27%	
Category 6 – Business travel	—	14%	32%	
Other Scope 3 metrics	2021	2022	2023	
Upstream transportation and distribution Air2Sea&Rail (% tonne.km)	73%	74%	73%	
Upstream transportation and distribution Air2Sea&Rail (% volume)	64%	65%	64%	

Focus area: Product sustainability

Target	Year	Progress	Status
Ensure 90% of total syntheses meet resource efficiency targets at launch.	2025	64% of total syntheses met resource efficiency target at launch. For the remainder, continuous improvement work is ongoing in process development functions to maximise resource efficiency. We work to balance the priority to provide medicines to patients at the earliest opportunity with minimising their environmental impact.	Lagging
Ensure 95% of paper-based product packaging materials used are supplied from sustainable sources.	2023	97.6% of paper-based product packaging materials used are supplied from sustainable sources.	Target met
Ensure 100% of AstraZeneca site discharges and ≥90% of supplier site discharges are in compliance with safe API discharge concentrations.	2023	99% of API discharges from AstraZeneca sites and 94% of discharges from direct suppliers were in compliance. Out of 42 measurements for one API, at a single site, one sample marginally (1.4-fold) exceeded our safe discharge target. This exceedance lasted less than five days and, based on available data, was not considered to impact the environment. The cause has been identified and site improvements have been agreed.	Lagging

Safe active pharmaceutical ingredients (API) discharges	2021	2022	2023
Safe API discharges for AstraZeneca sites	SDG 6.3	100%	100%
Safe API discharges from suppliers	SDG 6.3	91%	92%
Number of safe API discharge supplier assessments completed	75	66	70
Resource efficiency	2021	2022	2023
Small molecule API syntheses that meet resource efficiency at launch	SDG 12.2	75%	75%
Monoclonal antibody syntheses that meet resource efficiency target at launch	SDG 12.2	75%	60%
Total syntheses that meet resource efficiency target at launch	75%	67%	64%

*Data has been restated due to methodology changes to improve data quality.

[†]Data represents the proportion of primary data in the year of reporting to demonstrate progress.

**Product value chain environmental impact**

		2021	2022	2023
Number of key products scored against Product Sustainability Index (cumulative)		4	9	13
Number of key products with lifecycle assessment completed (cumulative)		—	14	22
Paper-based product packaging materials supplied from sustainable sources <small>BV</small>	SDG 15.2	—	97.5%	97.6%

Focus area: Natural resources

Target	Year	Progress	Status
Reduce water use by 20% below the 2015 baseline.	2025	Water footprint was 3.59 million m ³ , a 19.5% reduction from 2015.	On plan
Reduce waste by 10% below the 2015 baseline.	2025	Total waste was 26,213 tonnes, representing a 13.2% reduction from 2015.	On plan
Plant and maintain 200 million trees by 2030.	2030	9,179,387 trees were planted through AZ Forest in 2023. The total is 19,983,210 since 2020.	On plan
All 12 key materials within our Raw Materials Responsible Sourcing Framework have sustainability action plans in place.	2025	List of Raw Materials in-scope updated in 2022 to include lactose and exclude fish oil in reflection of the excipients used in our products. Progress has been made in timber, palm oil and cattle products.	On plan
All of our sites with labs operate My Green Labs.	2025	100% of sites with labs operate My Green Labs.	On plan

Water use within site water footprint, excluding non-contact cooling water*

	2015	2021	2022	2023
Municipal (million m ³)	3.66	3.01	3.11	3.12
Groundwater (million m ³)	0.77	0.66	0.46	0.44
Rainwater (million m ³)	0.03	0.05	0.04	0.04
Total (million m³) <small>BV</small>	SDG 6.4	4.46	3.71	3.61
Chemical oxygen demand – effluent leaving our sites (tonnes) <small>BV</small>	196	615	486	556
Sites in water stewardship programme <small>BV</small>	—	6	6	6

Non-contact cooling water

	2015	2021	2022	2023
Direct from fresh surface water – volume fully returned after use (million m ³)	9.48	10.34	8.49	9.19

Water use by water scarcity rating for sites with over 10,000 m³ water per year (including non-contact cooling water) (m³)

	2021	2022	2023
High stress rating	SDG 6.4	57,476	49,466
Medium stress rating	SDG 6.4	49,108	53,461
Low stress rating	SDG 6.4	14,012,745	12,073,903
Percentage of water consumption by AstraZeneca in low stressed areas	99.2%	99.2%	99.5%

**Waste management***

		2015	2021	2022	2023
Total waste (tonnes) 		30,217	27,659	24,797	26,213
Total recycling (tonnes)	SDG 12.5	13,537	9,701	9,072	10,941
Total recycling as a percentage of total waste	SDG 12.5	45%	35%	37%	42%
Total waste to landfill (tonnes)		2,153	906	596	1,136
Waste avoided – by-product sold (tonnes)	SDG 12.5	—	999	2,129	2,130

Non-hazardous waste (tonnes)*

		2015	2021	2022	2023
Total non-hazardous waste 		22,148	17,628	15,078	16,552
Non-hazardous waste recycled		13,242	8,989	8,277	10,009
Non-hazardous waste to landfill		2,126	859	570	1,121

Hazardous waste (tonnes)*

		2015	2021	2022	2023
Total hazardous waste 		8,069	10,031	9,719	9,661
Hazardous waste recycled		295	712	795	932
Hazardous waste to landfill		27	47	26	15

Green Labs Programme

		2021	2022	2023
Number of valid My Green Lab certifications		56	84	108
Employees engaged in My Green Lab Programme		943	2,333	4,248

Supply chain – Environmental footprint for critical direct suppliers

		2021	2022	2023
API category – total waste (thousand tonnes) [†]		36	40.1	140
Formulation & Packaging (F&P) category – total waste (thousand tonnes)		4	3.7	2.1
API category – water use (million m ³)		1.2	0.9	1.5
F&P category – water use (million m ³)		0.3	0.2	0.2

Investing in nature

		2021	2022	2023
AZ Forest: Trees planted	SDG 15.2	3,111,137	7,067,529	9,179,387

Additional metrics

		2021	2022	2023
Prosecutions		0	0	0
Enforcement actions [§]		1	1	0
Regulatory warnings/alerts [§]		1	3	4
Other environmental compliance matters [§]		1	2	1
Awaiting regulator outcome or AstraZeneca investigation ongoing		2	1	0
Significant environmental violations		0	0	0
Financial penalties relating to above (USD)		0	0	0

^{*}Data has been restated due to a site divestment.[†]Increase in total supplier waste is due to expansion of programme scope leading to more suppliers being surveyed compared to previous years.[§]Data has been restated to incorporate Alexion, which was acquired in 2021.



Data has been externally assured. See also letter of assurance and reporting criteria.

Ethics and transparency

Focus area: Ethical business culture

Target	Year	Progress	Status
Maintain 100% of active employees trained on the Code of Ethics.	2025	100% of active employees trained on the Code of Ethics in 2023.	On plan
Ensure AstraZeneca has a 'speak up' culture.	2025	83% of employee survey respondents feel we have a 'speak up' culture.	On plan
Improve the AstraZeneca global biennial human rights survey results and use Fair Wage Network data to more robustly assess our performance against local living wage data.	2025	The biennial human rights survey has been completed in 2022 and action plans are in progress. The analysis of Fair Wage Network data has enabled us to ensure we continue to pay a fair living wage globally.	On plan
Our Sustainable Procurement programme aims for 100% ethical spend by embedding sustainability into end-to-end processes.	2025	All suppliers are required to work in accordance with our Code of Ethics and Expectations of Third Parties. 66% of our spend with suppliers is now with companies who have been assessed by EcoVadis to have an acceptable ESG rating (45 or more).	On plan

Business ethics	2021	2022	2023
Active employees trained on Code of Ethics	100%	100%	100%
Percentage of employees who feel we have a 'speak up' culture	83%	83%	83%
Concerns reported through the company helpline in commercial regions (per thousand employees)	6.3	7.5	7.4
Instances of non-compliance with the Code of Ethics in commercial regions (per thousand employees)	50.9	55.6	74
Corrective actions taken in commercial regions (per thousand employees)	83.9	115.5	114.4
Employees terminated or asked to leave due to non-compliance in commercial regions (per thousand employees)	2.2	3.2	4.8

Clinical trials transparency (all cumulative)	2021	2022	2023
Studies shared with external research teams	165	228	270
Requests we responded to from external researchers using our clinical trials portal	255	313	364
Publicly available trial summaries	245	312	401
Clinical document packages published by EMA and Health Canada	13	14	23

Political donations	2021	2022	2023
Contributions to U.S. national political organisations, state-level political party committees and to campaign committees (USD, million)	1.14	1.86	1.69

**Human rights**

		2021	2022	2023
Countries that completed the Human Rights survey	SDG 8.8	—	74	—
Countries that have a relationship with trade unions	SDG 8.8	—	45%	—
Number of employees who receive Modern Slavery awareness training annually*		79,138	80,536	3,272

Data privacy

		2021	2022	2023
Privacy impact assessments		2,054	2,161	2,344
Data subject rights		185	240	272
Privacy regulatory impact assessments		3	0	1
Dedicated on-line privacy training†		55,363	65,521	18,446
Transfer impact assessments (TIAs)		—	2,728	3,800

Responsible supply chain

		2021	2022	2023
Total supplier assessments 		13,633	9,481	10,754
High-risk supplier audits 		37	42	47
Percentage of suppliers by spend assessed by EcoVadis 		—	60%	70%
Percentage of suppliers by spend assessed by EcoVadis that achieve >45 		—	53%	66%
Critical manufacturing suppliers that disclose their energy, waste and water footprint (%)		75%	94%	82%
Supplier environmental sustainability assessments completed		70	67	65

Animal use standards

		2021	2022	2023
In-house research (number of animals)		93,511	100,803	122,768
External contract research (number of animals)§		58,826	53,377	59,690
Total number of animals  §		152,337	154,180	182,458
Council for Science and Animal Welfare (C-SAW) Global 3Rs Awards (number of awards)		3	3	4
Signatory to the Concordat on Openness on Animal Research in the UK		Yes	Yes	Yes

Human biological samples

		2021	2022	2023
Human foetal tissue (hFT) supplier assessments		0	1	1
hFT suppliers approved to date		60%	64%	67%
hFT projects approved and progressed to date		36%	46%	53%
Active projects using hFT 		2	3	3
hESC projects approved		100%	100%	100%
Active projects using human embryonic stem cells (hESC)		13	17	13

*From 2023, Modern slavery training was not included in the mandatory Code of Ethics training and instead more intensive targeted training was rolled out.

†Dedicated privacy training is rolled out on a biennial basis, with a new course launched in 2022.

§2022 data has been restated due to system error causing figures to be overstated.



Focus area: Inclusion and diversity

Target	Year	Progress	Status
Reach gender equality in management positions.	2025	50.1% of senior middle management roles are occupied by women.	On plan
Launch supplier diversity programmes in 10 new countries (outside of the US).	2025	Programmes launched in a total of 10 countries outside of US, with three countries being launched in 2023: Switzerland, Canada, Ireland.	Target met

Inclusion and diversity	2021	2022	2023
Women representation of AstraZeneca employees	51.8%	52.9%	53.9%
Women in management – All management levels	SDG 5.5	44.3%	45.5%
Women in management – Senior middle management	SDG 5.5	48.1%	49.5%
Women in management – Executive management	SDG 5.5	39.5%	41.7%
Women representation on Senior Executive Team (SET)	SDG 5.5	41.7%	41.7%
Women representation on Board of Directors	SDG 5.5	38.5%	38.5%
Share of women in STEM-related positions	38.4%	39.8%	40.6%
Share of women in management positions in revenue-generating functions	45%	46.3%	47.7%
Share of women in junior management positions, i.e. first level of management	43.4%	44.5%	45.3%
Leadership within country of origin: emerging markets and Japan in roles that report to SET (emerging markets and Japan)	18.4%	17.7%	26.1%
Ethnic minority representation for US employees	32.1%	35.7%	36.8%
Percentage of employees age <30	—	17.1%	16.7%
Percentage of employees age 30–50	—	62.1%	62.1%
Percentage of employees age >50	—	20.8%	21.0%
Countries with supplier diversity programmes	7	8	11

Focus area: Workforce safety and health

Target	Year	Progress	Status
75% reduction in total injury rate from 2015 baseline.	2025	59.6% reduction in total injury rate.	On plan
55% reduction in collisions per million kilometres driven from 2015 baseline.	2025	52.5% reduction in collisions.	On plan

Workforce safety and health	2021	2022	2023
Total reportable injury rate (per million hours worked) (employees)*	0.57	0.69	0.72
Collisions (per million kilometres driven) [†]	SDG 3.6	2.36	2.10
Occupational illness rate (per million hours worked) (employees)**	0.53	0.34	0.20
Lost time injury rate (per million hours worked) (employees)*	0.35	0.29	0.37
Lost time injury rate (per million hours worked) (construction contractors)	3.12	1.24	3.41
Fatalities (employees)	SDG 8.8	2	0
Fatalities (contractors)	SDG 8.8	0	0

*Data has been restated to incorporate Alexion, which was acquired in 2021.

[†]Data has been restated due to retrospective updates by sites.

**Employee satisfaction****2021** **2022** **2023**

Employee perception of the opportunities for personal development and growth	82%	83%	83%
Employees that have at least one quality development discussion with their line manager	89%	89%	89%
Employee belief in our strategy	87%	89%	89%
Employee perception of AstraZeneca as a "Great Place to Work" survey score	85%	86%	86%
Sustainability engagement survey score	84%	87%	87%

Employee recruitment and retention**2021** **2022** **2023**

Employees that have a development plan	79%	77.2%	73.4%
Total amount spent on upskilling employees (USD, million)	—	—	33.7
Total learning hours	—	—	2,040,956
Average learning hours	—	—	17.7
Overall promotion rate	8.2%	8.3%	7.7%
Voluntary employee turnover – recent hires	20.6%	13.1%	9.8%
Voluntary employee turnover – total	13.9%	10.7%	7.5%
Employee turnover rate	—	18.9%	12.6%
Organisational structure – percentage of employees within six management steps of the Chief Executive Officer (CEO)	64%	55.8%	56.6%

Product safety**2021** **2022** **2023**

FDA Class I Recall	0	0	0
FDA Class II Recall	0	0	0
FDA Class III Recall	0	0	0
Total FDA recalls	0	0	0
Total FDA observations	9	15	8
Total FDA inspections	3	4	7
Total inspections from all health authorities	34	50	71
Unique health authorities completing inspections	22	24	31

Quality manufacturing**2021** **2022** **2023**

Internal quality audits of AstraZeneca suppliers	379	501	561
Internal quality audits of AstraZeneca sites	46	61	76