



Our Sustainability Impact

For healthy people, society and planet

May 2024



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Overview

Healthcare is facing challenges all over the world. With ageing populations, a rising burden of chronic diseases and the growing impact of the climate crisis on health, health systems are struggling to meet people's needs. This strain is exacerbating existing inequities in healthcare and vulnerable populations continue to be the most affected.

As a global, science-led, patient-focused company, we believe that science is key to unlocking the answers to healthcare challenges and to transforming healthcare for billions of people.

This publication complements our [2023 Sustainability Report](#) and spotlights some of the ways AstraZeneca is working to improve the health of people, society and the planet.



Taking bold action for a sustainable future

In conversation with Pam Cheng, Executive Vice President, Global Operations & IT and Chief Sustainability Officer

How does AstraZeneca approach sustainability?

The word ‘sustainability’ can mean different things to different people. At AstraZeneca, we think about sustainability holistically – it’s how we build a healthier future for people, society and the planet. That’s a broad definition but it needs to be, because achieving a healthier, more sustainable future requires tackling the biggest challenges of our time – from climate change and biodiversity loss, to health equity and health system resilience – and doing so in a way that is ethical, transparent and inclusive.

As an organisation, this commitment is a real source of inspiration for our 90,000 employees and encourages them to play a part in embedding sustainability from the lab to the patient.

Why is a healthcare company engaging on issues like climate change?

The climate crisis is one of the largest public health crises of our time, and the healthcare sector plays a vital role in managing its impact on human health. Climate-related deaths are growing from air pollution, extreme temperatures, flooding and drought, and there is also a steep rise in heart conditions, cancers, respiratory illnesses and infectious diseases linked to environmental factors.

Paradoxically, researching, developing, manufacturing and delivering medicines and healthcare services is energy and resource intensive.

So, in its effort to keep people healthy, our sector is a significant contributor to the problem, emitting approximately 5% of greenhouse gas (GHG) emissions globally.



Pam Cheng hosting a roundtable event on decarbonising supply chains during COP28 in Dubai, UAE



This means we need to take accountability and accelerate the transition to net-zero healthcare, and ensure that the systems that deliver care are resilient and able to adapt to the health needs of our changing world.

Keeping people well and out of hospital through early, targeted and patient-centred interventions can significantly reduce the health sector's environmental footprint, while improving patient outcomes. So, while AstraZeneca has a responsibility to reduce its own footprint, we all have a shared responsibility to build more sustainable systems that move from providing 'sick care' to true healthcare. This is good for patients, health systems, economies and the planet.

Your primary role at AstraZeneca is leading the global manufacturing and supply of medicines and vaccines. How does this inform your approach to sustainability?

I was honoured to be asked to lead AstraZeneca's sustainability efforts at the start of 2023. As I run our global manufacturing, procurement and IT, having sustainability in my remit feels like the perfect combination. We have worked hard to reduce emissions from our sites and fleet (Scope 1 and 2) and are making significant progress in our decarbonisation journey. Now, with 97% of our emissions in Scope 3, our transition to net zero is fundamentally linked to our value chain as a whole.

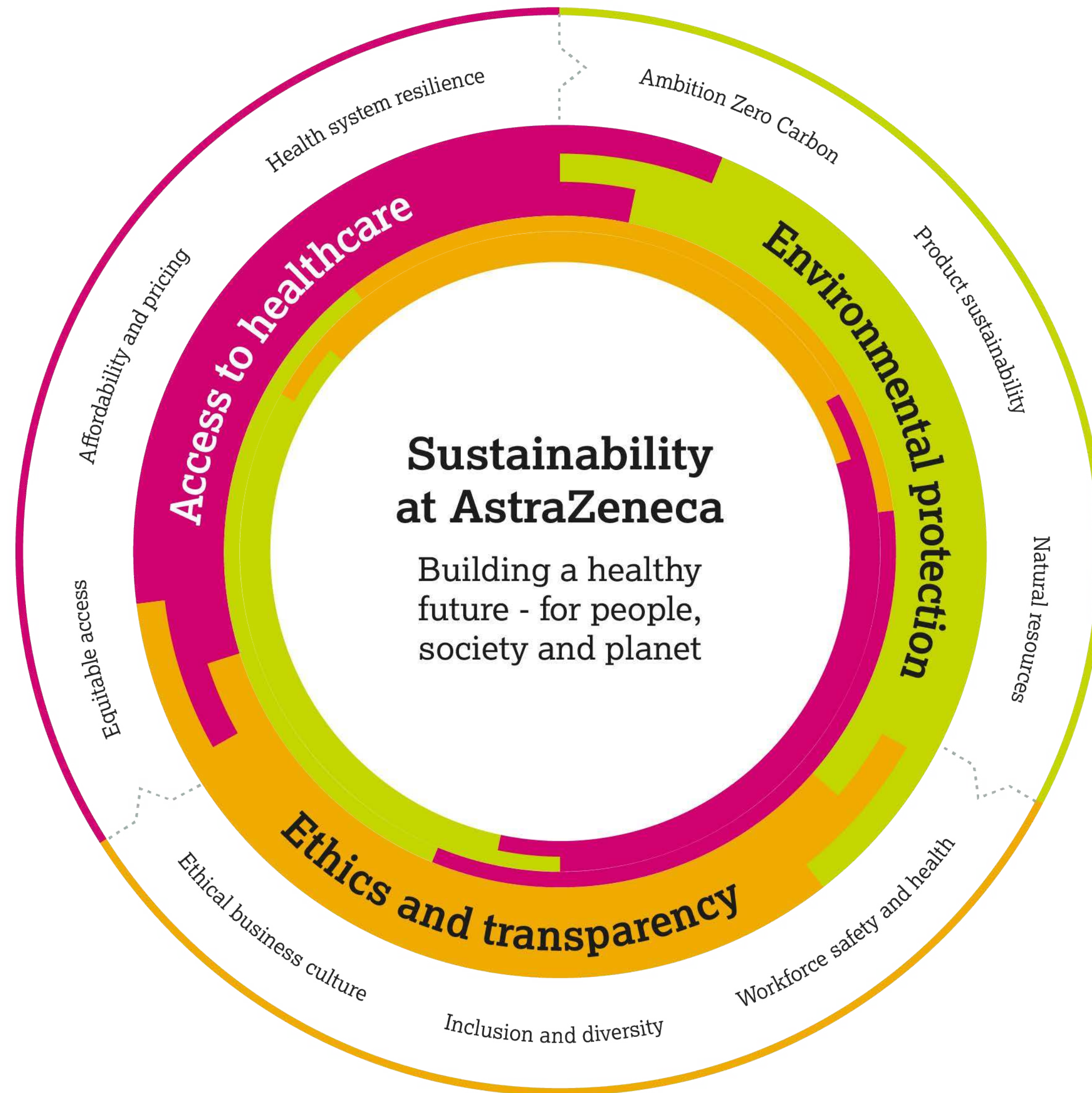
I'm also a scientist and engineer by background, so it's in my nature to take a science-based approach to solving big challenges.

I do want to reinforce that at AstraZeneca, sustainability isn't just about environmental protection – it spans access to healthcare, and ethics and transparency. I enjoy partnering with colleagues from across our organisation and our stakeholders on the shared priority of transforming healthcare to be more resilient, equitable and transitioning to net zero. This is core to our business strategy.

What drives you to achieve AstraZeneca's sustainability goals?

Improving health outcomes for patients while reducing the environmental footprint of care, and doing it in a way that is underpinned by ethical and value-driven behaviours, makes solid economic, business and moral sense. The health of the planet is inextricably linked to people's health and we need to come together – for our children and future generations.

This is a complex space, where no one has all the answers. But if we follow the science, are bold and innovative in how we collaborate, and move with agility and speed, I know we can make a difference.



At AstraZeneca, we believe that through science, we can drive positive change and a healthier future. Our approach to sustainability comprises three interconnected strategic priorities:

- **Access to healthcare:** Promoting prevention, increasing access to life-saving treatments, and strengthening health system resilience and sustainability.
- **Environmental protection:** Accelerating the delivery of net-zero healthcare, proactively managing our environmental impact across all activities, and investing in nature and biodiversity.
- **Ethics and transparency:** Ensuring ethical, open and inclusive behaviour across our organisation and value chain.



Sustainability in numbers

66m+

People reached through access to healthcare programmes (cumulative)

\$115m+

Total community investment**

127,300+

Healthcare workers trained since 2010

10m

People with elevated blood pressure reached through Healthy Heart Africa***

15m+

Young people reached through the Young Health Programme since 2010

10

Countries with supplier diversity programmes outside of the US

67.6%

Reduction in Scope 1 and 2 GHG emissions*

19m+

Trees planted across six continents since 2020

19.5%

Reduction in water use*

35%

Of our road fleet are battery electric vehicles*

As of end 2023
*Since 2015 baseline
**Not including patient assistance programmes
***As of February 2024



Closing healthcare gaps around the world



Healthy Heart Africa healthcare provider training in Ethiopia

Equitable access to healthcare is critical across the patient care pathway – from prevention, early detection and diagnosis to the effective treatment of disease. However, as the burden of disease around the world changes, including a rise in non-communicable diseases (NCDs), major gaps in access to high quality care persist.

Our mission is to transform healthcare and improve health outcomes. As we work toward these goals, playing our part to strengthen health systems and address the health impacts of climate change, we know that we need to act for all people, no matter where they live.

By working through public-private partnerships with stakeholders across the healthcare ecosystem, including governments, academia, healthcare professionals and non-governmental organisations (NGOs), we can address local challenges, close healthcare gaps and leverage our global experience in healthcare delivery to scale our impact for the long term.

1.5 billion

People living with chronic diseases worldwide (excluding cancer)

More than 3/4

of global NCD deaths (31.4 million) occur in low- and middle-income countries (LMICs)

19:1

Return on investment from additional NCD interventions in LMICs



Healthy Heart Africa

Improving health system sustainability and addressing health inequities is central to the [Healthy Heart Africa](#) (HHA) programme. Launched in 2014 in Kenya, HHA first began work with Kenya's Ministry of Health to address hypertension and the increasing burden of cardiovascular disease. Since then, we have developed partnerships with health ministries in eight other African countries, together with global and local implementing partners such as PATH and the African Christian Health Association Platform (ACHAP).

Recognising the significant benefits awareness and early detection have on health outcomes, this programme focuses on education and screening, as well as access to evidence-based care and high-quality, low-cost products, where applicable, to benefit people and the health system more broadly.

“Through Healthy Heart Africa, we have integrated existing healthcare structures into primary care services to improve reach to people and contribute to the prevention and halting of NCD spread in Uganda.”

Dr. Tonny Tumwesigye

Executive Director, Uganda Protestant Medical Bureau

To further these efforts, we work to uplift healthcare provider capabilities by raising awareness of cardiovascular diseases and offering training opportunities. By the end of 2023, HHA has trained more than 11,300 healthcare workers since 2014.¹

As of February 2024, nearly two years ahead of target, Healthy Heart Africa has reached its ambition of identifying 10 million people with elevated blood pressure across Africa. To date, we have conducted more than 50 million blood pressure screenings.

We are now working with our partners to expand the programme to integrate a focus on cardiorenal diseases, including chronic kidney disease (CKD), and explore new countries in Africa to implement the successful model. Learn more about our launch of the next phase of HHA in Ghana [here](#).



Healthy Heart Africa screening in Kenya

Case study

Pioneering an equitable and sustainable approach to cancer care in Africa

Our [Cancer Care Africa](#) programme is another example of our commitment to putting patients first and improving equity and health system sustainability.

Launched in November 2022 at COP27 in Egypt, Cancer Care Africa helps countries in their fight against cancer by advocating for policy changes to improve outcomes for all individuals affected by the disease, irrespective of their demographic, geographic or socio-economic status.² It also adopts innovative health technologies to make cancer screening more accessible, especially in remote and underserved communities.



Localising care to improve community health

Millions of people die each year from preventable diseases, and factors such as gender, geography and socioeconomic status can lead to certain communities being disproportionately burdened.

That's why it is important to address the broader physical, social and environmental factors that can impact health outcomes. From an individual's genetics and lifestyle to the environment in which they live, their income and education level – all of these aspects can have a significant impact on a person's risk of disease, the barriers they face in becoming aware of their health needs and how they access appropriate care.

Because of these compounding factors, people at the highest risk of disease are often not being screened and lack access to early detection, precision diagnostics and quality treatment. By increasing our understanding of the factors that influence health, raising awareness of health risks and prioritising access to earlier screening and detection, we can partner with communities to deliver tailored interventions for those at greatest risk and do more to address avoidable deaths. This will not only benefit people and public health, but can help societies and economies thrive.

1/5

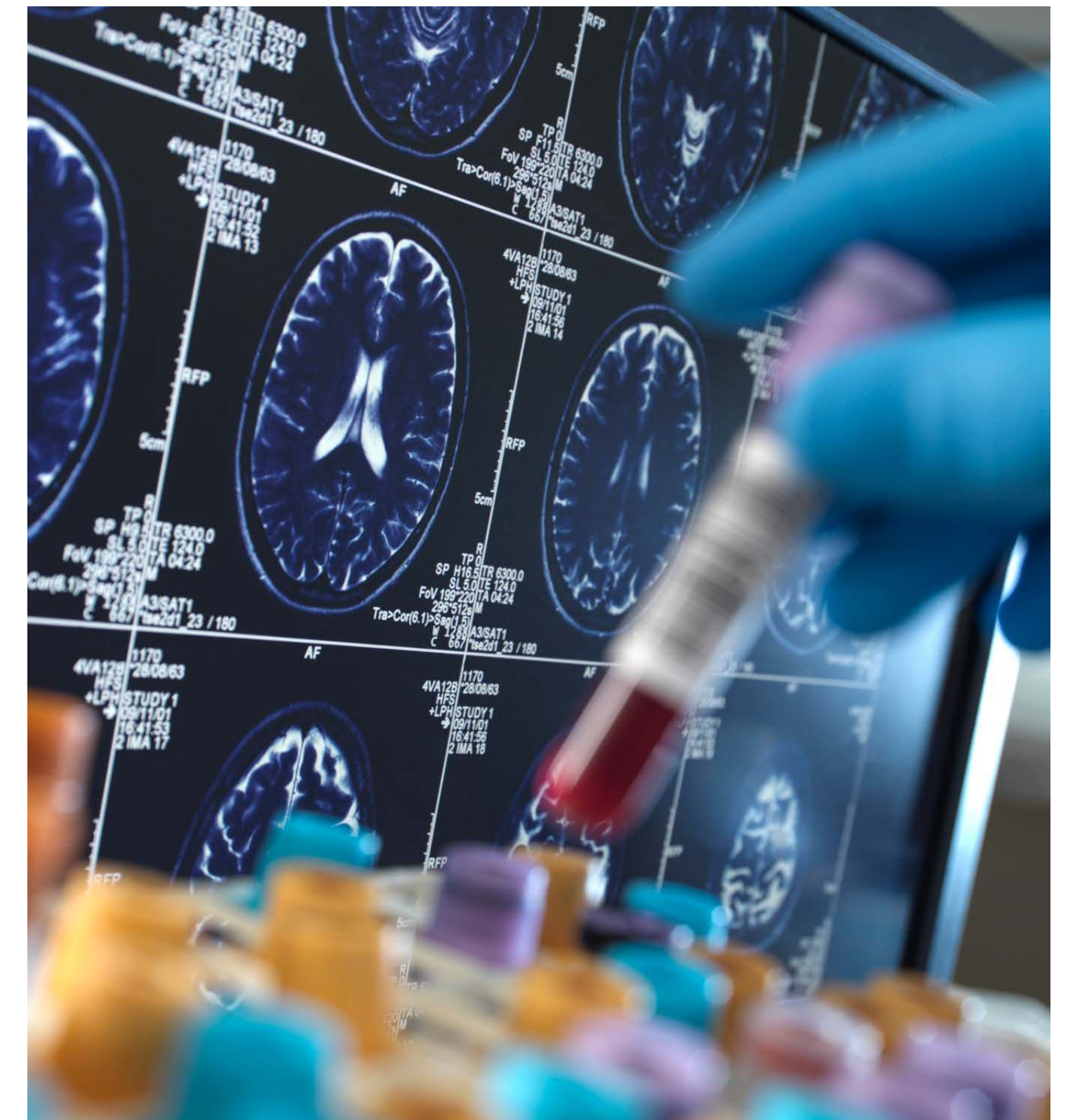
of all cancer-related deaths globally are due to lung cancer

80%

Of premature deaths from NCDs could be avoided through prevention and screening

\$2+ trillion

Cost of NCDs per year by 2030





Increasing lung cancer screenings in Kentucky, US

Health disparities exist in countries all over the world. In the US, a high level of health inequity is based on people's geographic location within the country as well as high rates of adults living in rural areas skipping critical medical care.³

In Kentucky, a state with a large rural population, the rate of newly-diagnosed lung cancer cases is the highest in the country. To address this burden, AstraZeneca began partnering with the Association of Community Cancer Centers in 2021 to set up the Rural Appalachian Lung Cancer Screening Initiative and bring early detection, cancer screening and treatment programmes to underserved communities across Kentucky.

Through this partnership, we were able to increase screening in the most socially and economically disadvantaged rural counties of Kentucky where people are at higher risk of developing lung cancer. Working with local advocates in these communities, the initiative developed and implemented new patient-centric approaches to promote awareness of the importance of screening in rural Appalachia.

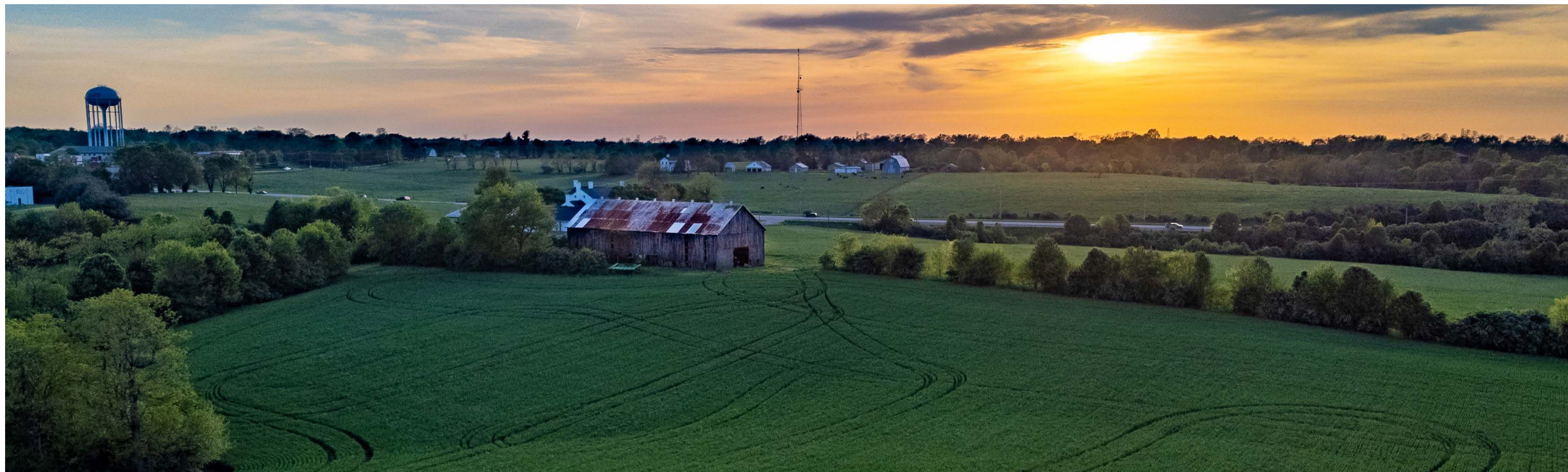
This collaborative effort improved patient access to screening and contributed to Kentucky becoming the state with the second-highest lung cancer screening rate in the US.



Case study

ACTing on Health Equity across the US

In 2021, we created Accelerate Change Together (ACT) on Health Equity, a US-based initiative designed to transform how we improve access, affordability and outcomes for patients in the disease areas and communities we serve. [Learn more.](#)





Strengthening health systems and building resilience

The delivery of sustainable healthcare requires stable, resilient health systems with the right infrastructure in place to meet population health needs now and in the future. Health systems today, however, are struggling to meet people's needs.

Growing demand for healthcare due to ageing populations and increased prevalence of NCDs, alongside economic pressures and the health effects of climate change, are causing workforce shortages and further stretching health systems.

Much of the world's population still lacks routine access to essential medicines and health services. Without corrective action, health systems are at risk for a protracted process of decline, leaving them less able to meet people's health needs and more vulnerable to future crises.

Innovations in the healthcare sector through digitisation and efforts to support disease prevention and early intervention can all help health systems transform and become more resilient.





The Partnership for Health System Sustainability & Resilience (PHSSR)

To improve global health and build more sustainable and resilient health systems, AstraZeneca joined forces with the London School of Economics and the World Economic Forum to launch PHSSR in 2020 at the height of the COVID-19 pandemic.

Four years later, the partnership is active in more than 30 countries and has grown to include additional members such as Philips, KPMG, the Center for Asia-Pacific Resilience and Innovation (CAPRI), the WHO Foundation, and additional regional and national organisations.^{4,5}

With its unmatched collective expertise spanning health research, policy and innovation, the Partnership has built, and continues to expand upon, one of the largest bodies of work on the sustainability and resilience of health systems globally. It has published 26 reports with robust, evidence-based recommendations for policy change.

These collaborative efforts have resulted in more than 30 policy changes around the world in line with these recommendations, strengthening health systems to positively impact care and treatment for millions of patients.



“Health systems must prepare for future pandemic threats, climate change, conflict, or technological or economic shocks. Then, when the next crisis occurs, we can mobilise quickly and potentially reduce the number of preventable deaths. This can only be done if we make health a strategic asset.”

Michel Demaré

AstraZeneca Chair

Case studies

Brazil

PHSSR research has informed health policy priorities for the government, ensuring that improving community-based prevention and disease management services are now key focus areas.⁴

EU

An EU Expert Advisory Group⁶ was formed to make high-impact health policy recommendations. With NCDs accounting for 90% of deaths and 80% of the overall disease burden in the EU, the Expert Advisory Group formulated recommendations for EU institutions in its first policy report to improve the prevention and early detection of NCDs. Additionally, in Italy, clinical pathways for chronic diseases are being reviewed to identify investment needs.

Japan

The PHSSR advocated for an integrated e-health record infrastructure in the country and Japan included the development of a digital platform to collect and share medical information in the *Honebuto* – the set of guidelines which informs Japan’s economic and fiscal policy. The digital platform will support healthcare providers to make guideline-based decisions and detect patients at early stages of their disease.⁴



Delivering sustainable science – from lab to patient

With scientific laboratories consuming five to ten times more energy than standard office spaces,^{7,8} scientific innovation and environmental sustainability must go hand-in-hand.

By pushing the boundaries of science and embedding a culture of sustainability across the organisation, we can design, develop and deliver new medicines in the most environmentally sustainable way possible and minimise our impact on the world's natural resources.

Whether in research and development, clinical innovation, manufacturing, or the treatment and delivery of healthcare, we encourage our employees and partners to adopt a sustainability mindset that embraces our core values.

Across our value chain, we are harnessing the power of sustainable science and pioneering new approaches through partnership. Together, we are working collaboratively to drive impact at pace and at scale.





A culture of sustainability

Through our Green Labs programme, we integrate sustainability standards into research processes to reduce laboratory emissions and waste as part of our commitment to innovating with sustainable science. More than 4,000 colleagues are already optimising ways of working and championing a sustainability culture in their labs.

Together, we're acting on:

- **Energy reduction:** Promoting best practices in lab cold storage management and empowering scientists and operators to switch off lab equipment to reduce our power consumption and carbon footprint.
- **Waste management:** Adopting eco-friendly waste disposal methods and promoting the recycling of lab materials such as plastics and gloves, which is reducing our waste.
- **Certification:** In collaboration with My Green Lab, certificates are being awarded to highlight sustainable performance within the lab space and identify opportunities to improve.
- **Raw material and solvent use reduction:** Achieved by innovating in lab process.

External recognition

The United Nations Race to Zero recognised the My Green Lab Certification as a key measure of progress towards a net-zero future and is considered the worldwide standard for laboratory sustainability.

- AstraZeneca has achieved My Green Lab Certification in 100+ lab spaces globally, with 41 labs awarded the highest-level certification - Green.
- We are the first organisation in the Americas – in any industry – to achieve Green certification at our manufacturing and supply sites in this region.
- Our Cairo, Egypt manufacturing site received the first Green level certification in the pharma sector for a quality control lab.
- In 2023, we were awarded 'Sustainable Lab of the Year' by Lab Innovations.

“Every incremental step we take to embed sustainability into our labs and operations furthers our ambition to deliver life-changing medicines in a way that is respectful of our planet.”

Penny James

Chief Operating Officer,
BioPharmaceuticals R&D, AstraZeneca



Case studies



Decarbonising respiratory care

Chronic respiratory diseases such as asthma and chronic obstructive pulmonary disease (COPD) are complex, difficult to treat, and often patients continue to experience poor outcomes like worsening symptoms or disease resulting from suboptimal care. Not only do these challenges impact patients, but they lead to a greater carbon footprint than when such diseases are well controlled. Improving patient care to reduce hospitalisations and healthcare resource utilisation is key to lowering the environmental burden of respiratory healthcare.

AstraZeneca is accelerating the development of our respiratory inhalers using an innovative, next-

generation propellant with near-zero global warming potential, which is 99.9% lower than in today's medicines. This new propellant will also be non-persistent (breaks down easily in the environment) and non-bio accumulative (does not build up within living organisms).

A viable transition to respiratory inhalers with reduced climate impact is important to ensure continuity of care and access to these medicines for the millions of people who live with respiratory diseases around the world. With the first launches of these medicines anticipated from 2025, subject to regulatory approvals, continuity of care and access should be considered in any climate policy development.

Transitioning to electronic Product Information (ePI)

Around the world, people are increasingly consuming information digitally. At AstraZeneca, we're working closely with global regulators and policymakers to transition to paperless product information leaflets, taking an important step towards sustainable healthcare delivery that also has co-benefits for patients and health systems.

Every year, approximately 100 billion paper information leaflets are printed worldwide for medicine packs. By removing paper leaflets, waste from paper, ink and packaging materials can be reduced and packaging and transportation can be made even more efficient.

Our medicines manufacturing site in Japan is a trailblazer in the transition to ePI for all of our products for Japan. We were among the first companies to make a 100% switch to digital in Japan, and achieved this milestone eight months before the regulatory deadline.

In just one year at just one site in Maihara, Japan, we:

- Eliminated 30m sheets of paper and 180t of waste
- Eliminated 154t CO2 emissions
- Saved 800 hours of warehouse and 2,500 hours of production time

We are focused on a responsible transition to ePI that ensures equitable access to information by working with our partners and healthcare system stakeholders. We will take a digital-first approach while allowing for flexibility for patients to access information through alternative ways if needed.



Progressing our transition to net zero

The healthcare sector plays a vital role in managing the impact of climate change on human health, but our sector is also a significant contributor to the problem, producing approximately 5% of GHG emissions globally.

This means we need urgent action at scale to accelerate the transition to patient-centric, net-zero healthcare and everyone involved in the delivery of healthcare must play their part.

From progressing on our bold, science-based net-zero targets to investing in circularity and nature-based solutions, and partnering across and beyond our sector, we aim to drive lasting change and inspire others to act now.





Ambition Zero Carbon

AstraZeneca has a bold, science-based decarbonisation strategy – “Ambition Zero Carbon” – and through this \$1 billion effort we are making strong progress toward our goals by maximising our energy efficiency, shifting to renewable energy sources and investing in nature-based solutions to compensate for any residual emissions footprint.⁴

We are on track to achieve our targets to reduce emissions from our global operations and fleet (Scope 1 and 2) by 98% by 2026 and by 2030, we aim to halve our entire value chain footprint (absolute Scope 3 GHG emissions), on the way to a 90% reduction by 2045. By 2030, we will become carbon negative for all residual emissions, which means that we will remove more carbon from the atmosphere than we emit.

“As a physician, I took the Hippocratic Oath, which means not only do we need to relieve suffering and save lives, we must do no harm. That’s why it’s so important for us to take responsibility and decarbonise the healthcare sector.”

Dr. Victor Dzau

President, National Academy of Medicine, US (BBC StoryWorks, 2023)





Here are four ways we’re taking action today:

1

Making progress on our science-based targets

We were one of the first seven companies to have our net-zero targets verified under the Science-Based Targets Initiative’s (SBTi) Net-Zero Corporate Standard.

67.6%

Reduction in Scope 1 and 2 GHG emissions since 2015, on track toward a 98% reduction by 2026.

5 facilities

in our global supply network have already delivered a sustained 98% reduction in their Scope 1 and 2 GHG emissions. This includes sites in Lomas Verdes, Mexico; Cotia, Brazil; Nijmegen, Netherlands; Cairo, Egypt; and Cikarang, Indonesia.

2

Engaging suppliers across our value chain

We’re decarbonising across our value chain to tackle our Scope 3 emissions and have set the goal that by the end of 2025, 95% of our key suppliers and partners by spend will have science-based targets. We’re working closely together and supporting suppliers and partners on how to achieve this.

12%

of all companies taking action with SBTi are AstraZeneca suppliers.*

*As of May 2024; companies taking action includes AstraZeneca suppliers that have committed to set science-based targets, have submitted targets or that have had their targets verified.

3

Working in partnership

We’re collaborating across the healthcare sector to address key emissions sources, recognising that a systems-level approach can drive greater impact. We’re a founding member of “Energize”, working with Schneider Electric and 19 global healthcare companies to facilitate access to renewable power at scale for our suppliers. We’re also helping accelerate the decarbonisation of active pharmaceutical ingredient (API) supply chains through the “Activate” programme, another industry collaboration.

286

AstraZeneca suppliers registered with Energize to participate in the first power purchase agreement buyers’ cohort to buy 2TWh of renewable electricity since 2022.

4

Creating a culture of Sustainability

We champion a culture of Sustainability and encourage all employees to contribute to our sustainability goals, whatever role they have.

87%

of employees say they understand how they can contribute to AstraZeneca’s sustainability priorities.



VIDEO *The Climate and Us: Can medicine be made more sustainably?*

Medical innovations are critical to keeping people healthy and treating disease – but developing, manufacturing and delivering healthcare has a significant environmental footprint. In this short film, AstraZeneca CEO Pascal Soriot and sustainability apprentice Kate Stevenson share their perspectives on the transition to more sustainable, resilient healthcare.



This content was produced for AstraZeneca by BBC StoryWorks as part of The Climate and Us series.

Case study

Powering our sites with clean heat

The research, development and production of medicines is energy-intensive, yet access to certified low- and zero-carbon fuels and imported heating and cooling sources is limited. That's why we are working to expand access to renewable energy and contribute to the circular economy, through a number of innovative partnerships to decarbonise our operations:

- **US:** With [Vanguard Renewables](#), we're transforming food and farm waste into renewable natural gas (RNG). The first-of-its-kind collaboration will provide clean heat to all of our US R&D and manufacturing sites by 2026.
- **UK:** Through an [agreement with Future Biogas](#), the largest biomethane producer in the UK, we established the first unsubsidised industrial-scale biomethane supply in the UK.⁴ A new biomethane plant will add renewable energy to existing UK infrastructure and supply green gas for our sites in Macclesfield, Cambridge, Luton and Speke.
- **China:** A [renewable energy collaboration with China Resources Gas](#) will enable the transition to clean heat at our Wuxi manufacturing site in the Jiangsu province. This partnership enables us to reduce our Scope 1 and 2 emissions by up to 80% in China, and represents the first time a healthcare company has procured clean heat in this way in China.



Catalysing action to decarbonise health systems

The Sustainable Markets Initiative (SMI), launched in 2020 by His Majesty King Charles III, then the Prince of Wales, is the leading global organisation for the sustainable transition, convening top organisations alongside governments to innovate, accelerate and deliver on a just, sustainable and prosperous future.

AstraZeneca CEO Pascal Soriot chairs the SMI Health Systems Task Force, which brings together global healthcare CEOs and health leaders with the shared mission of accelerating the delivery of net-zero, patient-centric healthcare. Task Force members include AstraZeneca, GSK, Merck KGaA, Novo Nordisk, Reckitt, Roche, Samsung Biologics, Sanofi, Bupa, Novartis, National Health Service England, the Sustainable Healthcare Coalition, UNICEF, the University of Pavia, and the WHO.

The Task Force is taking joint, scalable action across four priority areas: Decarbonising Supply Chains and Patient Care Pathways; Digital Innovation in Clinical Research; and Consumer Health & Wellbeing.



The Terra Carta is the guiding mandate for the Sustainable Markets Initiative, providing a proposed set of principles to 2030 that puts Nature, People and Planet at the heart of global value creation.



VIDEO *Advancing health sector decarbonisation*

Leaders from the SMI Health Systems Task Force share the actions they're taking to decarbonise health systems.



Shared action for greater impact

Significant progress has been made since the launch of the SMI Health Systems Task Force at COP26.

Supply Chains:

- Launched joint, minimum climate and sustainability targets for suppliers to address emissions across the value chain and reduce the complexity of multiple asks for suppliers.
- Signed an industry-first, multi-party agreement in China to unlock access to renewable power.

Patient Care Pathways:

- Members launched a carbon calculator for haemodialysis.
- Advanced emissions measurement frameworks and tools, including the development of a sector-wide standard for medicines Life Cycle Assessment (LCA).

Digital Healthcare:

- Published guidance for a clinical trial eco-design framework to measure emissions from clinical trials.

Consumer Health & Wellbeing:

- Launched a new Working Group, focusing on prevention and adapting to the impact of climate change on human health.



Case study

Transitioning to net-zero healthcare in China

China is a major global market for discovering, developing and manufacturing pharmaceutical products. In November 2023, the [SMI China Council](#) launched a Health Working Group comprised of 16 multinational and China-based companies across the healthcare, energy and supply chain sectors to collaborate on accelerating the transition to net-zero healthcare in China.⁹ The coalition is chaired by the China Resources Group and AstraZeneca.

In addition, in January 2024, AstraZeneca, Lonza, Novartis, Novo Nordisk, and Roche signed an agreement in China with the green technology company Envision Energy to unlock access to renewable power.¹⁰ This is the healthcare sector's first multi-party agreement to access renewable power in China. It is set to achieve potential annual CO₂e savings of around 120,000 tonnes, comparable to taking 25,000 cars off the road.

Companies from within and beyond the health sector are now able to join this collaborative effort to access green power in China.



Restoring biodiversity and investing in nature

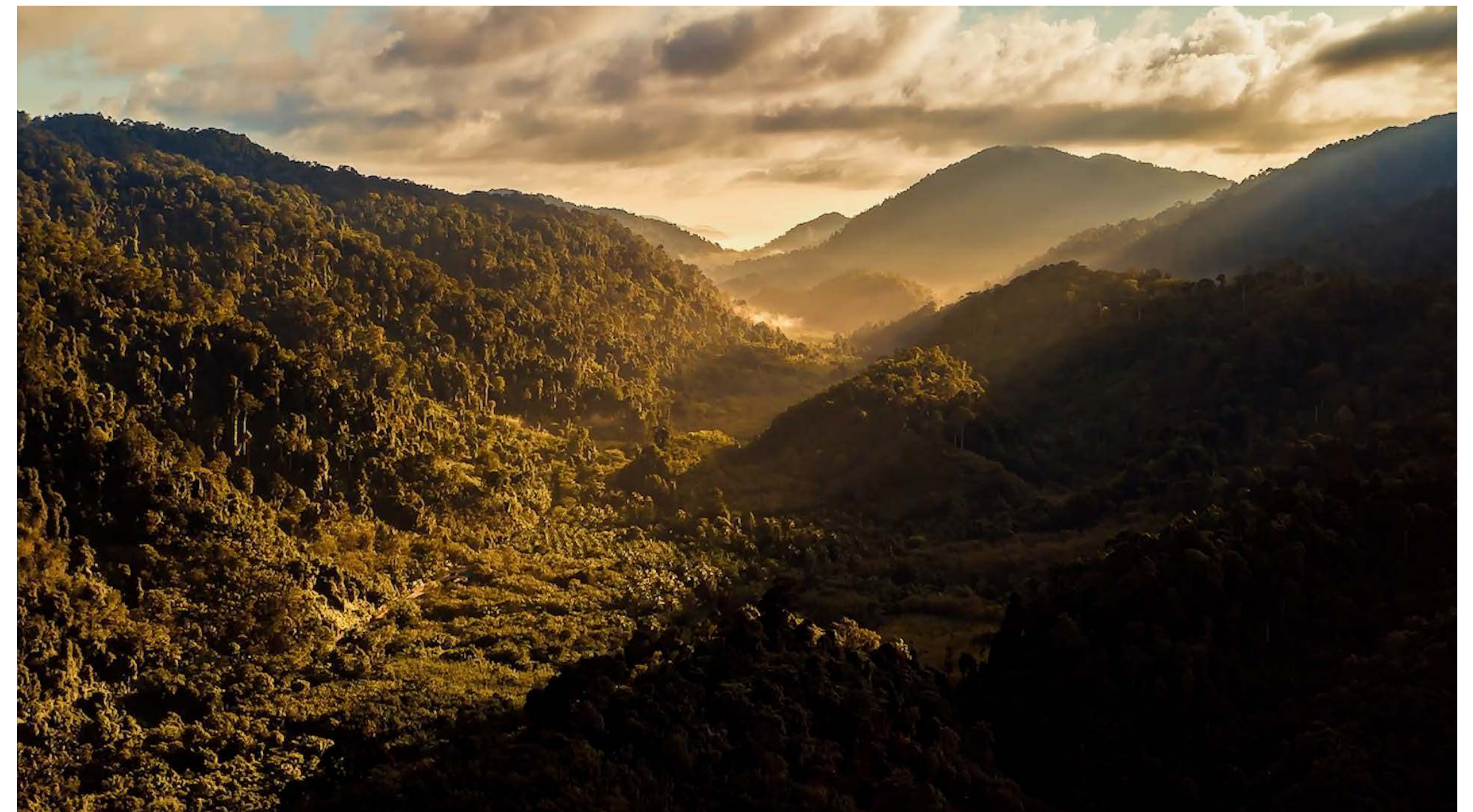
We recognise the strong interconnection between the health of nature and people. Pressures on nature and biodiversity are multifaceted and interconnected, so systems-level thinking is needed to achieve greater harmony with the natural world.

We are taking action to protect and restore ecosystems and furthering our commitment to minimise the environmental impacts of our value chain, focusing where it is needed most:

- **In our supply chain**, while making progress on our existing responsible sourcing targets, we are building a risk-based approach to assess our impacts and dependencies on nature.
- **At our sites**, we are building on existing water stewardship and biodiversity efforts and identifying opportunities to work collectively.
- **With our medicines**, we closely monitor the risk of water quality impacts from the manufacture and patient use of our products through our EcoPharmacoVigilance, which builds our understanding of pharmaceuticals in the environment.
- **In communities around the world**, through our reforestation and biodiversity commitment, AZ Forest.

These efforts are part of an holistic approach to nature and in addition, we have committed to be an Early Adopter of the Taskforce on Nature-related Financial Disclosures (TNFD) framework.

VIDEO *AZ Forest: our commitment to supporting biodiversity and human health*





AZ Forest

Recognising the deep connection between health, nature and the climate, AZ Forest is our global initiative to restore forests to help mitigate climate change, protect biodiversity and build sustainable livelihoods. Through our \$400 million commitment to AZ Forest we aim to plant and maintain 200 million trees across six continents by 2030 and restore over 100,000 hectares of land.

Each reforestation project is co-designed with planting experts, local communities, and governments. To date, we have planted more than 19 million trees across Australia, Brazil, Ghana, India, Indonesia, Rwanda, the US, and the UK.

AZ Forest isn't just about planting trees; it's about working with local communities to build ecological and community resilience. In partnership with planting experts and local leaders, we select diverse, locally appropriate tree species to maximise climate resilience and biodiversity benefits and reduce risks from pests and diseases. We monitor local tree projects for an average of three years and large-scale reforestation projects for at least 10 years to ensure long-term survival. We also involve local people in the project area, such as farmers, landowners and other indigenous knowledge-holders, to ensure that we consider the local socioeconomic context and leave a positive net impact on the communities and livelihoods.

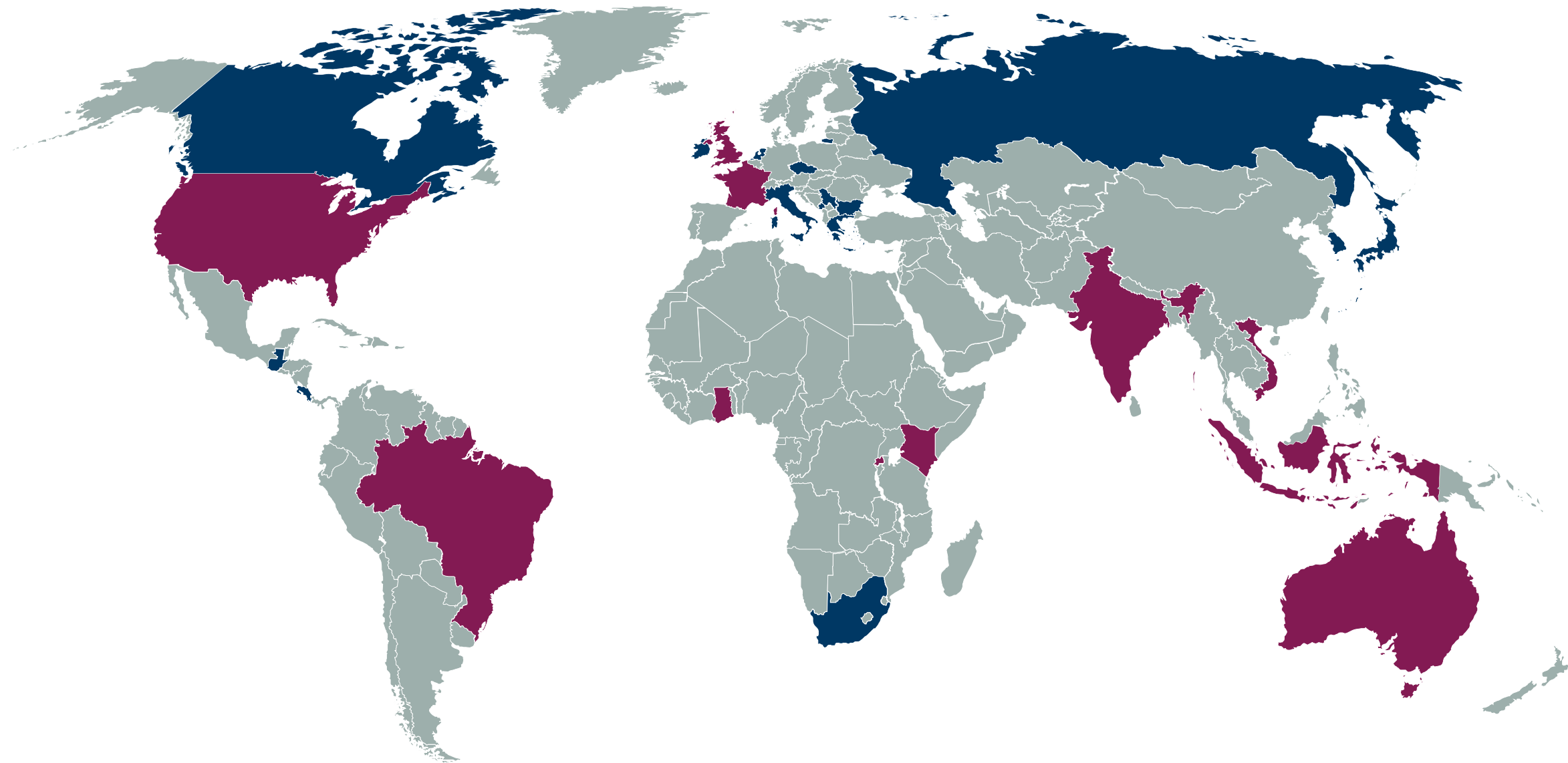
“Our focus is on reforestation that supports nature, human health and local communities, with a science-driven approach. We are proud to be collaborating with recognised experts and hope these efforts will support sustainable, resilient landscape regeneration for decades to come.”

Juliette White

Vice President, Global Sustainability, AstraZeneca



AZ Forest across six continents



Australia: In partnership with Greening Australia and One Tree Planted, more than four million trees have been planted, including 260 native tree species, supporting vulnerable and endangered wildlife species.

Brazil: A partnership with Biolífica Ambipar and Instituto de Pesquisas Ecológicas (IPE) called “Corridors for Life” will plant 12 million trees within the Atlantic Forest, with over 100 native species planned in each project area. This programme will also build an important habitat for vulnerable and endangered species.

Indonesia: In partnership with One Tree Planted and Trees4Trees, more than three million trees have been planted, with over 13,000 farmers opting into agroforestry activities in 2022.

India: A partnership with Earthbanc and local implementation partners in the state of Meghalaya will plant an estimated 64 million trees, focusing on a diverse mix of species, restoring nature in this degraded biodiversity hotspot while supporting farming livelihoods.

Ghana: Through a community-led programme that is part of a global network of “Living Labs,” we will plant more than 4.7 million surviving trees in a project that seeks to boost forest restoration, agroforestry, biodiversity and nature-based business models for small-holder farmers.

Rwanda: A pilot project with partners aims to plant more than 5.8 million trees, with a focus on agroforestry and agricultural land management which will benefit local communities and improve livelihoods, including more than 30,000 farming households.

UK: We are planting one million trees in Scotland and England with Forestry England and Borders Forest Trust Scotland, to create high-quality woodland areas that provide additional green space in support of physical and mental wellbeing.

US: We’re restoring hundreds of kilometres of riverside woodlands by planting one million trees in partnership with the National Fish and Wildlife Foundation.

Vietnam: AstraZeneca has committed to planting 22.5 million trees across at least 30,500 hectares to restore Vietnam’s forests and landscapes. This new investment will allow biodiversity to flourish and provide sustainable livelihoods for more than 17,000 small-holder farmers.

Local AstraZeneca tree planting initiatives support landscape regeneration and are in addition to our global AZ Forest commitment.



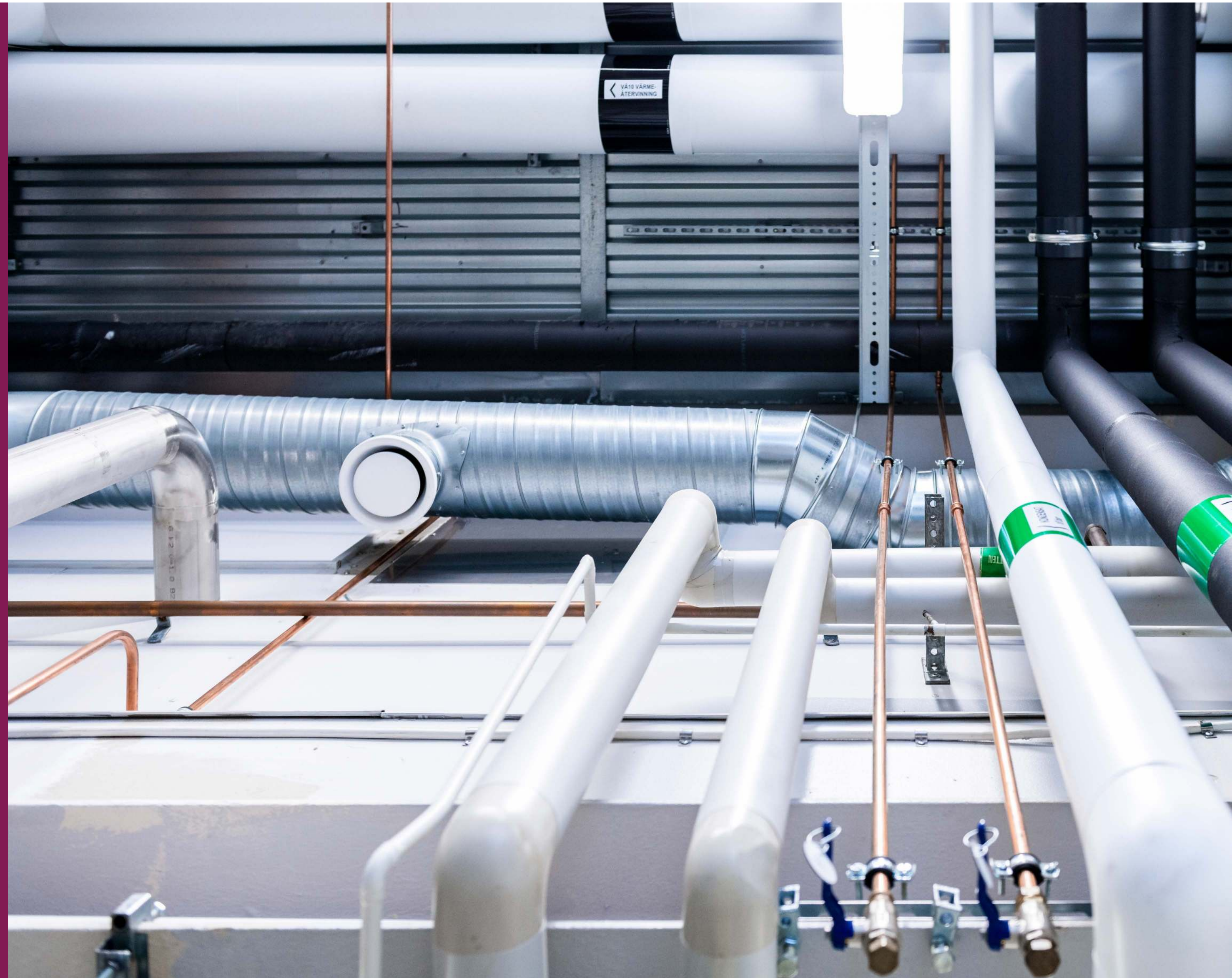
Case study

Our approach to water stewardship

High quality freshwater is essential to produce medicines across our global supply chain. Water risks faced by the basins we depend on are multifaceted and unique to their location. That's why we're committed to progressing on our water stewardship journey. Our focus on water stewardship includes targets, initiatives and goals across our operations and with our largest suppliers, including:

- Designing out our water dependence during process development.
- Improving the efficiency of our research, development and manufacturing sites.
- Applying safe discharge limits for the active pharmaceutical ingredients we produce or formulate while also applying these limits across our supply chain.

Starting in 2024, we're investing \$5 million per year to fund nature restoration and water stewardship projects, which will help us work collectively to address shared water challenges in the communities where we operate. [Learn more.](#)



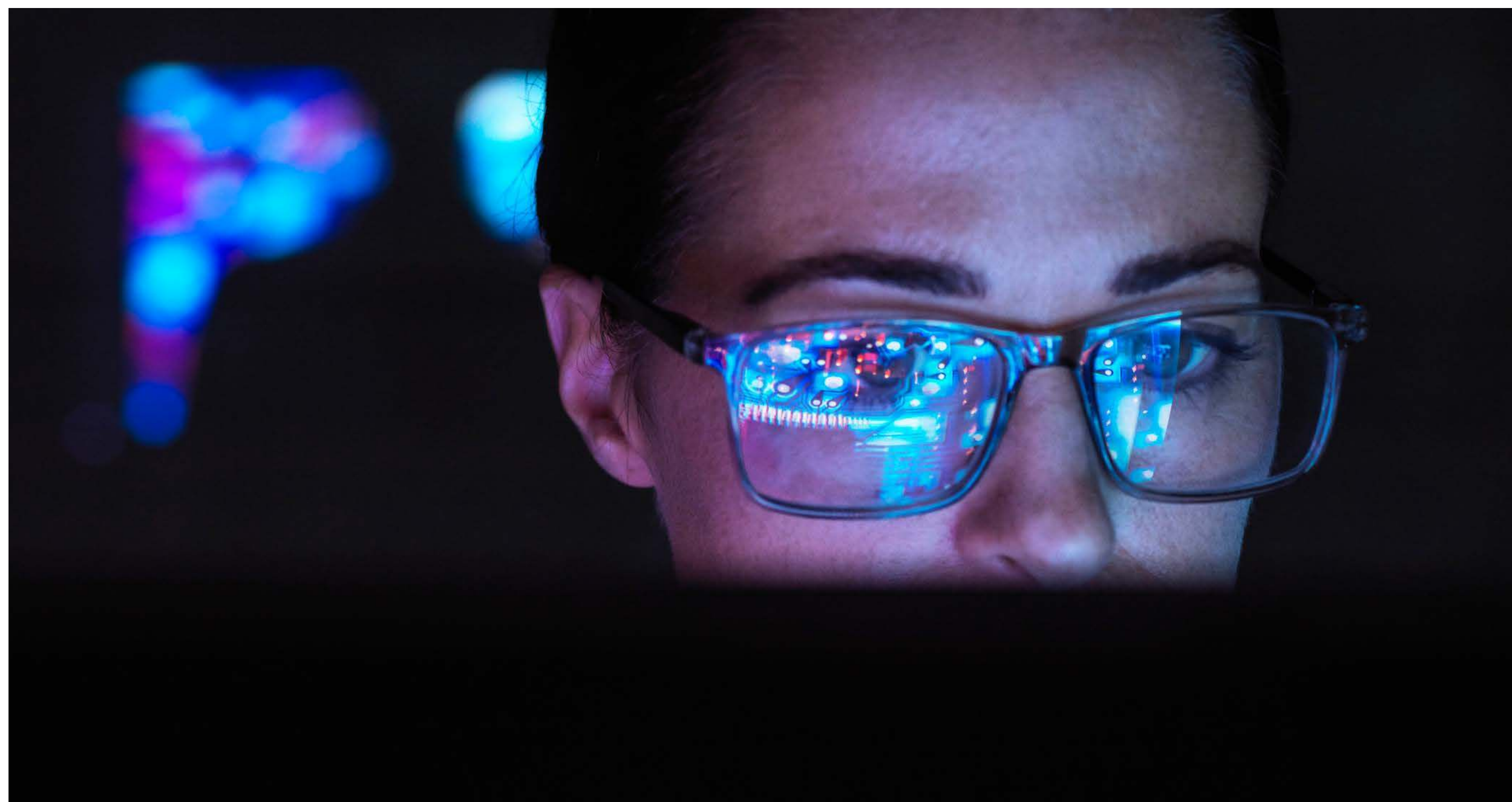


Transforming healthcare with ethical AI

Rapid advances in Artificial Intelligence (AI), machine learning and emerging technologies are accelerating innovative science and the delivery of life-changing medicines for the most serious and complex diseases facing humankind.

These advancements are enabling us to process and understand vast amounts of data so that we can:

- Discover and deliver new treatments with greater speed, efficiency and precision;
- Detect and diagnose diseases earlier;
- Pioneer new approaches to delivering healthcare; and
- Improve the patient experience.





A new frontier in what science can do

At AstraZeneca, we're committed to acting ethically, responsibly and securely to maximise the potential of AI and emerging technologies in a way that is human-centric and socially beneficial. We're unlocking the potential of AI to explore new frontiers of what science can do by:

Accelerating drug discovery & design: In drug discovery, AI and large-scale data analysis are enhancing our ability to fundamentally understand diseases and their underlying causes so that we can uncover new ways to treat, prevent, or one day even cure these conditions. As our discovery efforts identify new targets, we can use AI tools to find more efficient ways to design therapeutics that affect those targets and can move through our development pipeline successfully.

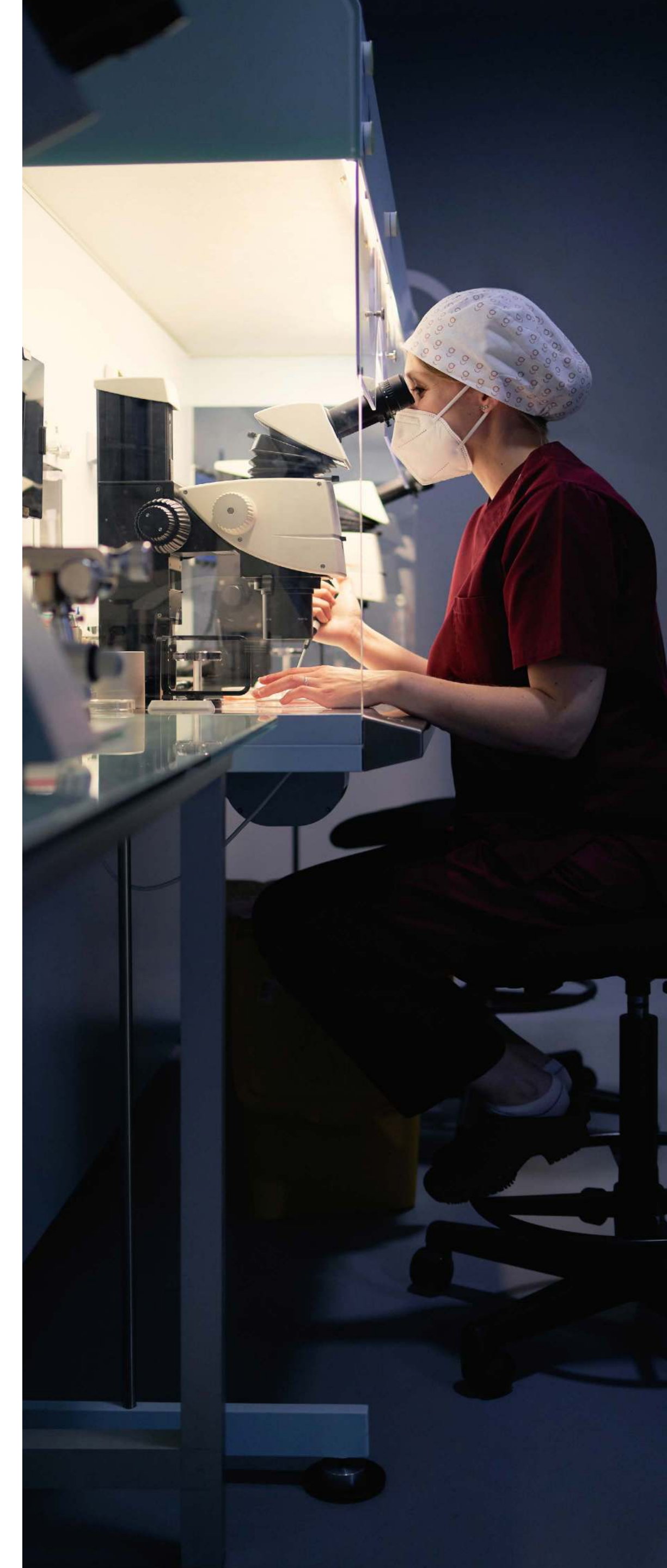
- We're using advanced cloud data and AI tools to interpret genetics faster with the aim of analysing up to 2 million genomes by 2026.
- Alexion, our rare disease unit, is collaborating with Genomenon to leverage AI-driven genomic technology to produce a complete 'Genomic Landscape' for certain rare diseases. This will enhance the Mastermind® Genomic Search Engine that makes available comprehensive gene information to genetic testing laboratories and medical centres across the globe to enable earlier diagnosis and treatment for people living with rare diseases.

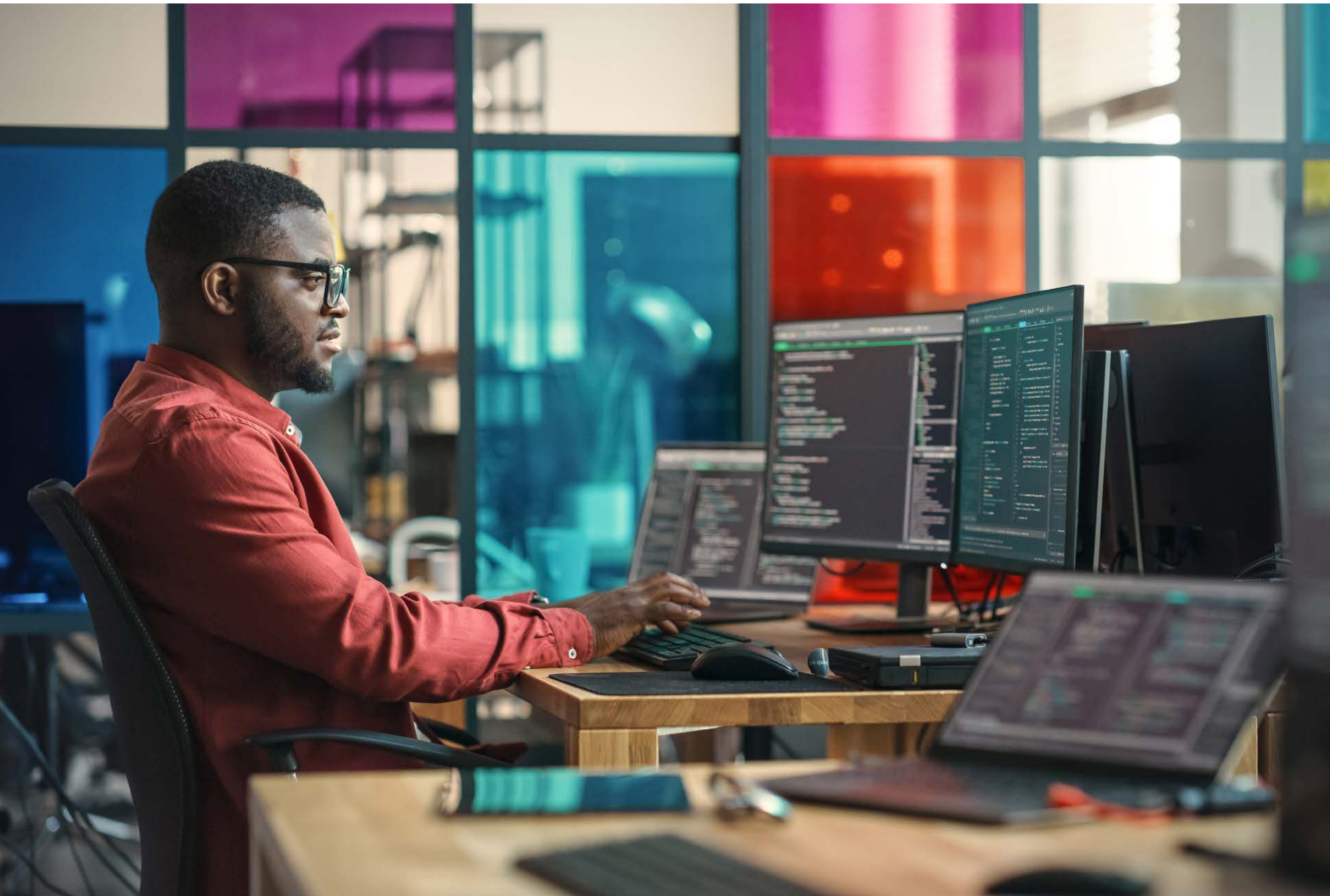
Improving clinical development: Clinical trials are a vital part of the drug development process but they can be costly and time-intensive for patients and healthcare providers. Digital solutions can make clinical development faster, more effective, inclusive and more patient-centric.

- We created a new health-tech company called Evinova to provide digital optimisation of clinical trial design and delivery that will help accelerate medicine development and improve patient experience and outcomes. Evinova includes a unified platform for decentralising trials and remote data collection, digital trial planning and analysis, and portfolio oversight for tracking global trial progress.

Empowering patients: We're maximising the use of AI and emerging technologies to empower patients to play an active role in their own treatment by building advanced disease management platforms. We're also helping healthcare professionals diagnose, monitor and treat patients more precisely and sustainably.

- We're partnering with Qure.ai, developers of deep learning algorithms to analyze X-rays for potential early-stage lung cancers using AI. This initiative integrates the technology into routine chest X-rays and existing screening programs to improve the detection of lung cancer quickly and at scale. Qure.ai's chest X-ray interpretation tool can detect and localise up to 29 abnormalities, including possible lung cancer.





Case study

Data privacy and protection in the age of AI

The expanded interest in and use of AI creates opportunities for improved patient engagement and data analysis, but also results in concerns around data privacy and usage. It's essential that we meet regulatory and stakeholder expectations around the responsible use of AI, as well as data protection and security in this evolving environment.

Our [Global Privacy Standard](#), [Global Standard on the Ethical Use of AI](#) and our internal data and AI governance committees and Enterprise AI Governance Framework are some of the ways in which we ensure we are upholding the highest standards and living by our AI ethics principles.



Fostering innovation and inclusion in clinical trials

Clinical trials are the cornerstone of delivering the next wave of life-changing medicines. To meet the evolving demands for clinical innovation, we are pioneering new approaches to how we engage with patients, trial teams and healthcare providers, and are working for clinical trial populations to match disease state populations.

“Prioritising diversity in our clinical trials is key to meeting the needs of our patients and regulators — it is also simply ‘good science.’”

Serban Ghiorghiu

Chief Safety Officer, Chief Medical Office, AstraZeneca





Reducing environmental impact

Running our trials sustainably is key to reducing GHG emissions and environmental impact. To achieve this, we're using a multitude of operational and digital health solutions throughout the clinical trial process – from study design to data analysis. Our operational innovations include decreasing face-to-face meetings and clinic visits for patients, reducing the number of wasted lab kits by better predicting where they are needed, diverting unused kits to other healthcare facilities and cutting back on single-use plastic.

Enhancing clinical trial diversity

Increasing diverse participation in clinical trials is an ongoing journey to create stronger processes, systems, and standards that remove barriers and improve access to therapeutics for all. To develop more personalised and effective medical interventions, we must consider the diverse realities of the global population and combat disparities in healthcare outcomes with improved inclusion of all populations in the clinical trial phase of R&D. We are building this into the development of our transformative medicines, from discovery to delivery, and our commitment will ensure more people benefit from our trials, science and capabilities.^{4,11}

Prioritising transparency

We have a long-standing commitment to make information about our clinical research publicly available. We believe that being transparent about our research and development, including our clinical trials, serves the best interests of patients, their relatives, caregivers, healthcare professionals, researchers and the public.

Our [clinical trial website](#) aims to increase knowledge and awareness of clinical trials including what it means to participate and how to expand access to relevant clinical trials for patients.





Case study

Meeting the needs of people with rare diseases

More than 10,000 rare diseases are estimated to exist today, but fewer than 10% have approved treatment options. Rare disease community members face many 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.

At Alexion, we believe people with rare diseases deserve the same attention and investment to find and access therapies as anyone else. This drives our 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.

And we are not doing this alone — organisations such as Rare Diseases International and EURORDIS have been instrumental in educating policymakers about health inequity from a rare disease perspective. Now, we need country-level action to bolster this progress.



Creating a healthier future

Creating a better future for all requires engaging the leaders of tomorrow, both across our own organisation and in the communities we serve. We encourage all employees, including new joiners and our early career employees, to participate in our Sustainability journey and pursue their ideas to make their role and teams more sustainable.

Beyond our company, we're working with the next generation of leaders through our flagship Young Health Programme (YHP), a global community investment initiative that aims reduce NCD risk factors. Through the YHP, we're supporting the development of young leaders who are working to make their communities and our planet healthier.

On the pages that follow, hear from the young leaders who are working to ensure we have a more sustainable future.





A view from the next generation



Alejandro Daly, Colombia | MPA candidate at Columbia University and YHP Impact Fellow

How has air pollution impacted your community?

I was born with asthma. When I was 16 years old, I had to flee Venezuela's political chaos and start a new life in Colombia. After I arrived in Bogotá my asthma got worse due to air pollution. In Latin America and the Caribbean, around 130 million children live in areas where air pollution puts their health and development at risk. In Colombia, my new home country, one person dies of diseases related to air pollution every 50 minutes. Air pollution is a silent killer, but it doesn't have to be this way.

How can youth advocates encourage climate action?

We must change the global narrative around the climate crisis. We need to recognise the disproportionate effects of the climate crisis on our health, in particular on NCDs. I believe we can shape the current narrative and build a broader one that is grounded in social and climate justice. I want climate justice and healthy lifestyles to be prioritised and I want the voices of those affected the most by the climate crisis, in particular young people and children, to lead this conversation.



Talita Gobbi, Brazil | Public Policy Lead, AstraZeneca

What health inequalities do people face in Brazil?

Here in Brazil, the health system challenges reflect the challenges of our society as a whole. Screening and early diagnosis are not a reality for many – especially for those living in the most vulnerable communities. Climate change highlights these challenges even more. Building more resilient and sustainable healthcare means creating a more equitable health system.

How do you motivate others to act and make an impact on these issues?

Establishing partnerships that go beyond medicines to create a purposeful agenda for more equitable healthcare makes me proud and gives me hope that we can transform healthcare and change the lives of thousands of people in Brazil. By uniting around a common goal, we can reduce inequities in access to healthcare and improve people's lives.



Eliezer Lappots-Abreu, Dominican Republic | President of Health Horizons International and YHP Impact Fellow

What health inequalities do people face in the Dominican Republic?

Chronic diseases are the second leading cause of death in the Dominican Republic, and the people I serve include marginalised individuals facing socioeconomic vulnerability including undocumented immigrants, women and children. Historically, women in the Dominican Republic, especially Haitian immigrant women, have faced significant challenges in accessing healthcare, including language barriers and limited access to health insurance, often making the cost of treatment and care prohibitive.

How does your work impact patient's lives and improve health equity?

With support from AstraZeneca, our team identified, educated and empowered young community leaders to become “Health Promoters,” or trusted community members who serve as a link between vulnerable populations and health and social services. This innovative approach allowed our institution to close a gap in access to health services through inclusive community-based NCD education in Spanish and Creole, and by creating the first Community Youth Council where young people have the opportunity to influence health policies and share their feedback.



Elishia Alleyne, UK | Sustainability Apprentice, AstraZeneca

What motivates you to act and pursue a career in sustainability?

If we continue to do things the way we always have, the world will continue to get sicker and so will people. My education as a sustainability apprentice is a continuous journey, and I’m learning every day about how we can help keep people healthier, communities fitter and our planet greener. That purpose inspires me but I also see the challenges we face on this journey and I know that creating a more sustainable world is easier said than done. I want to do more and I want others to do more too. We need to set bolder ambitions for ourselves and for the organisations we work for so that we make an even bigger impact.

How are you working to build a healthier, more sustainable future?

Through my professional work and beyond, I am contributing to a better future and creating lasting foundations for self-sustaining practices. At AstraZeneca, the work I am part of is championing our sustainability agenda. Outside of work, I champion the health equity agenda by using my learnings to raise awareness of how climate change impacts our wider society and how we as individuals and organisations can work together on this agenda.



Mohamed Khamis, Egypt | Senior First Line Sales Manager, AstraZeneca

Why are you so passionate about contributing to health system sustainability in Egypt?

I see the strong relationship between health and the environment every day in Egypt. The air around us, the water, the food – all of these things have become increasingly polluted, which in turn impacts our health. I am honoured to be supporting greener, more equitable healthcare in Egypt. We're helping reach those who need health services most with solar-powered mobile hospitals and reaching more vulnerable communities for screening and diagnosis. Doing this while limiting the use of natural resources makes this mobile hospital model more resilient.

What would you like your generation to understand about health system resilience?

I believe we can influence change and improve the lives of patients while also being environmentally conscious. Let us inspire others to deliver greener, equitable and more resilient care.



Hiroyoshi Kaneko, Japan | Study Manager, AstraZeneca

How is your work supporting human and planetary health?

I am currently leading digitally-enabled clinical trials, which can help involve more people who would otherwise be hard to reach. When I first joined AstraZeneca, my motivation was to help improve human health, but what I didn't realise was that when we do that, we are also helping our communities and the environments we live in. Through my work, I feel like I am making a positive impact and moving forward, my hope is to harness the power of digital technology for more sustainable healthcare.

What drives your passion for health?

I believe that through healthcare, we can make a difference and an impact on the world. Through my work in clinical trials, I am contributing to the development and delivery of new treatments for cancer patients as soon as possible. I want to save as many patients as possible and I want to create a world where cancer is cured. That's what drives my work every day.



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