



OXFORD NET ZERO

THE STORY SO FAR

Oxford Net Zero is a growing network and collaboration of leading researchers from across the University of Oxford, providing advice and expertise to national governments, global industry leaders and international organisations in the global race to net zero.



**IN ITS FIRST FOUR YEARS AS A PROGRAMME,
OXFORD NET ZERO'S RECORD AND EXPERTISE HAVE
ATTRACTED FUNDING OF NEARLY £30 MILLION. THERE
CONTINUES TO BE AN URGENT NEED FOR COORDINATED
AND AMBITIOUS RESEARCH AND ENGAGEMENT, WHICH WE
INTEND TO TAKE FORWARD THROUGH AN EVEN BROADER
INTERDISCIPLINARY TEAM.**

A fair transition to net zero that benefits all of society will require a multi-faceted approach. In order to inform this transition, we have organised our work around three key areas:

1

Integrated
international
research
community

2

Transformative
research

3

Engagement
with policymakers,
businesses and
civil society



AN INTEGRATED INTERNATIONAL RESEARCH COMMUNITY

Throughout the life of Oxford Net Zero, we have been working to foster greater diversity in net zero research and enhance the overall level of research excellence at Oxford, particularly on topics that cut across disciplines. Together with international partners, we have established Oxford Net Zero as a global research centre where collaboration between colleagues in the Global South and Global North is key to our success.

EXAMPLES OF OUR WORK

Dr Jessica Omukuti, Research Fellow on Inclusive Net Zero, and **Dr Javier Lezaun**, Oxford Net Zero Co-Investigator, have been working with colleagues at Strathmore University in Kenya to understand how to ensure that carbon markets and green growth serve the needs of African countries in a just and equitable way.

Dr Sugandha Srivastav, Research Fellow in Climate Compatible Growth, leads work on economic policies in low- and middle-income countries that support investment in sustainable energy and transport systems. She is researching how long-term fossil fuel contracts may be holding back the deployment of cheaper, cleaner technologies in the power sector.

Oxford Net Zero Fellows Dr Matilda Becker, Alexis McGivern and Kaya Axelsson are working with the British Standards Institution to train 12 youth activists around the world in the net zero standards-making process. The aim of the project is to increase engagement of actors from the Global South in these processes and to solicit best practice and new ideas on how to better integrate equity into net zero governance.

Oxford Net Zero is one of four collaborating partners in the **Net Zero Tracker**, a project that monitors the net zero commitments made by over **4,000 entities** around the world. It is the only independent tool that provides a comprehensive view of net zero across all nations and the world's largest regions, cities, and companies. Its aim is to evaluate how serious these entities are about cutting their emissions to net zero. The Tracker relies on an **international community of volunteers** who collect the data, which is made freely available as an [online resource](#).



2

TRANSFORMATIVE RESEARCH

Oxford Net Zero researchers have made a significant and lasting contribution to the amount of credible and relevant research that is available to decision-makers as they plan for a net zero future. Their efforts have increased understanding of the progress we are making internationally towards global net zero as set out in the 2015 Paris Agreement, and their work is shining a light on the coverage and robustness of net zero targets around the world.

EXAMPLES OF OUR WORK

Dr Steve Smith,

Executive Director of Oxford Net Zero, has led both editions of the State of Carbon Dioxide Removal report, and other members of Oxford Net Zero have served as lead authors and contributors. The report is a groundbreaking, multi-institution research effort that assesses global trends in CO₂ removal. The first edition of the report, published in 2023, and the second edition, published in 2024, have been cited in more than 300 scholarly articles.

Professor Ros Rickaby and Professor Myles Allen

were elected Fellows of the Royal Society for their outstanding contributions to science in 2022 and 2023, respectively. Professor Rickaby, the chair of Oxford's Department of Earth Sciences, uses a combination of approaches to understand how life, the oceans and Earth's atmosphere interact. Professor Allen, the Founding Director of Oxford Net Zero and the Head of Atmospheric Physics at Oxford, was appointed for his groundbreaking work on the understanding of climate change and net zero.

Professor Mike

Kendall, Head of the Department of Earth Sciences, was awarded the Royal Astronomical Society's Gold Medal for Geophysics in 2024 for his outstanding contributions to seismology and his support of early-career seismologists. He was elected a Fellow of the Royal Society in 2019.



PUBLICATIONS WITH OXFORD NET ZERO AUTHORS HAVE BEEN CITED IN CLOSE TO

800

POLICY DOCUMENTS PRODUCED BY GOVERNMENTS, THINK TANKS AND OTHER ORGANISATIONS AROUND THE WORLD.

SINCE THE ESTABLISHMENT OF OXFORD NET ZERO IN 2020, THE WORK OF OXFORD NET ZERO AUTHORS HAS BEEN CITED ALMOST 14,000 TIMES.

Publications with Oxford Net Zero authors have been cited in close to 800 policy documents produced by governments, think tanks and other organisations around the world. Our researchers frequently collaborate across disciplines to publish work that spans economics; physical, earth and life sciences; social science; business studies; finance and more. Some of these key papers are:

- **The Meaning of Net Zero and How to Get it Right** (778 citations)^{1,2}
- **Harnessing the potential of nature-based solutions for mitigating and adapting to climate change** (310 citations)³
- **Empirically grounded technology forecasts and the energy transition** (474 citations)⁴
- **Towards Carbon Neutrality and China's 14th Five-Year Plan: Clean energy transition, sustainable urban development, and investment priorities** (457 citations)⁵

1 Citations according to Google Scholar.

2 Fankhauser, S. et al. "The meaning of net zero and how to get it right". *Nature Climate Change*, 12, pp. 15–21, 2022. <https://www.nature.com/articles/s41558-021-01245-w>

3 Seddon, N. "Harnessing the potential of nature-based solutions for mitigating and adapting to climate change". *Science*, volume 376, issue 6600, pp. 1410–1416, 2022. <https://doi.org/10.1126/science.abn9668>

4 Way, R. M.C. Ives, P. Mealy, J.D. Farmer. "Empirically grounded technology forecasts and the energy transition". *Joule*, volume 6, issue 9, pp. 2057–2082, 2022. <https://doi.org/10.1016/j.joule.2022.08.009>

5 Hepburn, C. et al. "Towards carbon neutrality and China's 14th Five-Year Plan: Clean energy transition, sustainable urban development, and investment priorities". *Environmental Science*, vol 8, 2021. <https://doi.org/10.1016/j.eso.2021.100130>

ENGAGING POLICY, BUSINESS AND THE PUBLIC ON NET ZERO

Communicating and socialising our research is vital to helping policy makers, businesses and the public understand climate solutions pathways to net zero. Our work has increased awareness and helped to establish high quality net zero targets across multiple sectors of the economy. We don't shy away from engaging with sectors such as fossil fuels and aviation whose emissions will be difficult to abate. Members of Oxford Net Zero are frequently quoted in the media and write op-eds for news outlets, and they are highly sought-after speakers for panels and conferences. Our website, social media channels and public webinars are important resources for an international audience looking to learn more about net zero.

EXAMPLES OF OUR WORK

The Oxford Net Zero Engagement Team (**Kaya Axelsson**, **Alexis McGivern**, and **Dr Matilda Becker**) are at the forefront of developing, refining and researching international net zero standards so that they are clear, usable and credible. They lead and contribute expertise via Technical Working Groups for the **International Standard Organisation's Net-Zero Guidelines**, the **Science-Based Targets Initiative**, and the **Greenhouse Gas Protocol's Corporate Standard**, among others.

In 2024, **Kaya Axelsson** and **Dr Matilda Becker** [published a paper](#) with the Exponential Roadmap Initiative arguing for a new climate reporting framework that would see companies work to reduce emissions across their entire "**Spheres of Influence**", not just their direct value chains. Building on this research, they are working with climate-focused advertising agency Futerra to help companies adopt the Spheres of Influence model.



COP29
Baku
Azerbaijan

Alexis McGivern and the Oxford Smith School work with the Global Youth Coalition to run the **Global Youth Climate Training programme**, a free, online, multilingual programme for young climate advocates who want to learn how to engage with international climate processes. With funding from the ClimateWorks foundation, the programme sent five members of the 2024 cohort to COP29, and will send 10 members to COP30 in Brazil.

Multiple members of Oxford Net Zero worked with colleagues from across the University of Oxford to publish the [Oxford Principles for Net Zero Aligned Carbon Offsetting in 2024](#). Updating guidance first published in 2020, the revised principles set out how state and non-state actors can ensure carbon offsets make a positive contribution to the net-zero transition, rather than undermining it. More than two dozen companies around the world are using the revised principles as part of their net-zero strategies.

Oxford Net Zero Fellows **Dr Stuart Jenkins** and **Dr Alice Evatt** are researching effective appraisal approaches for the net-zero transition plans of the fossil fuel sector, and Dr Evatt is doing extensive work on decarbonisation of the Australian energy sector. **Professor Myles Allen** is leading the Net Zero Aviation project, examining the feasibility and potential impact on emissions of geologically balanced fuels. Along with other colleagues, he and Dr Jenkins have conducted research on how the carbon capture and storage industry in the UK can function effectively without taxpayer money.

After helping to lead a multidisciplinary research project on safely storing CO₂ under the UK's shelf seas, Oxford Net Zero Fellow **Dr Tom Kettle** has led on a series of research projects for CO₂ storage operators in the UK. He is now heading up the development of a consortium for environmental monitoring research facilitated by the national regulator.



3

EXAMPLES OF OUR WORK

Dr Aline Soterroni, Research Fellow on Nature-Based Solutions, has recently completed work with the Brazilian government on SINAPSE MCTI, a modelling tool that will enable users to project the impact of public policies and help the government increase its Nationally Determined Contributions under the Paris Agreement. In December 2024, she gave a talk on preventing deforestation in the Amazon as part of TEDxAmazônia.

Dr Selam Kidane Abebe, Senior Research Fellow in Net Zero Law, has been nominated by African countries to represent them as an Alternate Board Member on the Fund for Responding to Loss and Damage, established under the UNFCCC. She has also been asked by the 2025 G20 Presidency (South Africa) to assist in drafting the declaration and decision of the Environment and Climate Sustainability Working Group.

Members of Oxford Net Zero have participated in multiple international climate processes, including the Bonn Intersessional negotiations and every COP since ONZ's inception. The University of Oxford's delegation to COP29 was led by Oxford Net Zero Co-Investigator **Professor Thomas Hale**.



OXFORD NET ZERO'S WEBSITE AVERAGES

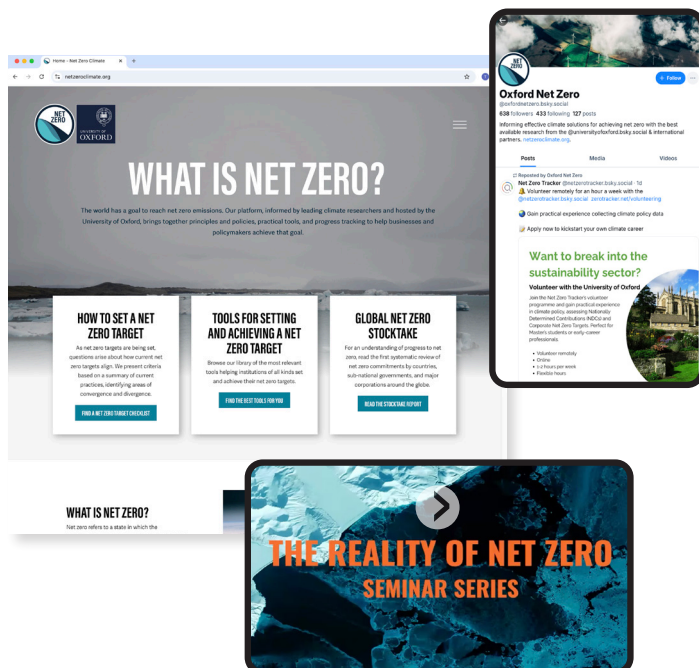
18,000

VISITORS PER MONTH, AND WE HAVE BUILT AN AUDIENCE OF MORE THAN

22,000

FOLLOWERS ON SOCIAL MEDIA. SINCE THE PROGRAMME WAS ESTABLISHED, MEMBERS OF OXFORD NET ZERO HAVE BEEN FEATURED IN THE PRESS CLOSE TO

500 TIMES.



OUR PEOPLE

Directors

Professor Sam Fankhauser (Research Director),
Dr Steve Smith (Executive Director)

Founding Director

Professor Myles Allen

Co-Investigators

Dr Aoife Brophy, Dr Ben Caldecott, Professor Thomas Hale, Professor Cameron Hepburn, Professor Mike Kendall, Dr Radhika Khosla, Dr Javier Lezaun, Professor Michael Obersteiner, Professor Lavanya Rajamani, Professor Ros Rickaby, Professor Nathalie Seddon, Dr Thom Wetzer

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THE STORY SO FAR



GET IN TOUCH

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