Creating a New Reality: A Sustainable Digital Transformation

22nd and 23rd April 2026

Martin Wood Lecture Theatre

Department of Physics, Parks Road, Oxford, OX1 3PU

UNIVERSITY OF LEEDS

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UKRI Science and Technology Facilities Council

National Centre for Atmospheric Science

Contents

Agenda

Day 1: Navigating the challenges of environmental, digital and social transformation

Wednesday 22 April 2026

Time	Session
10:00 – 10:30	Registration & Welcome Coffee
10:30 – 11:05	Introduction to NetDRIVE programme and meeting objectives **Discussion of meeting objectives**
11:05 – 12:30	**Keynote presentations** Making Net Zero Real *Prof. Myles Allen, Head of Atmospheric, Oceanic and Planetary Physics, Department of Physics* Forthcoming sustainability strategies at Imperial *Harriet Wallace, Director Sustainability at Imperial College London* Digital Transformation at Oxford (TBC) *David White, Chief Digital & Information Officer, Oxford University* **Discussion of keynote presentations**
12:20 – 13:50	Lunch Break (Poster Session)
13:50 – 14:40	**Keynote presentations** Energy implications of advanced IT services and resourcing for UK academic research *Prof. David Wallom, Associate Director – Innovation of the Oxford e-Research Centre* Net zero challenges for the UKRI estates professionals *Dr. Susan Simon, Director of Capital and Estates and Chief Environmental Sustainability Officer at the Medical Research Council* **Discussion of keynote presentations**
14:40 – 15:30	**NetDRIVE community project presentations** SMART-DRI: Scenario Modelling and Assessment for Research Transition in Digital Research Infrastructure *Zeynep Tekler, (Assistant Professor) in Digital Construction Management* REACT: Recommendations for Enhancing Adoption of Carbon-footprinting Tool *Liz Ing-Simmons, Senior Research Software Engineer, KCL* **Discussion of project presentations and Breakout briefing**
15:30 – 15:50	Coffee Break (Poster Session)
15:50 – 17:00	**Breakout discussions:** Session 1 (How do we view Net Zero) **Report back and closing remarks**
17:30	Informal drinks at the college bar, St Anne's College, 56 Woodstock Rd, Oxford OX2 6HS (venue details below); followed by Event Dinner (also at St. Anne's) at 18:30 for registered attendees

Day 2: Getting Involved: Shaping the NetDRIVE Community and Future Actions

Thursday 23 April 2026

Time	Session
9:00 – 10:45	Review of NetDRIVE project delivery • NetDRIVE priorities • Project monitoring • Integration clusters • Sandpits for Call 3 • What can NetDRIVE do? Opportunities and capacity.
10:45 - 11:10	Coffee Break
11:10 - 12:30	**Breakout discussions**: Session 2a (Towards Flexibility in DRI Service Provision) and Session 2b (Empowering the Future Researchers see below) **Sessions 2a and 2b will run in parallel: delegates should choose their preferred topic.**
12:30 – 14:00	Lunch
14:00 – 14:15	Recap of meeting
14:15 – 15:30	**Breakout discussions**: Session 3 (Net Zero Scenarios)
15:30 – 16:00	Wrap-up and close

Breakout Sessions

"Attention is the rarest and purest form of generosity"[1]

The breakout sessions in our meeting serve two purposes: they provide an opportunity for meeting delegates to exchange and explore different views on the topics raised and means for us to collect ideas from the community. Please be generous with the attention that you give to others. We hope that everyone will not only have a chance to share their views but will also be able to develop greater understanding through discussion.

Session 1: How do we view Net Zero?

Consider the following framings of the net zero challenge:

1. **Tech optimist:** new technologies will take us close net zero on UN timelines.
2. **Restraint optimist: w**e need significant restraints on resource usage.
3. **Adaptation optimist:** if net zero is late, we will adapt to climate impacts.
4. **Culture change optimist:** we can make positive changes which benefit everyone.
5. **Pessimist:** we are heading for a disaster beyond our control.
6. **Fatalist:** humanity has run its course, and the world will go on.

As an individual, is there one of these framings that you identify with? There may be several. Pick one and try to identify the critical evidence that leads you to that choice and discuss this. We do not expect agreement or even that individuals will always stay in the same frame.

In your group, try to identify promising pathways and avenues for delivery. Do not try to resolve all differences, but record contrasting views.

[1] Simone Weil, in Gravity and Grace

Sessions 2a and 2b will run in parallel: delegates should choose their preferred topic

Session 2a: Towards Flexibility in DRI Service Provision

With the creation of AI Growth Zones, the UK Government has introduced regional variations in power pricing to encourage heavy users to move towards areas of abundant renewable supplies. One of the four National Compute Resources awarded in February, the UCL Charger machine, will be hosted in Scotland to exploit this opportunity. There are also growing financial rewards for anyone who can reduce demand during periods of high load on the national grid. This might involve parking some servers or reconfiguring running at low clock rate and handling memory-limited workloads.

How should the DRI approach the Government requests flexibility in power usage and associated financial incentives?

What would the implications be for users and operators of DRI services if capacity was reduced during periods of high carbon cost?

Suggested reading

- AI Growth Zones https://www.gov.uk/government/publications/delivering-ai-growth-zones/delivering-ai-growth-zones
- UCL announcement of Charger https://www.ucl.ac.uk/news/2026/feb/ucl-host-ps195m-supercomputing-facility
- Crown Commercial Service Demand Side Response leaflet https://assets.publishing.service.gov.uk/media/5a82355b40f0b6230269b6ae/4720-17_Demand_Side_Response.pdf

Session 2b: Empowering the Future (Researchers)

The early career staff who are likely to be most impacted by climate chaos are often under-represented in decision making, despite goodwill. Discuss the barriers, the steps that could be taken within NetDRIVE and recommendations for UKRI and DRI providers.

- Are young researchers better placed to understand the digital and societal transformations?
- Are they more likely to see opportunities for exploiting the benefits of these transformations to power a sustainability transformation?
- What practical steps can be taken in NetDRIVE, in academic institutions, in DRI facilities, and in UKRI?

Delegates who have progressed beyond early career (e.g. by taking responsibility for managing or supervising staff) may attend this breakout but should defer to early career staff and keep any contributions short and factual.

Suggested reading

- NCEAS, 2019: To Achieve a Sustainable Future, We Need to Include Early Career Professionals in Global Decision-Making (commentary)
- Lim et al., 2017: Early-career experts essential for planetary sustainability. https://doi.org/10.1016/j.cosust.2018.02.004
- Field and Barraclough, 2025: Applying the 7P Framework to Youth–Adult Partnerships in Climate Organizing Spaces: “If We Are Going to Be the Ones Living with Climate Change, We Should Have a Say”. https://doi.org/10.3390/youth5030066

NB: The 7Ps are purpose, power relations, perspectives, position, protection, process, and place.

Session 3: Net Zero Scenarios

For many decisions which aim to deliver benefits over longer timescales, we need to have clarity about the scenarios that are considered likely. We cannot predict how the carbon costs of power and equipment will change, but the scenario approach supports planning by enabling clarity and consistency in the assumptions that people make about future conditions. For instance, scenarios might be defined in terms of positive and negative developments of four key external factors: the decarbonization of the national power supply, decarbonization of the IT supply chain, availability of credible offsetting options, and effective, non-disruptive approaches to constraining user demand.

- What are the scenarios that we should consider?
- What are the positive pathways and the significant risks?
- What actions look good, perhaps for different reasons, in multiple scenarios?

Suggested reading

- Anthropogenic Greenhouse Gas Removals from the Atmosphere, Implications for Sustainable Research Computing. NetDRIVE discussion document. https://eng.ox.ac.uk/media/pgjljpru/offsetting-an-essay.pdf

Online

Video call link: the link will be sent to registered delegates before the meeting.

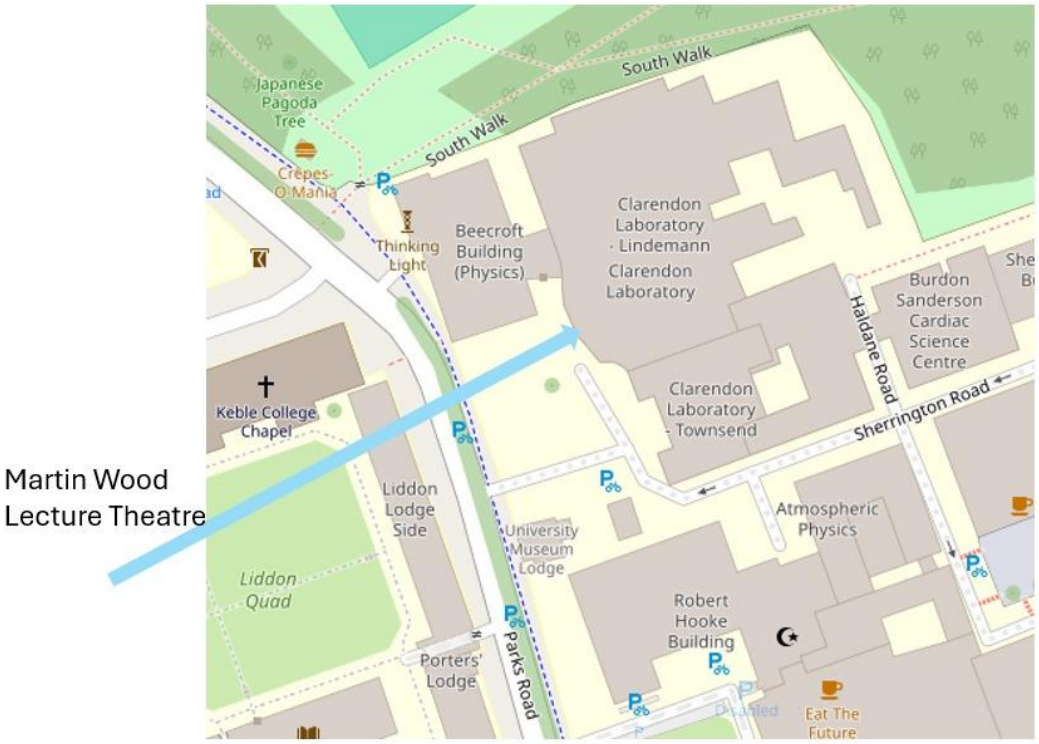
Additional Documents

Summary of NetDRIVE Community Projects.

Anthropogenic Greenhouse Gas Removals from the Atmosphere, Implications for Sustainable Research Computing. NetDRIVE discussion document.

Venue

The plenary sessions of the meeting will be held at the Martin Wood Lecture Theatre, Department of Physics, Parks Road, Oxford, OX1 3PU, and reception will be in the foyer in the entrance area.

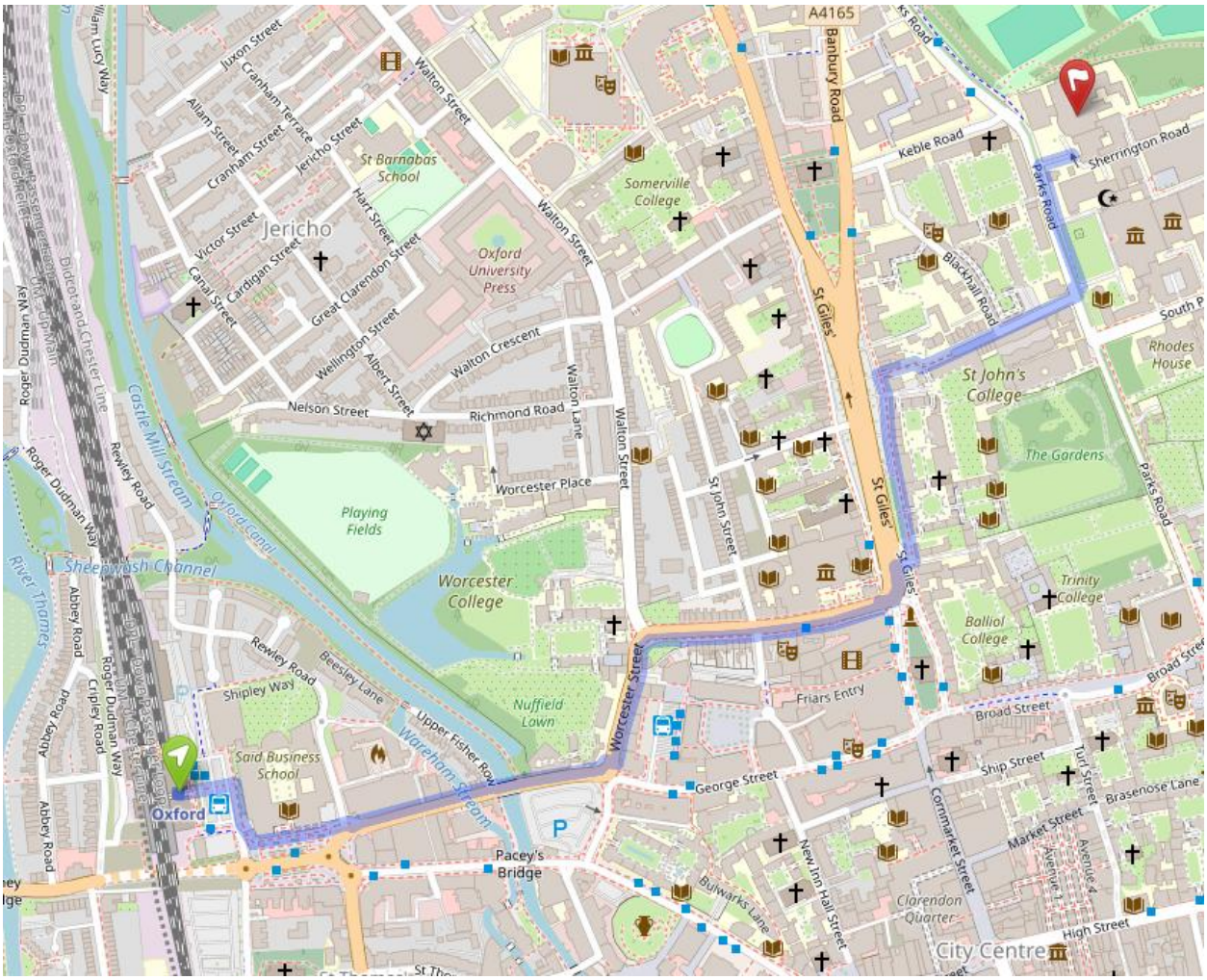


Directions

The Martin Wood Lecture Theatre is in the Clarendon Laboratory, between the city centre and the University Parks.

- Walking from Oxford station: 1 mile
- Bus 14 from Oxford station to Keble Road stop, and 0.2 miles walk from there.
- Park and Ride (Redbridge in the south or Pear Tree in the north) and bus to 300 Oxford, Radcliffe Observatory Quarter on Woodstock Road, and 0.3 mile walk from there.

For other options see Open Street Map or equivalent: https://osm.org/go/eutDx2f8



Rooms for Breakout Sessions

Room	Capacity	Wednesday 22 April	Thursday 23 April
Martin Wood (Lecture Theatre)	230	08:30–17:00	08:30–17:00
Audrey Wood (Breakout Room)	45	15:00–17:00	10:30–13:00
Simpkins Lee (Breakout Room)	60	15:00–17:00	10:30–12:30
MW Foyer Ground Floor (Catering)	50	08:30–17:00	08:30–17:00
MW Foyer First Floor (Catering)	50	08:30–17:00	08:30–17:00
Mendelssohn Room	10	08:30–17:00	08:30–16:00

Martin Wood Lecture Theatre

The Martin Wood Lecture Theatre has its own dedicated entrance. There is ramped and stepped access to a secure powered door. The door is opened by swipe card access - the swipe card reader is 127 cm high. The door has a clear width of 81 cm.

Mendelssohn Room

This is on the ground floor. There is step-free access to the room. There are double doors with each door leaf having a clear width of 61 cm. However, both door leaves can be held open to give a clear width of 122 cm. Furniture is not fixed and can be rearranged if needed.

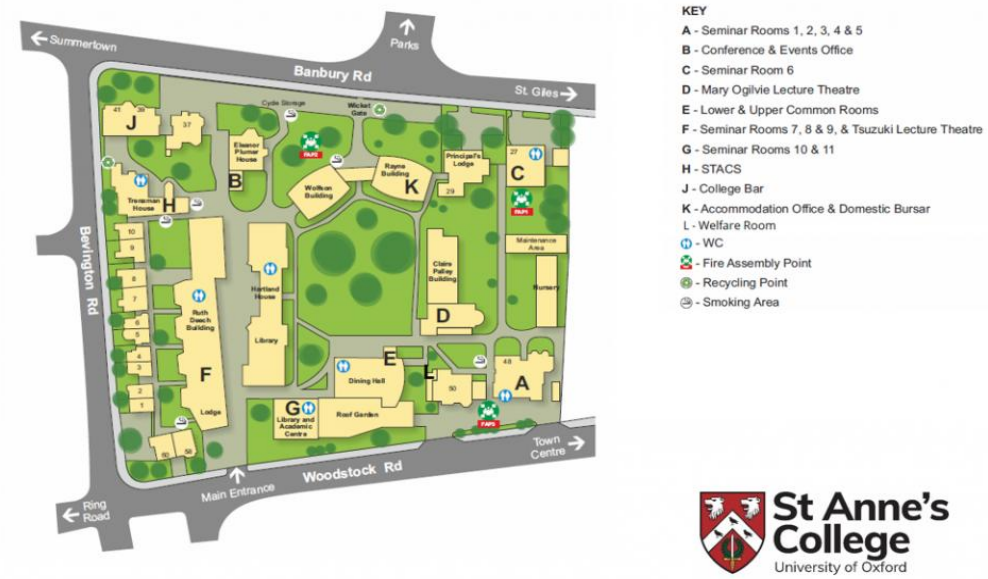
Accessibility

https://www.accessguide.ox.ac.uk/clarendon-laboratory

The lecture theatre is accessible via a ramp or via steps. There are accessible toilets near the lecture theatre.

Dinner Venue

St Anne's College, 56 Woodstock Rd, Oxford OX2 6HS. Enter via the Main Entrance on Woodstock Road, where you will find the porter's lodge/ reception. There are drinks in the college bar, then dinner will take place in the Ruth Deech building.



St Anne's College
University of Oxford