



<https://uknetdrive.org/>

Network for Sustainable Digital Research Infrastructure - Vision and Expertise

CIUK Discussion December 2025

Speaker: Dr Alex Owen - NetDRIVE Champion Queen Mary University of London

Ambition



Confidence in our pathway to sustainability

Immediate and tangible progress towards net zero

National and international thought leadership

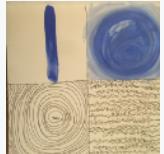
Key Facts

- Grant: £3,959,793 (FEC, without indexation)
- January 2025 to March 2028
- Core team at Oxford:
Lead by Dr Martin Juckes and Prof Sarah Sparrow

Theory of Change



My NetZero History



NetZero DRI Scoping Project

<https://doi.org/10.5281/zenodo.8199984>

Measuring Data
Centre Carbon
Costs



Audit of Carbon Costs

CHEP 2023

<https://doi.org/10.5281/zenodo.7692451>

Allocating
Carbon Costs to
Payloads



CHEP 2024

<https://doi.org/10.5281/zenodo.10966001>

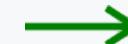
Allocating GPU Carbon Costs

Lay in foundations
(identify long lead times)



policy
processes
technology
systems

Identifying relevant,
equitable, quantifiable
and practical metrics



federated carbon
accounting and reporting
system

Add
Value



Group
Synthesise
Prioritise
Challenge?

Network for Sustainable Transformation



Champion!

Activities

Workshops

February - Queen Mary UoL
Priorities and Ethics of Research
Computing Investments
<https://doi.org/10.5281/zenodo.14999697>

June - University of Oxford
NetDRIVE Workshop
<https://doi.org/10.5281/zenodo.17160867>

September - Durham University
NetDRIVE Community Meeting

October - Birmingham
Early Career Sandpit

Working Groups



Short Format
Training Material



Supply Chain
Environmental
Sustainability Clauses



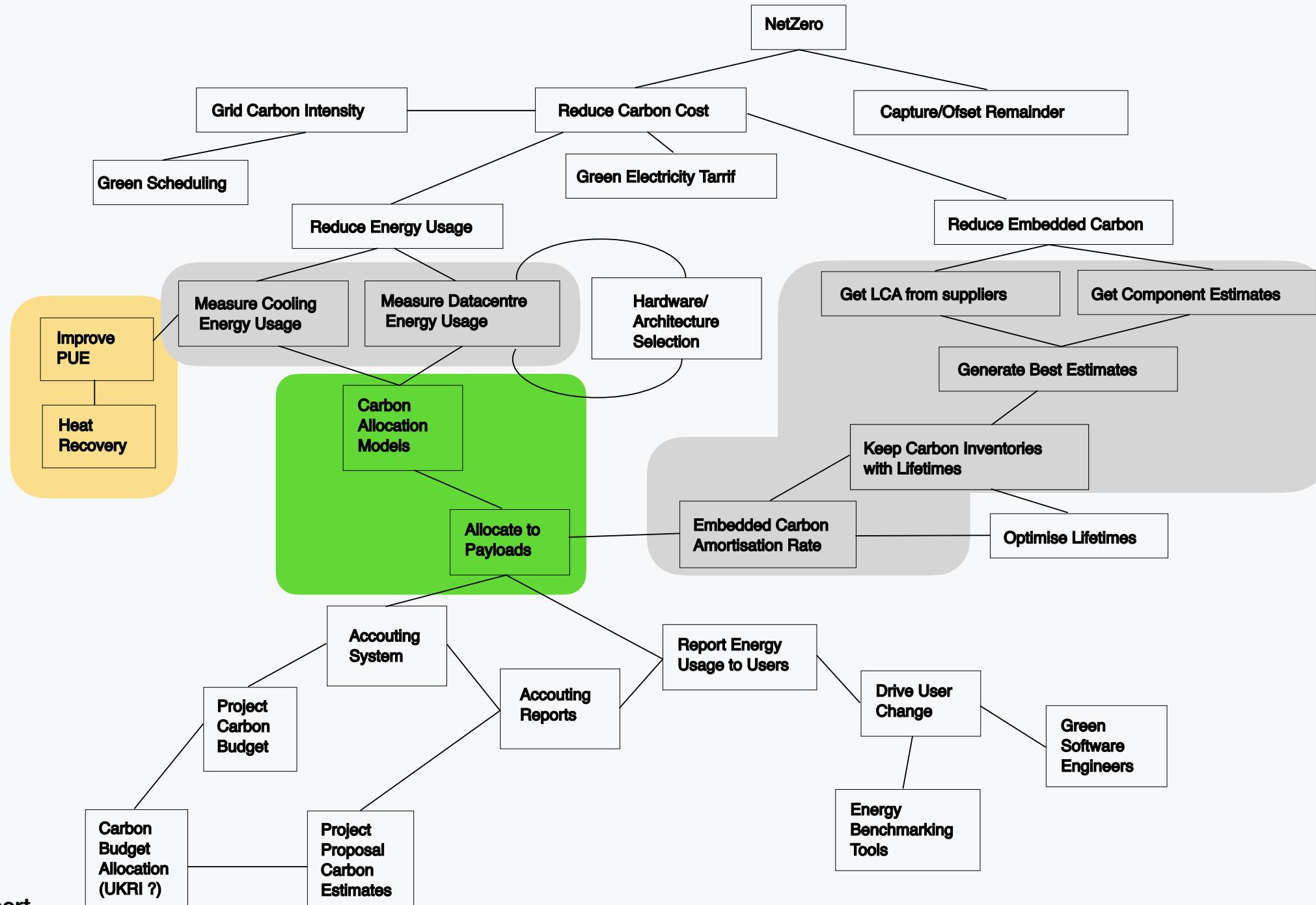
Metrics

Community Projects

1. NetDRIVE DRI User Summer School
2. ISPACE: Improving Sustainable Performance and Accelerated Computing Efficiency
3. NetDRIVE Guide to Best Practices for Efficient and Sustainable Usage of Computing Infrastructures
4. Dash4Action: Facility Action Plans in Pursuit of a Sustainable UKRI DRI
5. A community hackathon to enable green scheduling
6. Pathways to Effective Carbon Reductions by Use of Green Scheduling
7. REACT: Recommendations for Enhancing Adoption of Carbon-footprinting Tools
8. Measuring and Effectively Using Emissions Data Across DRI: A Dynamic Training Resource for Managers, Developers, Facilitators, Researchers and Users
9. Digital Emissions Integration for Climate Action Planning (DEICAP) - Modelling the Unseen: Integrating Digital Carbon into Real-World University Decisions
10. SMART-DRI: Scenario Modelling and Assessment for Research Transition in Digital Research Infrastructure
11. Unified Multi-Facility Resources Monitoring Dashboard for Sustainable UK Digital Research Infrastructure
12. Sustainable Training Initiative for NetDRIVE (SusTrainN)
13. Data sufficiency: A case study of soil data curation, storage, and usage at UKCEH.

NetZero The Big Picture

A framework
for discussion





Get Involved

NetDRIVE Community Meeting

22 & 23 April 2026 - University of Oxford

Creating a New Reality:
A Sustainable Digital Transformation

Save the date!

Invited speakers

- Nuclear and Hydrogen Tech for NetZero
- Trust in carbon removal contracts

Topics

- Practical approaches to balancing residual GHG
- The shape of the decarbonised UK power market
- The role of biofuels and biosphere carbon sequestration



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Working Groups

Have you got expertise to contribute to a working group?

Volunteer by contacting:

netdriveoxford@gmail.com