Project: ARINZRIT

Learning from the Big Picture: Applying Responsible Innovation to the Net Zero Research Infrastructure transformation

Abstract

Creating a net zero digital research infrastructure (DRI) requires an understanding of the wider social and organisational factors which drive demand for it, not just of the technical factors. By understanding the broader landscape of policy, practice and engagement with DRI, this project seeks to 'map the landscape' of how policies and practices interplay and affect growth in digital research infrastructure. It will provide key evidence at a 'policy & cultural' level and identify risks and opportunities to start answering critical questions toward net zero.

The project will identify the ways in which socio-technical forces shape, and are shaped by, theresearch infrastructures and their environmental impacts. It will suggest alternative ways in which these factors may shape the evolution of the infrastructures in the future, in line or exceeding expectations for net zero. Opportunities for impact reduction through intervention points in this system, how they might reduce infrastructure demand, and risks of potential unintended consequences from net zero initiatives will also be identified.

Institutions and representatives for the project

Lancaster University - Adrian Friday

University of Bristol - Chris Preist

Science and Technology Facilities Council - Simon Lambert

Edinburgh University – Adrian Jackson

Funding information

This project has been awarded a total of $\pm 132,500.00$ by the UKRI Net Zero DRI Scoping Project (NERC project <u>NE/W007134/1</u>). This funding is split between the institutions listed above.

Additional information

The UKRI Net Zero DRI Scoping Project will produce clear evidence and recommendations for a roadmap for the UKRI and their community to deliver carbon neutral DRI by 2040 or sooner.

The ARINZRIT sub-project was selected for funding via a sandpit event in May 2022. The proposals from teams were assessed on three factors; their excellence, potential to produce conclusive evidence and clarity of planning.

To read more about the UKRI Net Zero DRI Scoping Project visit our website.