

Project: Value

‘Value’ and Net Zero Decision-Making

Abstract

This project will develop a methodology to aid net zero decision making for UKRI in relation to Digital Research Infrastructure (DRI). This ‘net zero decision making’ is made up of:

- Comparison: the carbon emissions of a task vs. the ‘value’ it generates
- Action: assigning which tasks get to emit carbon via the use of UKRI electricity and infrastructure

‘Task’ here can be any use of DRI, whether it’s for computation or storage etc. Any use of infrastructure or electricity will have a carbon cost associated with it and will therefore affect the pathway to net zero.

The project will review how UKRI currently make decisions around DRI use (if, when and how a task gets to use DRI), undertake a literature review of how emissions-vs-value decisions have been managed in similar infrastructure environments, and provide specific recommendations to UKRI of a NetZero decision making methodology.

Adopting the methodology outlined above, not only helps with keeping UKRI accountable to the net zero pathway, but also starts a mindset shift which brings the real carbon impact of DRI activities to the front of all UKRI decision making.

Institutions and representatives for this project

Heriot-Watt University - Susan Krumdeick

Funding information

This project has been awarded a total of £12,247.33 by the UKRI Net Zero DRI Scoping Project (NERC project [NE/W007134/1](#)).

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 Value and Net Zero Decision-Making 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](#).