

Contribution ID: 60

Type: 5 minute 'flash' talk

Life Cycle Assessment of ISIS-II: Challenges and Pathways for Sustainable Accelerator Design

Life Cycle Assessments (LCAs) provide key insights into the broad range of environmental impacts associated with a product or system. By providing both a holistic overview and a detailed breakdown of these impacts, LCAs help identify the most effective opportunities for sustainability improvements. As the demand for sustainable practices grows, LCAs will play an increasingly important role in evaluating the environmental footprint of complex scientific infrastructure, including particle accelerator facilities.

Practically, what do we need as a field to effectively enable these assessments?

In this talk, I will present the LCA conducted for the ISIS-II Neutron and Muon Source. I will outline the methodological challenges encountered, share key findings, and propose practical solutions to support the broader adoption of LCAs in the design, operation and decommissioning of accelerator facilities.

Author: Dr WAKELING, Hannah (John Adams Institute, University of Oxford)Presenter: Dr WAKELING, Hannah (John Adams Institute, University of Oxford)

Session Classification: Flash Talks