Engineering and Innovation Research Studentship 2023/2024

Project title:	**Risk governance for decommissioning of nuclear sites**
Discipline	Social studies of risk, safety science, energy studies
Key words:	Nuclear power; risk governance; stakeholder engagement.
Supervisory team:	Leslie Mabon, Gareth Neighbour, Other (TBA)
URL for lead supervisor's OU profile	https://www.open.ac.uk/research/people/lm32658

Project Highlights:
- Comparative research into lessons learned and policy challenges for management and decommissioning of ageing nuclear plants;
- Understand best practices in risk governance, stakeholder engagement and consensus-building.

Overview:

Although the contribution of nuclear power to global net-zero goals remains contested, it is true that the existing fleet of nuclear power stations globally will need to be managed into longer life (PLEX) and eventually decommissioned. The controversy over the release of treated water and storage of waste from the Fukushima Dai'ichi has brought into sharp focus the importance of clear plans for long-term governance of environmental radionuclide release, particularly low energy and short lived, and for early and full engagement of stakeholders.

The aim of this project is therefore to understand the risk governance and policy landscape for the management and decommissioning of ageing nuclear power plants, particularly those in coastal settings and to contextualise to the geographical setting. The project will focus on understanding lessons learned – both positive and negative – from previous and ongoing decommissioning controversies such as Fukushima Dai'ichi and Sellafield, and identifying different perspectives and areas of uncertainty in policy and risk governance for management of radioactive waste within decommissioning that exist at present.

Methodology:
The successful applicant will have significant flexibility to develop the project and its methodology in line with their own research design and expertise.

Potential methods could, for example, include: expert elicitation processes such as Delphi, Q-Methodology or Analytic Hierarchy Process; more qualitative and/or deliberative process such as discussion groups or interviews; or structured policy analysis.

References & Further reading:

1. Mabon L and Kawabe M (2022) Opinion: Bring Voices from the Coast into the Fukushima Treated Water Debate *Proceedings of the National Academy of Sciences* DOI: 10.1007/s11625-022-01196-x 2
2. Renn, O (2008) *Risk Governance Coping with Uncertainty in a Complex World* Routledge: London.

Further details:

The successful candidate will have a Masters-level degree in a subject area appropriate to their chosen research design and methodology, e.g engineering, political science, social sciences. The successful applicant will also have a good working knowledge of energy and environmental policy as it relates to decommissioning of nuclear power plants, or at least an understanding of the key issues associated with decommissioning and long-term management. Japanese language ability – or at least an ability to engage with and build on ongoing research being conducted in Fukushima within the school – is welcomed but not essential.

Applications should include:

- A 1000 word cover letter outlining why the project is of interest to you and how your skills match those required

- an academic CV containing contact details of three academic references
- an Open University application form, downloadable from: http://www.open.ac.uk/postgraduate/research-degrees/how-to-apply/mphil-and-phd-application-process
- IELTS test scores where English is an additional language

Applications should be sent to
STEM-EI-PhD@open.ac.uk <mark>**by 15.02.2023**</mark>