

# Engaging with intergenerational justice in radioactive waste management

Prof Matthew Cotton

Teesside University

School of Social Sciences, Humanities and Law

Nuclear Waste Services Research Support Office  
Social Science Topic Day  
31<sup>st</sup> March 2022

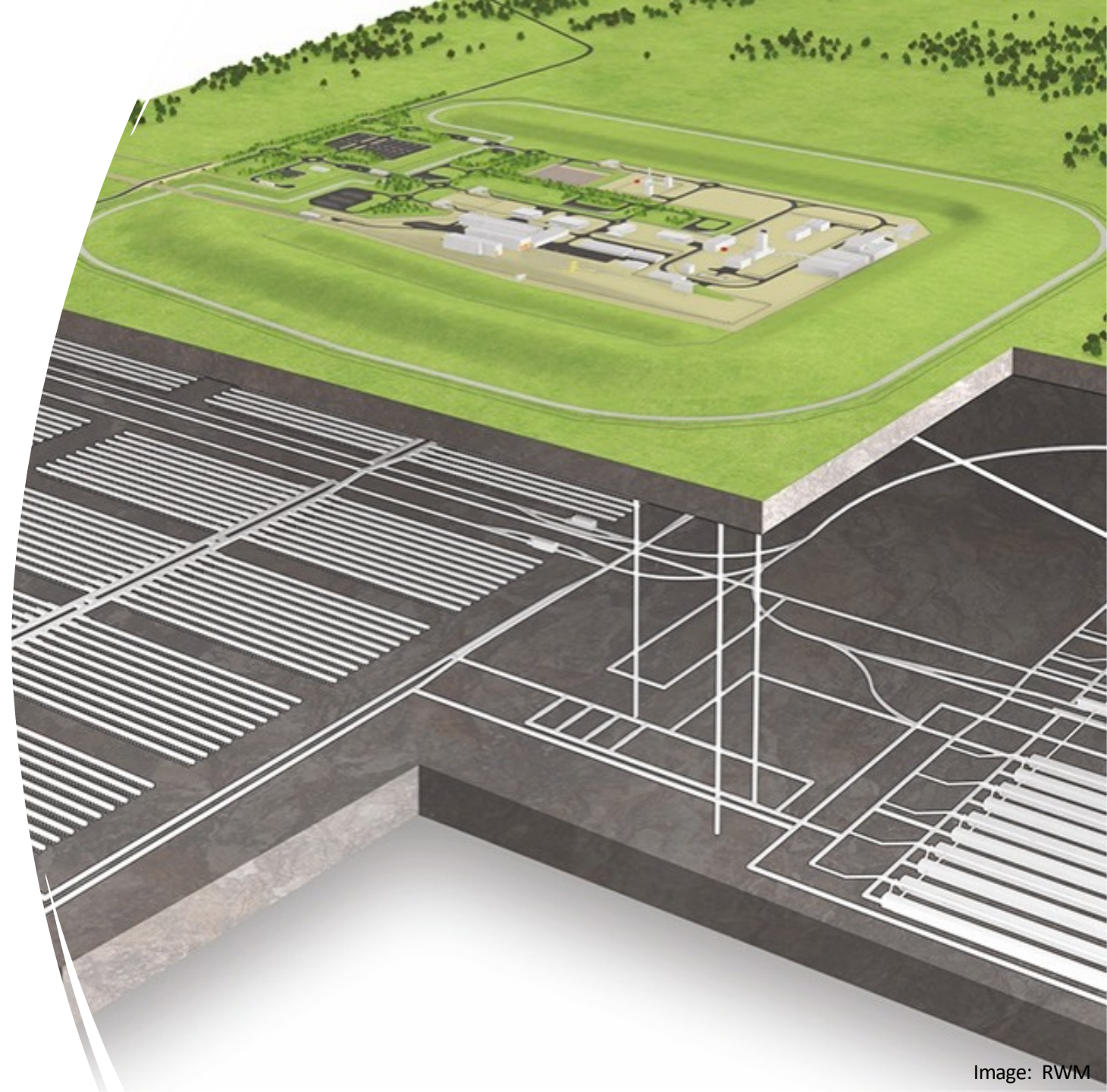
University of Manchester



# Radioactive waste and future generations

---

- The geological disposal facility concept requires thinking across 'deep time' – longer than any previous human civilization
- Communication of risk messaging into the future
- Stewardship of wastes with host communities
- Connection between contemporary (and historic benefits) and current and future harms
- Balancing current and future needs under conditions of scarcity



# Intergenerational equity

- Non-reciprocity
- The 'non-identity' problem
- Post-Brundtland Sustainable Development
- Rights, or welfare
- Distributional justice
- Discounting
- Temporal horizons – familial and kinship, ancestral, or deep time



# Radioactive waste policy

- Working With Communities policy framework
- Designed to ensure no harmful quantities of radioactivity ever reach the surface environment
- National geological screening exercise undertaken by Radioactive Waste Management (RWM)
- Updated planning and regulatory matters for implementing geological disposal
- Policy and process for working with communities in order to find a location to develop a GDF
  - 1. Initial discussions and forming a Working Group**
  - 2. Community Partnership**
  - 3. Community Partnership Agreement**
  - 4. Right of Withdrawal**
  - 5. Test of Public Support**

# Integrated empirical ethics

- Need for policy and planning focused *ethical tools*
- Provide social intelligence to (for example) local authority-led working groups, to NWS in the production of engagement materials, to aid community partnership working or decision-making following a test of public support.
- Future generational interests can sometimes remain 'voiceless' without some form of institutionalised proxy representation during participatory engagement processes
- Visualisation and imagination of future generational needs and interests



# The postdoctoral fellowship

## 1. **Systematic review**

- *Thematic synthesis analysis* of intergenerational justice literature (social policy, environmental management, economics, applied ethics)

## 2. **Visualising future generations**

- Using 'elicitation devices' including VR of GDF to imagine future generational interests.
- *Social representations* – the anchoring and objectification of future generations

## 3. **Backcasting radioactive waste management futures**

- Q-method, interviews, *comparative qualitative analysis*

## 4. **Synthesis, policy engagement and participatory tool development**

- An engagement toolkit (inc. handbook) for using the research in the Working With Communities framework



Any questions?

[m.cotton@tees.ac.uk](mailto:m.cotton@tees.ac.uk)