



## **Voluntarism, public engagement and the role of geoscience in radioactive waste management policy-making**

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In the UK, as elsewhere in Europe, there has been a move away from previous 'technocratic' approaches to radioactive waste management (RWM). Policy-makers have recognised that for any RWM programme to succeed, sustained engagement with stakeholders and the public is necessary, and any geological repository must be constructed and operated with the willing support of the community which hosts it. This has opened up RWM policy-making and implementation to a wider range of (often contested) expert inputs, ranging across natural and social sciences, engineering and even ethics.

Geoscientists and other technical specialists have found themselves drawn into debates about how various types of expertise should be prioritised, and how they should be integrated with diverse public and stakeholder perspectives. They also have a vital role to play in communicating to the public the need for geological disposal of radioactive waste, and the various aspects of geoscience which will inform the process of implementing this, from identifying potential volunteer host communities, to finding a suitable site, developing the safety case, construction of a repository, emplacement of waste, closure and subsequent monitoring.

High-quality geoscience, effectively communicated, will be essential to building and maintaining public confidence throughout the many decades such projects will take. Failure to communicate effectively the relevant geoscience and its central role in the UK's radioactive waste management programme arguably contributed to West Cumbria's January 2013 decision to withdraw from the site selection process, and may discourage other communities from coming forward in future. Across countries needing to deal with their radioactive waste, this unique challenge gives an unprecedented urgency to finding ways to engage and communicate effectively with the public about geoscience.