

# RWM: Our Aim & Mission

16 September 2020



Radioactive Waste  
Management

Working together to protect the future

# Introduction



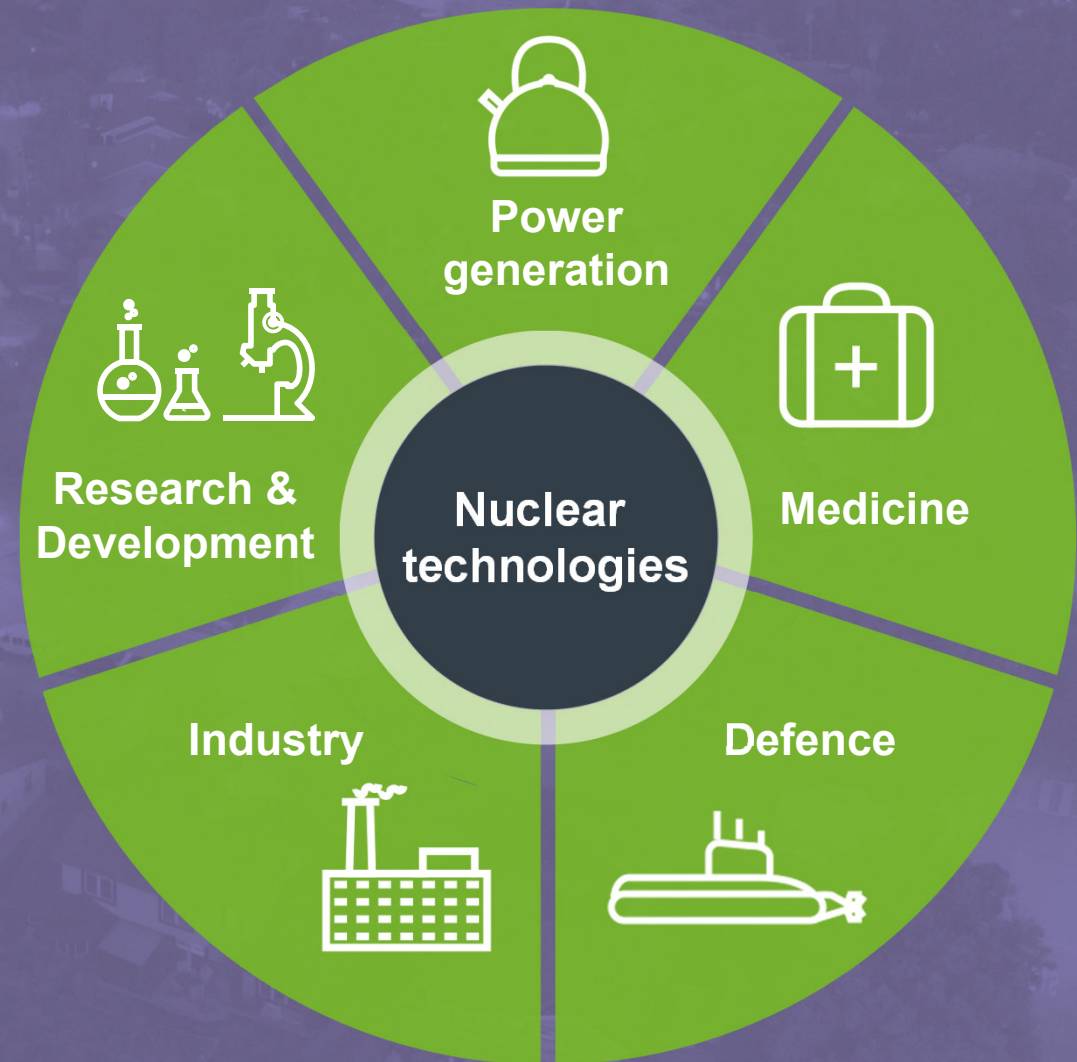
**Lucy  
Bailey**

Head of Research  
Support Office

- **Fellow of the Institute of Physics**
- **Over 25 years' experience in geological disposal**
- **International reputation**
- **Expert peer reviewer of international safety cases**
- **Leading roles in NEA, IAEA and EC projects**
- **Over 40 publications covering the safety case and other technical and societal aspects of geological disposal**
- **Excited to be leading the new RSO for RWM**

# Context

Nuclear technology has been part of our lives for more than 60 years, and the UK remains a world-leading nuclear enterprise.





of our existing radioactive waste is low-level and is already being safely disposed at specially licensed surface facilities around the UK.




The remaining waste needs a new permanent solution.



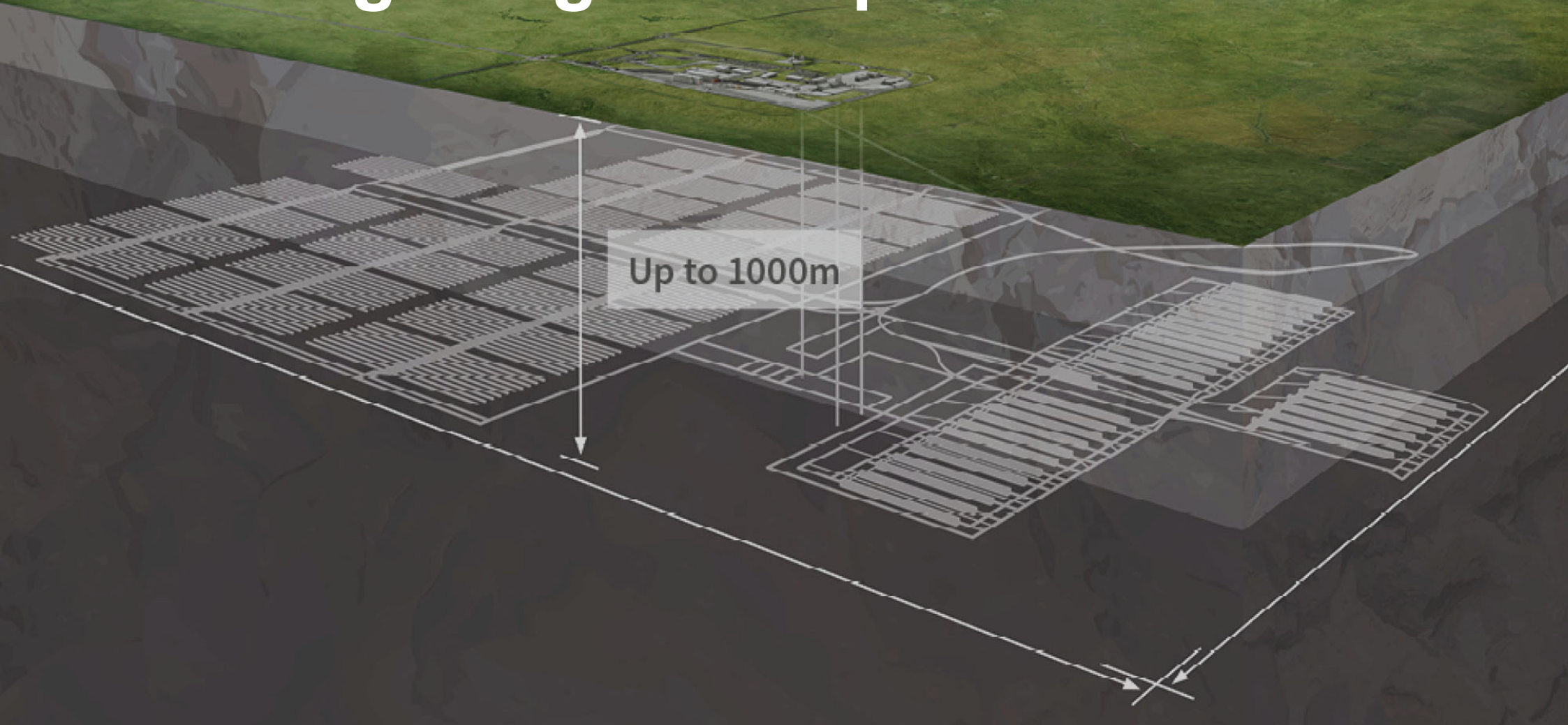
Higher Activity Waste is currently stored above ground at more than 20 sites around the UK.





After detailed consultation and considering evidence, an independent committee of experts (CoRWM) recommended that our Higher Activity Waste should be put into a Geological Disposal Facility.

# What is geological disposal?



# How does geological disposal work?



**Isolate**



**Contain**



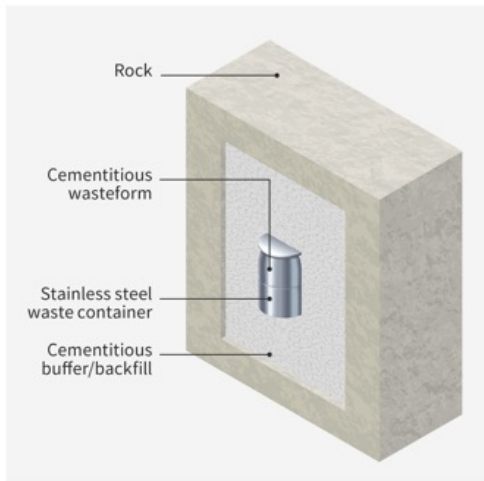
**Passive system**



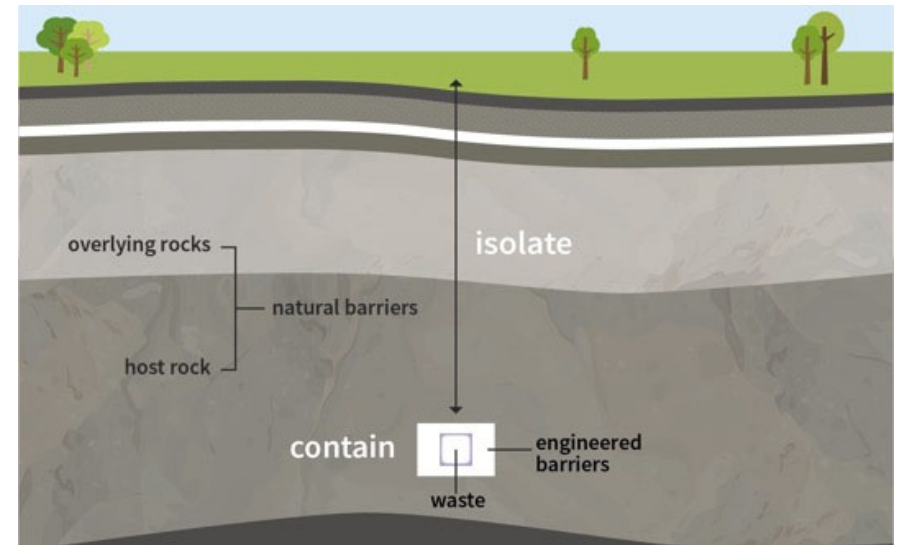
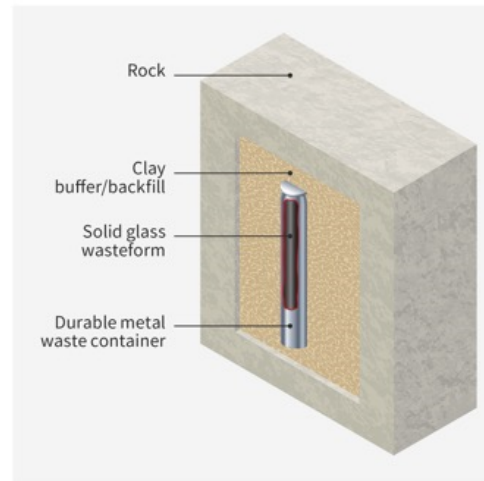
# The multi-barrier concept

A Geological Disposal Facility uses a combination of engineered and natural barriers that work together to isolate and contain radioactive waste.

Intermediate Level Waste



High Level Waste



Other countries that have chosen a Geological Disposal Facility for their radioactive waste include Sweden, Finland, Switzerland, France, Japan, USA and Canada.

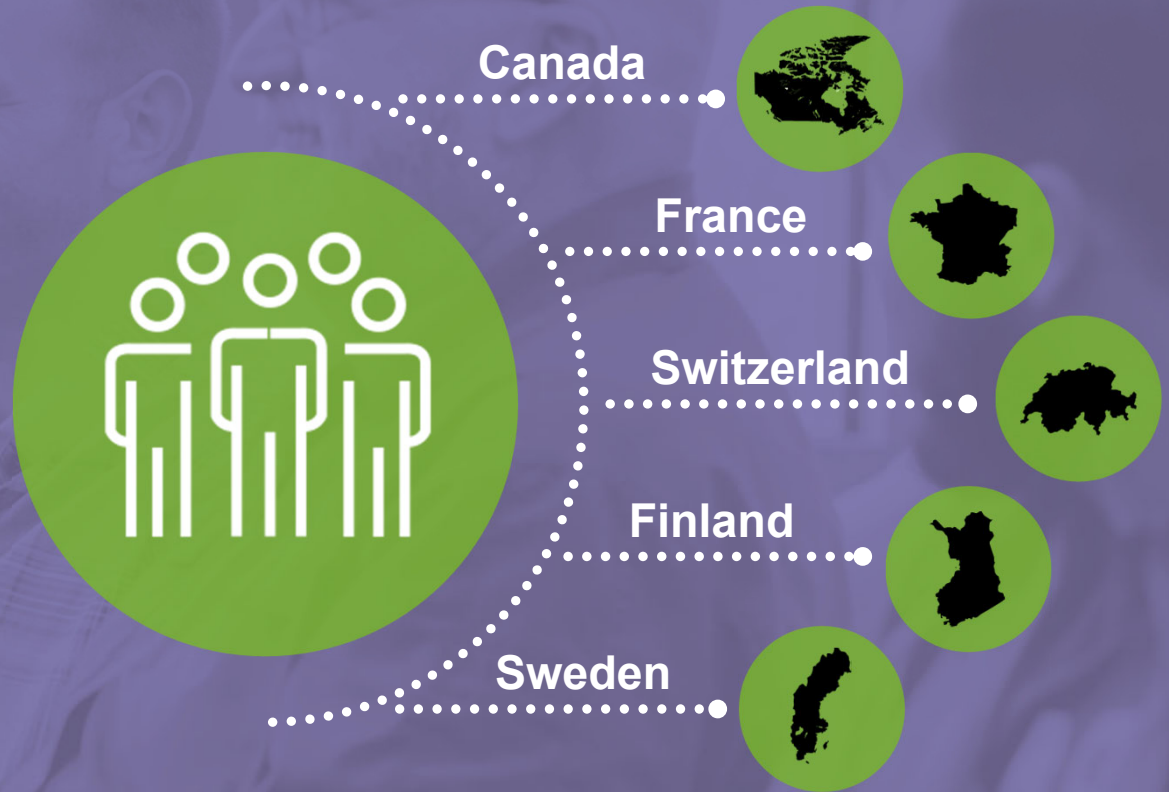
Countries who already have, or are developing, deep geological disposal (Jan '19)



Source: World Nuclear Association

Map showing locations in world where GDF being developed

International experience shows the importance of engaging with communities.



A group of people in a meeting, with a woman standing and presenting to a seated group.

# RWM's mission:

To build a GDF where there is a suitable site and a willing community.

Communities are at the heart of the siting process and no community will get a GDF without a demonstration of its willingness to host one.

Safety is also at the heart of all we do. We will not build a GDF unless we are confident of its safety.



# Safety is our absolute priority

The UK has world-class science and technology skills.

The GDF Programme requires significant expertise in geology, engineering, nuclear physics, chemistry, mathematics, social sciences and more.

We work closely with colleagues within the UK and across the globe to develop and use the best techniques relating to waste management and geological disposal.

# Summary

1

We've been using nuclear technology for over sixty years. Higher activity radioactive waste currently stored above ground at more than 20 sites across UK.

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2

Countries around the world have chosen deep geological disposal as a permanent solution, and an independent committee of experts has recommended that the UK does the same.

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3

Geological disposal uses a **multi-barrier approach** to provide isolation and containment of radioactive waste. It is a passive system, which means it requires no ongoing maintenance.

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4

International experience shows that it is possible to find communities willing to host a GDF.

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A GDF can be built at a suitable site with a willing community, supported by scientific and technical research to give confidence in its safety. This is RWM's mission. This is why we have established the RSO.