



# International engagement update

Presentation to Steering Group, 14<sup>th</sup> June 2023

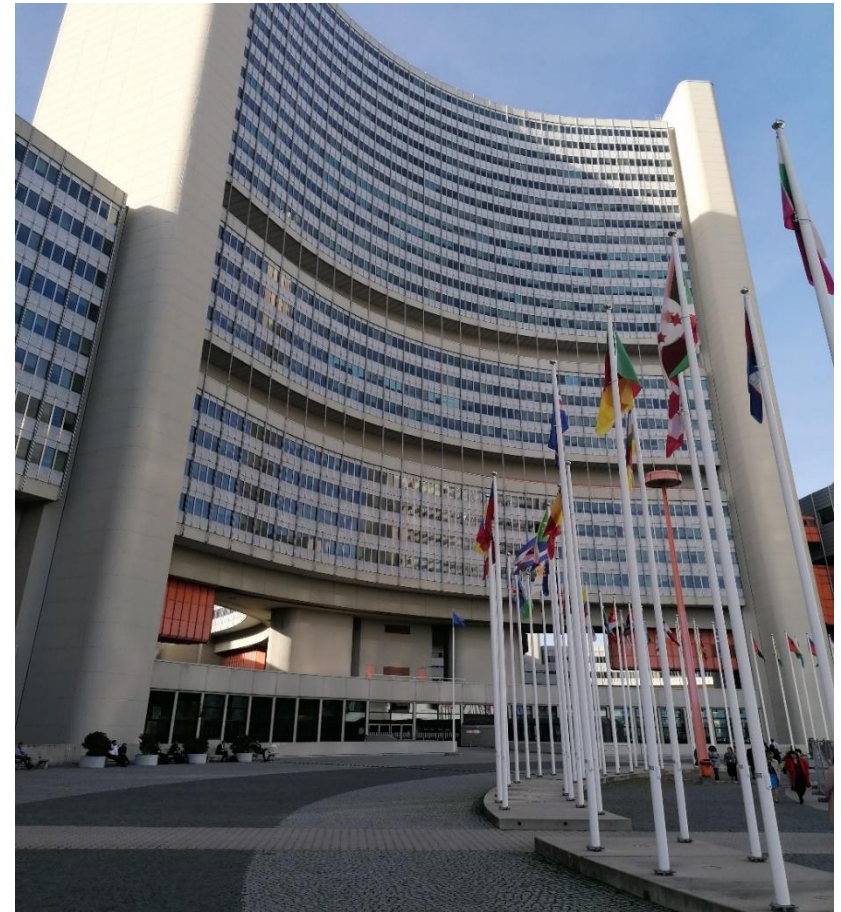
**Philip Matthews**  
Executive Director

Delivering the best outcomes  
for nuclear communities.



# Our international engagement

- **EURAD** – member of Civil Society Group – 5-year programme on geological disposal
- **GMF Europe** – Joined 2017. Signed MoU with ECA (United States) and CANHC (Canada) in 2022
- Other engagement with **IAEA** and **NEA**
- Most international engagement funded by external agencies

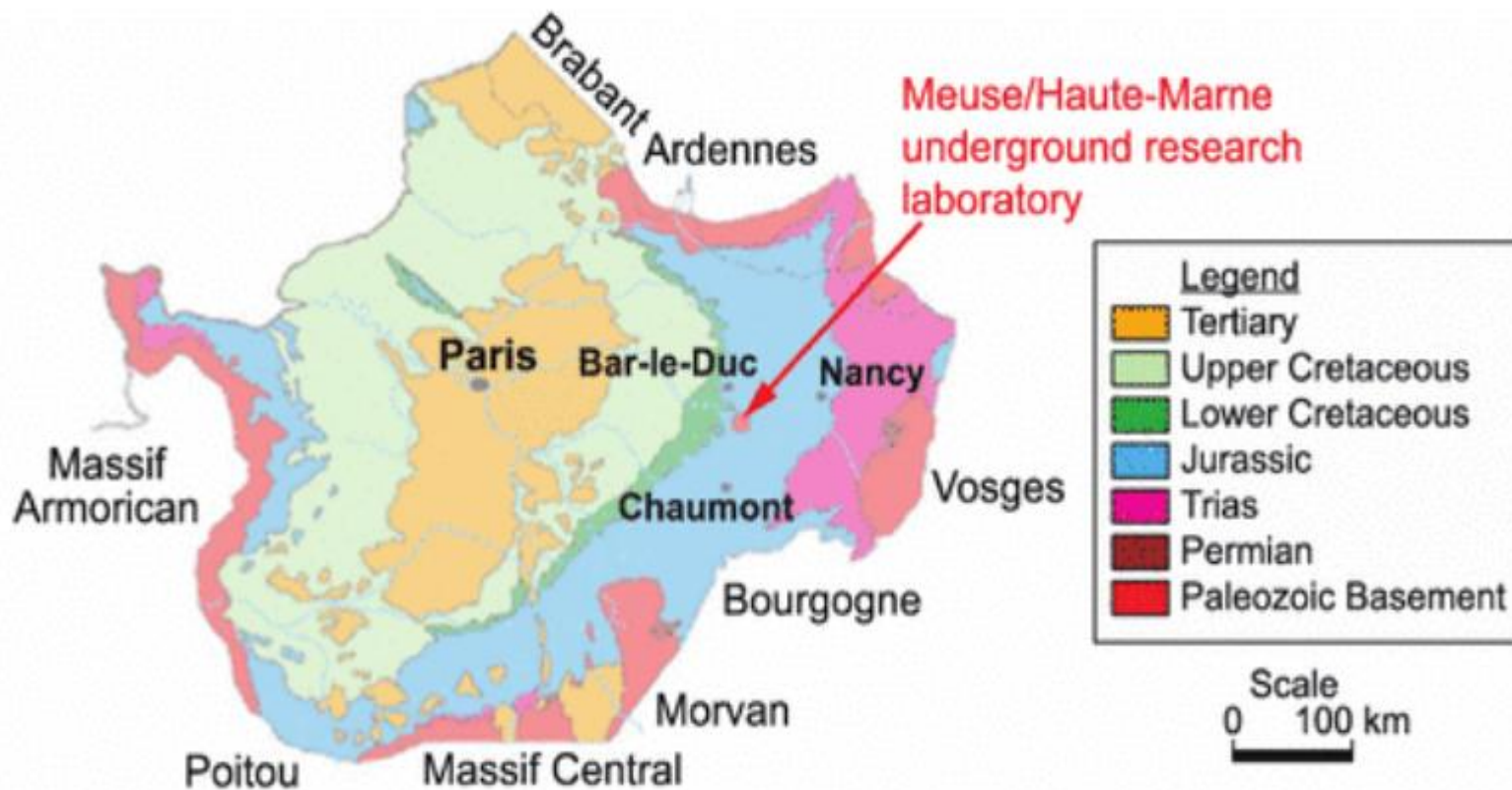


# Bure: history and purpose

- In 1980s, Andra tasked with search for an Underground Rock Laboratory and GDF site.
- 1991 law – identified a number of areas based on geology – granite and clay
- Bure site selected and construction begun in 2000
- Very rural area with small population – no consent process but community benefits
- Significant protests
- Now over 2km of tunnels and various tests on engineering and disposal – 500metres deep



# Bure: location and geology



# Bure: tunnels

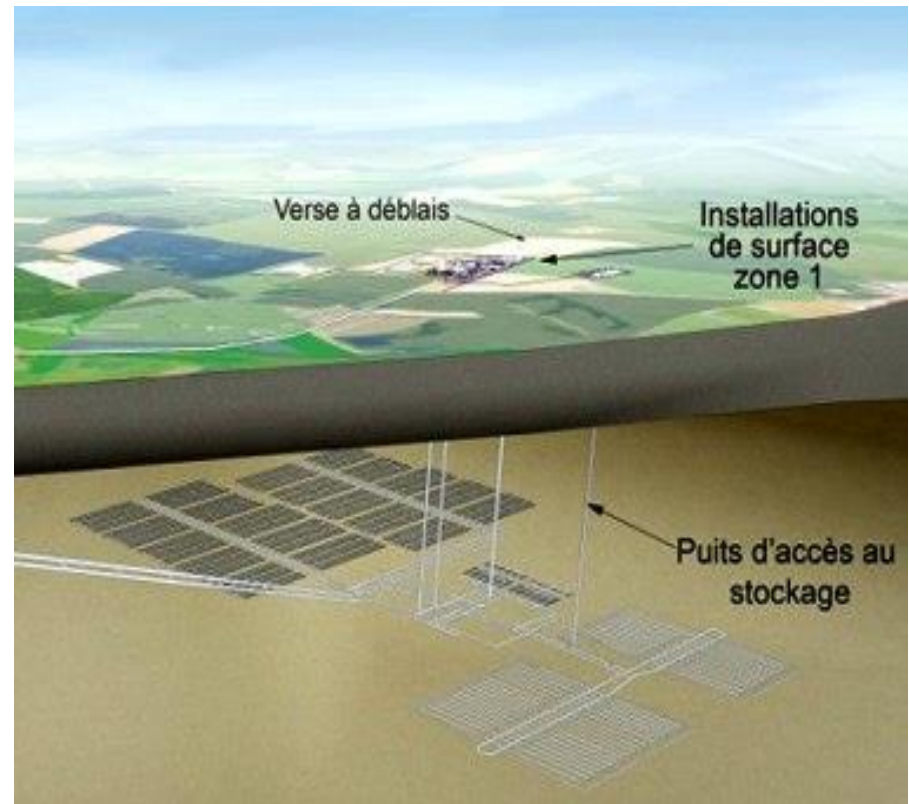


# Bure: Rock Laboratory



# Bure: what next?

- Tests will continue until 2030s
- If go ahead given then French GDF (Cigeo) will be constructed a few kms away
- First waste emplaced by 2040
- Footprint – 5.5km<sup>2</sup> above ground and 15km<sup>2</sup> below ground
- Designed for retrieval up to sealing around 2150
- HLW and Long Lived ILW Waste from reprocessing
- Estimated cost 25Bn Euros



# Paducah, Kentucky



# Paducah - History

- Former munitions plant
- Gaseous Diffusion Plant (GDP) – linked to Oak Ridge
- Produced enriched Uranium – for bomb programme and then civil nuclear power
- Operated 1952 to 2013
- Big site – almost 1,500Ha
- Onsite power generation – 3GW
- Employed 1,200 people when operational



# Paducah – clean up

- In USA, the Department of Energy is responsible
- 1,400 staff now on site
- 25 out of 500 structures demolished
- Groundwater contamination main issue – 10 billion gallons
- Site clean-up: Target date of 2065. Cost \$17 Billion
- Various lawsuits raised alleging impacts of radioactivity – State, workers, others.



# Paducah – engagement

- **Citizens Advisory Board** – *'informed, independent advice to DOE regarding environmental restoration, waste management, future land use, risk assessment, clean-up technologies'*
- **Educational Outreach** – big focus on STEM. Site contractors expected to engage local schools
- **Site Future Use** – end state and next use – interest in new nuclear
- **Paducah Area Community Reuse Organisation**
- Site visit disappointing – not allowed off bus



# gmf

GROUP OF  
EUROPEAN  
MUNICIPALITIES  
WITH NUCLEAR  
FACILITIES

 **nuleaf**  
nuclear legacy  
advisory forum





# Thank you

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