



# UK US Partnering Across the Pond

Session 110

March 2015 , Phoenix, AZ

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Waste Management and Decommissioning

# Common Challenges and Opportunities

- Legacy wastes, tanks, pools, D&D ...
- Ageing infrastructure
- Disposal
- Supply chain demographics, the skills pipeline etc.....



A problem shared is a problem halved ?

- Potentially a problem already solved elsewhere
- An opportunity to share knowledge and learn from experience
- An opportunity to collaborate to expedite a solution



## **Waste Management and Decommissioning**

- Underpinning Research
- Evolutionary R&D
- Revolutionary – Step/Game Changing Technology

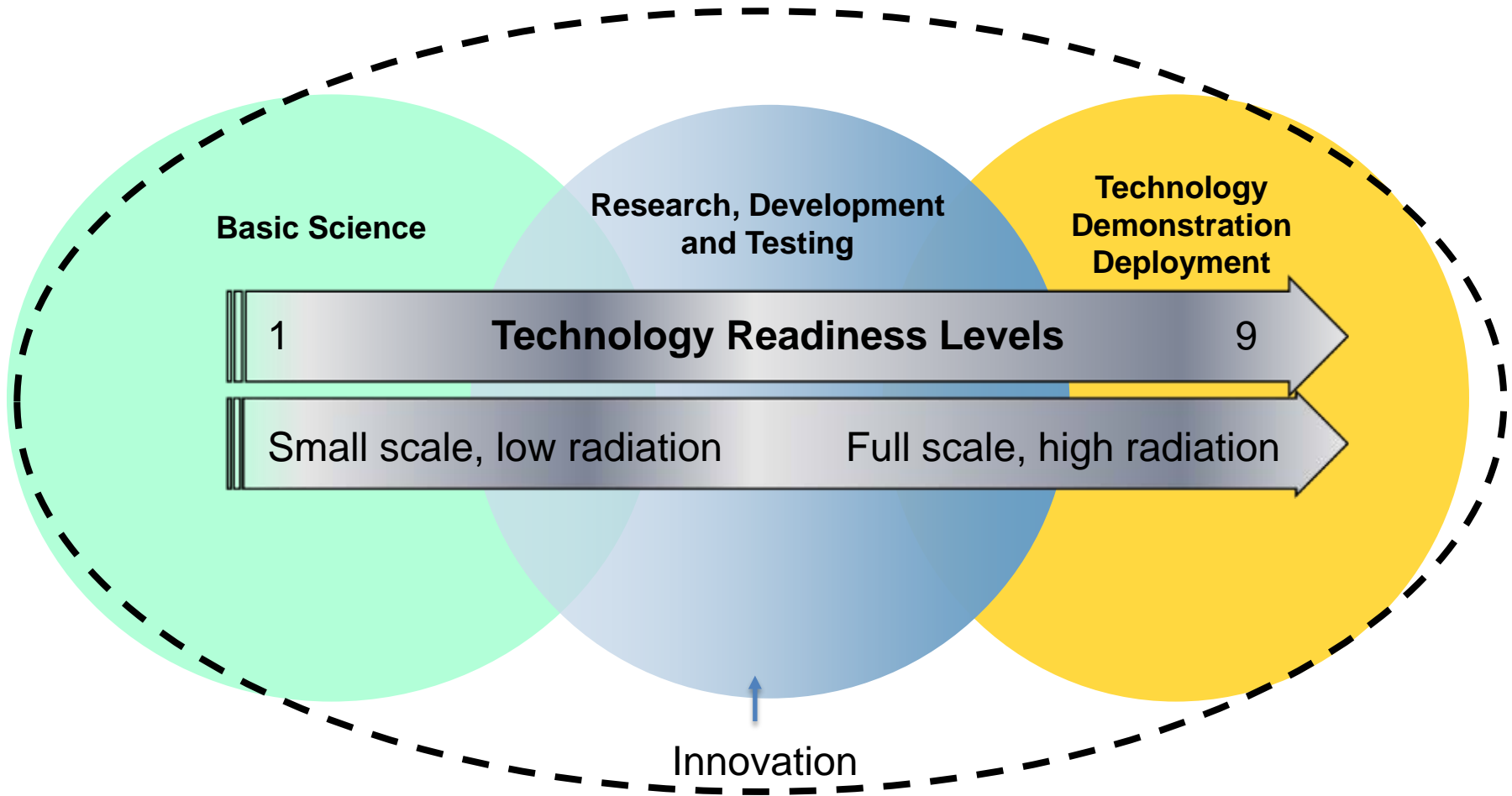
## **Environmental Management**

- Fundamental Research
- Incremental Technology
- High Impact Technology

To Deliver the Mission Safe - Faster - Cheaper

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# NNL R&D Portfolio Management



Working in partnership with end users and the supply chain  
Technology Demonstration Alliance



# NNL Technology Development and Demonstration

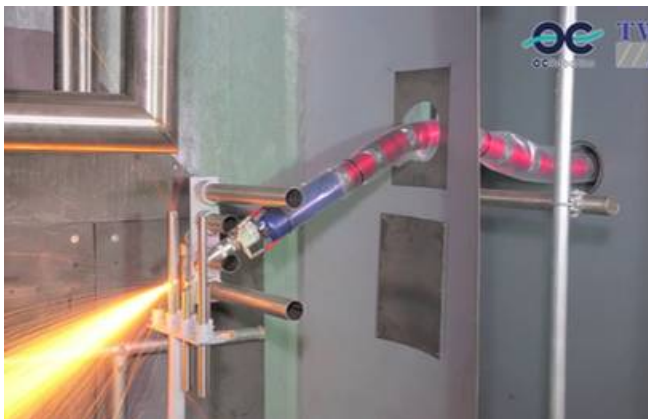
# Collaboration - Innovation



End users



Academia



Supply chain



International

- Understanding the US / UK context
- Identifying common challenges
- Sharing experience, e.g. tank waste
  - WTP materials, corrosion, erosion, fluidics and inspection
  - Peer review of technology plans
- Collaborative technology development
  - DOE International Programmes



# INL NNL Collaboration Fogging/Misting

Development of deployment systems for decontamination –  
contamination coating

- FX1 developed at INL
- Testing of delivery systems at NNL

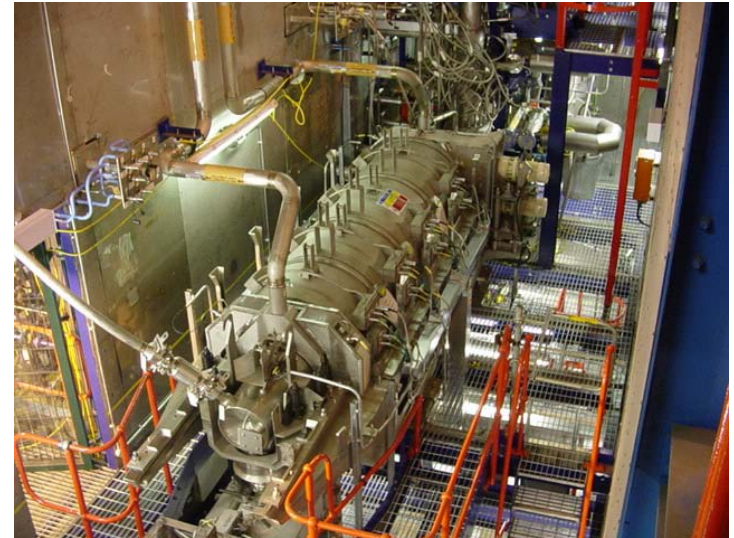


- Further development of FX2 at INL
- Further trials of deployment systems at NNL in 2015



# UK/US High Level Waste Glass Product Quality Validation

- NNL and SRNL have many years of experience in supporting vitrification of HLW
- National Lab – National Lab Collaboration established to consider:
  - Assessment of glass product performance
  - Control and optimisation of glass melting process
    - Tc behaviour
    - Full scale testing (benefits)
  - Qualification of the vitrified HLW product



- Many common challenges
- Ultimately the same mission goals
- Opportunity to learn from each others experience
- Move forward collaboratively to develop high impact technologies

