Managing Corrosion Under Insulation (CUI) using novel technologies

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Agenda

• Introduction to OGTC
• Overview of the challenges
• Inspection & sensor technologies
• Other Factors
The OGTC

We are all about technology innovation...

Inspire  Stimulate  Accelerate  Deliver

... working in partnership with industry.

£180 million of City Region Deal funding
Strong delivery

The story so far...

£18M+ of investment approved to develop and deploy new technology

9 offshore field trials of innovative technology

30 live projects to accelerate the adoption of innovative solutions

60+ members from major operators to SME technology providers

300+ technologies and projects reviewed for offshore trial or investment

100+ ideas generated through our ‘Call for Ideas’ process

Positive engagement with companies of all sizes
Current themes

- **Asset Integrity**: Eliminating the impact of asset integrity on uptime
- **Well Construction**: Reducing drilling costs by 50%
- **Small Pools**: Developing up to 3.4 billion barrels of oil and gas discoveries
- **Decommissioning**: Driving down the cost of decommissioning
- **Digital**: Transforming performance and unlocking hidden data

Identified by industry through the Technology Leadership Board
The CUI challenge

- £28 billion per annum
- 60% of pipework failures due to CUI
- 60% of pipework maintenance costs

Images courtesy of Inspectioneering
CUI management - key inputs

- Inspection
- Maintenance
- Online Monitoring
- Personnel
- RBI
Inspection technologies - existing

Guided Wave  Pulsed Eddy Current  Low Frequency Electromagnetic Techniques  Ultrasonics  Acoustic Emission

Effective partnering is critical to our success
Inspection technologies - emerging

Microwave Sensing  Acoustic Resonance  Terahertz Spectral Imaging  Ultrasonic Tomography

Significant challenges require transformative solutions
Sensor technologies

CorrosionRADAR  Sacrificial Wires  Electromagnetic Impedance Spectroscopy  Ultrasonic Sensors

Condition monitoring is central to asset integrity
Other factors

- Working Practices/Guidelines
- Competency & Human Factors
- Risk & Operating Models
- Maintenance & Repair Requirements
- Information & Data Management

Wide range of influencing factors
Point for discussion

What can the OGTC do to reduce the impact of CUI through the development of technology?
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