UK Technology Leadership Board – Update

ITF Technology Showcase – Mar 2016
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UK Technology Leadership Board – Background...

UK Technology Leadership Board... How did we get here?

- **PILOT Technology Work Group** formed in 2012
  - Enhance UKCS technology development & deployment
  - Develop a North Sea Technology Strategy
- **HMG Industrial Strategy** 1Q 2013 highlighted the need for increased technology focus...
- **Wood Review** Q1 2014: Includes a need for a consistent technology strategy that requires...
  - Leadership (Technology Leadership Board)
  - Focused Delivery (Technology Themes)
  - Funding (Multiple Sources)

**Key TLB Technology Focus...**
Enhance and extend the life of the UKCS
Build an enduring legacy with a strengthened supply chain
Maximising Economic Recovery and long term value...

Technology is required for MER... but also to add long term value.

- 41 Bn boe recovered to date
- Opportunity 12 – 24 Bn boe
- Potential Long term value - Dependant on successful MER
- Export revenue and Technology Projection
- UK Total Value Added
- Strong fundamentals...

UKCS Maximising Recovery Review Report - Sir Ian Wood
UK MER Forum and TLB…

Is not just about Technology…

Nevertheless… Technology Opportunities exist in multiple areas…
Initial work…

UK Technology Leadership Board Formed Q2 2014…

Initial Technology Themes Defined by Industry are…

- Small Pool Development
- Integrity and Inspection
- Well Construction
- Decommissioning

• Developing strategy
• Identify and progress key strategic themes
• Early-stage technology planning & funding
• Focus on adopt, adapt and developing solutions
• Strong link to accelerating effective deployment
• Work with Industry Technology & Trade Groups
• Engage UK & Scottish Government Groups
• Support Oil and Gas Technology Centre

Some great progress… strong links to OGTC developing funding opportunities
Small Pool Developments

The challenge…

To develop technology to enable the development of 1Bn boe from pools smaller than 50 MM boe in place…

The Technology Opportunity…

- Reduced well costs
- Small efficient structures or vessels
- Low cost controls and communications
- Autonomous systems
- Flow Assurance
- Re-useable structures
- Standardisation
- Chemical distribution
Asset Integrity...

The challenge...

To generate more than £1.0 Bn of additional revenue through the radical reduction of time and investment applied to vessel inspection and corrosion under insulation...

The Technology Opportunity...

- Sensors
- Predictive maintenance
- Data and analytics
- Inspection innovation
- Insulation design
- Access systems
- Chemical treatments
- Materials
The challenge…

Reduce well construction costs by 50% (time-to-depth and flat-time) to allow an extra c. 50 wells to be drilled per year…

The Technology Opportunity…

- Data and Smart Drilling
- Low cost fluid systems
- Innovative drilling tools
- Predictive maintenance
- Standardisation
- Active monitoring
The challenge…

Reduce Decommissioning costs by 50% and develop transferable knowledge in late field life management…

The Technology Opportunity…

- Planning for decommissioning
- Casing cutting
- Condition determination
- Cutting systems
- Cementing technologies
- P&A vessels and intervention systems
- Lifting and moving
- Diverless intervention systems
How are we progressing...

Significant progress made to date… Hundreds of individual multi-disciplinary contributions from industry…

Small Pools
Small Pools Hackathons Nov 2015 (London & Aberdeen)
Small Pools Hackathon Outcomes Feb 2016

Well Construction
Drilling & Wells workshop May 2015
Drilling & Wells workshop Dec 2015
O&G UK Wells workshop Jan 2016

Asset Integrity
OGIC Asset Integrity Workshops Feb 2016

Some good progress, fantastic commitment and engagement… More to do…
Looking Ahead…

Maintain…

Strategic guidance… Defining Technology Demands & Engaging all Stakeholders, linking Industry, Regulators and Governments…

Continue to develop…

Sources of funding, support for the Oil & Gas Technology Centre and clear routes from technology development through to deployment…

Encourage and drive…

Launch of new technology themes, technology deployment and focus on securing long term value for the UK from MER and Technology Projection…