

# Aberdeen Evening Meeting Report

## The Low Carbon Future – How can the Subsea Industry Contribute?



Evening Meeting, Aberdeen  
Robert Gordon University  
Tuesday 25<sup>th</sup> February 2020

*By Andrew Connelly*

Approximately 60 people attended a bumper evening of four speakers from ORE Catapult, Total, OGTC and University of Aberdeen. The goal of the evening was to capture thoughts on low carbon solutions with a nod towards energy transition. Oil & Gas UK recently published their Energy Transition Outlook, which concluded that the following initiatives will be important over the coming years:

- Renewables Integration
- Hydrogen Production
- Carbon Capture and Storage
- Net Zero Offshore Operations

The speakers for the evening were therefore invited to speak around these topics.

**Hugh Riddell of ORE Catapult** opened the evening with a talk on the integration of offshore renewables in offshore oil and gas. This included energy transport via green and blue hydrogen which may be considered to be the future beyond piped natural gas. Hugh's talk set the scene and advised that there is still a big prize beyond oil & gas as energy transitions to wind and hydrogen including the need for carbon capture and storage.

**Rory Mackenzie of Total** discussed their work on electrification of subsea assets. The initial driver was to reduce the requirement to regularly transport hydraulic fluid to support subsea operation. This initiative has also seen benefit of greatly reduced size and weight of subsea assets, increased reliability of actuators and improved valve control. Future development plans were shared which will further reduce cost, complexity and improve reliability. If integration of renewable energy is a key route to net zero offshore operations, then subsea electrification will clearly have a big impact.

**Greg Jones of OGTC** provided an update on hydrogen production and how both green and blue hydrogen can have an impact on reduction of carbon emissions. Limitations of lithium battery technology and manufacturing requirements were discussed with indication of how hydrogen as a fuel can remove mining requirements and make use of existing natural gas infrastructure.

**David Vega-Maza of University of Aberdeen** gave the final talk on carbon capture utilisation and storage (CCUS), with an overview of the need to reduce carbon emissions, through use of renewable energy, alternative fuels such as hydrogen, reduce energy consumption, reduce waste and increase carbon capture initiatives. This concluded with a discussion on drivers and blockers to CCUS leaving food for thought for future discussions on the topic.



The evening could have supported extended Q&A sessions but with a line up of four speakers this was kept short in the interest of time. There was a lot of interaction and discussion between the audience and all speakers during the networking dinner which followed the presentation session. Feedback was excellent from attendees and speakers alike and it is likely that SUT will expand on these topics in the near future.

*“Great event. It was brilliant to hear from all the speakers, but from my own perspective, particularly Total and their vision for the all-electric, zero emission subsea field.”*

*“I just thought last week’s event was one of the best evening events we have had for a long time. The energy transition is obviously the buzz, but offering long-term opportunities for the subsea sector, beyond Oil & Gas; my view it extends into the wider ‘blue economy’, bringing into account of the defence and aquaculture industries.*