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# **Bryan Lovell Meeting 2019:**

## **Role of geological science in the decarbonisation of power production, heat, transport and industry**

**21 – 23 January 2019**

### **Programme**

<b>Monday 21 January 2019</b>	
08.45	<b>Registration &amp; tea, coffee &amp; refreshments</b>
09.20	<b>Welcome</b> - Mike Stephenson (British Geological Survey) <b>Day 1 Chair:</b> Stuart Haszeldine (University of Edinburgh)
09.30	<b>KEYNOTE: Trends in world energy and decarbonisation</b> Spencer Dale (BP)
<b>Session I: Geological energy storage</b>	
10.00	<b>Cool Economy</b> Toby Peters (University of Birmingham)
10.30	<b>Energy storage - Compressed Air Energy Storage – a cost-effective enabler for carbon-free energy</b> Seamus Garvey (University of Nottingham)
11.00	<b>Breakout Session: Tea, coffee, refreshments and posters</b>
11.30	<b>High-temperature subsurface heat storage as part of the future urban heat supply</b> Sebastian Bauer (University of Kiel, Germany)
12.00	<b>“It’s all mica schist..” the role of fracture and fault analysis in the design and routing of tunnels for Hydroelectric Storage schemes</b> Martin Smith (British Geological Survey)
12.30	<b>Lunch and posters</b>
<b>Session:II Carbon capture and storage</b>	
13.30	<b>CO<sub>2</sub> Capture</b> Jon Gibbins (University of Sheffield)
14.00	<b>The Design of Carbon Dioxide Storage</b> Martin Blunt (Imperial College)
14.30	<b>Biomass energy with CCS: unlocking negative emissions</b> Clair Gough (University of Manchester)
15.00	<b>Breakout Session: Tea, coffee, refreshments and posters</b>
<b>Session III: RE Geoscience</b>	
15.30	<b>Minerals for the energy transition</b> Karen Hanghøj (EIT RawMaterials)
16.00	<b>Siting of offshore wind turbines</b> Ingrid Feyling (Equinor)

16.30	<b>Midway Plenary: Discussion</b>
17.00	<b>Close</b>
17.10	<b>Drinks reception</b>
<b>Tuesday 22 January 2019</b>	
08.45	<b>Registration &amp; tea, coffee &amp; refreshments</b>
09.20	<b>Welcome and Day 2 Chair:</b> Philip Ringrose (Equinor)
09.30	<b>KEYNOTE: Science Policy and Decarbonisation</b> Chris Stark (Chief Executive, Committee on Climate Change)
<b>Session IV: Geothermal</b>	
10.00	<b>Geothermal: Hot dry rock</b> Roy Baria (EGS Energy)
10.30	<b>Low enthalpy heat and building</b> Ingo Sass (TU Darmstadt, Germany)
11:00	<b>Mining for Heat</b> Charlotte Adams (Durham University)
11.30	<b>Breakout Session: Tea, coffee, refreshments and posters</b>
12.00	<b>Geoscience Insights for Developing Superhot Icelandic Geothermal Resources</b> Thomas Driesner (ETH Zurich, Switzerland)
12.30	<b>Do we have the right skills for the geoscience decarbonisation future?</b> John Underhill (Heriot-Watt University)
13.00	<b>Lunch and posters</b>
<b>Session V: Hydrogen economy</b>	
14.00	<b>Is there a role for H<sub>2</sub> in large-scale power production?</b> James Dawson (NTNU)
14.30	<b>H21 North of England</b> Henrik Solgaard Andersen (Equinor)
<b>Session VI: Critical material resources</b>	
15.00	<b>Clean technology raw materials: Rare Earth Elements</b> Frances Wall (University of Exeter)
15.30	<b>Breakout Session: Tea, coffee, refreshments and posters</b>
16:00	<b>Seabed minerals</b> Tracy Shimmield (British Geological Survey)
16.30	<b>Mineral resources in a low carbon future</b> Lluís Fontbote (University of Geneva)
<b>Session VII: Energy transitions</b>	
17.00	<b>Social science insights on energy transitions</b> Ben Sovacool (University of Sussex)
17.30	<b>Close</b> Philip Ringrose (Equinor)
<b>Wednesday 23 January 2019</b>	
08.45	<b>Registration &amp; tea, coffee &amp; refreshments</b>
09.20	<b>Welcome</b> Mike Stephenson (British Geological Survey)
09.30	<b>Public views of geoscience decarbonisation options</b> Nick Pidgeon (Cardiff University)

<b>Session VIII: Nuclear</b>	
10.00	<b>Geological disposal of radioactive waste</b> Jonathan Turner (RWM)
10.30	<b>Assessing Geohazards for UK Nuclear New Builds</b> Bob Holdsworth (Durham University)
11.00	<b>Breakout Session: Tea, coffee, refreshments and posters</b>
<b>Session IX: Skills, resources, infrastructure</b>	
11.30	<b>Role of the Oil and Gas sector in decarbonisation</b> Phil Ringrose (Equinor)
12.00	<b>Deep Geothermal: exploration in Italy, from knowledge to deployment in Europe</b> Adele Manzella (IGG CNR, Italy)
12.30	<b>UK Networks and projects</b> Jonathan Pearce (British Geological Survey)
13.00	<b>Lunch and posters</b>
14.00	<b>Advancing the Energy Transition</b> Dominic Emery, BP's Vice President of Group Strategic Planning
<b>The Underground and Decarbonisation: Minding the Gap Between Geoscience, Policy and Progress, chaired by Andrew Miller (tbc)</b>	
14.30	<b>Policy &amp; Geoscience in Conversation</b> Government and Policy Led Panel Discussion
16.00	<b>Way Forward Q&amp;A: Mapping out Barriers to Change</b> Mike Stephenson, Sebastian Geiger, Dave Schofield, Phil Ringrose, Mike Bridden
16.30	<b>Close</b>