

DEVEX 2021

TRANSITIONING TO A LOW CARBON INDUSTRY: MAXIMISING ECONOMIC RECOVERY, INFRASTRUCTURE VALUE & SKILLS DEVELOPMENT

VIRTUAL EVENTS - 7TH – 9TH JUNE 2021



TECHNICAL PROGRAMME

DEVEX is the only technical conference of its size which is focused on the full E&P project cycle: from exploration, appraisal, development and production (early, mid and late life) through to decommissioning. The Conference provides excellent opportunities for petroleum and reservoir engineers, geoscientists and geophysicists and geologists to come together and share knowledge.

2021 marks the 18th DEVEX Conference. Transitioning to a low carbon industry will be a key theme where we will look at the opportunities, skills required and how we can work together to maximise economic recovery during the energy transition.

Why attend?

- Cost effective training opportunity
- Up to date case histories from operators and service companies
- Informative techbyte presentations and technology updates

DEVEX 2021 ORGANISERS



EVENT SPONSOR



MEDIA PARTNER



Masterclasses

Two expert-led Masterclasses will take place this year and they are free to attend when purchasing a 3-day conference pass. **See page 6 for the Abstracts.**

Young Professionals Event – Wednesday 9th June, 17:00-19:00

Debate - Discuss - Network. The YP event will start with a panel session with presenters from the main conference programme in addition to other senior industry professionals. Following this there will be a roundtable discussion session where attendees will be placed into small groups in breakout rooms and will get to spend a few minutes speaking to each panellist. Although this is a YP event, we do not want to discourage other age groups from attending as well! **For more information on the agenda, see page 6.**

Booking information

All rates exclude VAT	Members	Non-Members	Students/ unemployed
Early bird rates before 21st May – all 3 days including Masterclasses	£65.00	£85.00	£25.00
Rates after 21st May – all 3 days including Masterclasses	£95.00	£105.00	£25.00
Young Professional Event	FREE	FREE	FREE

For more information visit:

Visit: [SPE Aberdeen Website](#)

Call: 01224 646311

Email: devex@mearns-gill.com

Technical Programme

DAY 1	MONDAY 7TH JUNE	SPEAKER	COMPANY
10:30	INTRODUCTION AND WELCOME	Russ Gilbert	Chair of DEVEX 2021
10:35	KEYNOTE	Jenny Morris	Harbour Energy
	CASE HISTORIES - MAXIMISING PRODUCTION		
10:55	Britannia Well Deliquification Strategy	Pavel Solovjov	Harbour Energy
11:15	The use of 4D seismic to maximise economic recovery of the Shearwater Field; driving well placement through evaluation of contact movement and reservoir connectivity	Rebecca Garrard	Shell
11:35	Seismic Stratigraphic Interpretation: A new approach to the giant Buzzard Field	Samira Souiki	CNOOC International
11:55	SESSION Q&A		
12:15	SPONSORS VIDEOS AND BREAK		
12:50	WELCOME BACK		
	TECHBYTES		
12:50	Assimilation of 4D seismic data for probabilistic modelling using ensemble-based methods	Konrad Wojnar	Resoptima
12:55	The application of new generation of outflow control devices autonomously controlling the conformance of injection well fluids	Mojtaba Moradi	Tendeka
	CASE HISTORY - MAXIMISING PRODUCTION		
13:00	Gannet A 4D shows us the reality, not the expectation	Ryan Singlehurst-Ward	Shell
	ADVANCED RECOVERY		
13:20	A novel sampling and testing procedure to confirm Polymer Flood viscosity retention at the Captain Field	Geoffrey Johnson	Ithaca Energy UK LTD
13:40	Low cost, low impact IOR for the Catcher Fields	Paul Bowden	Harbour Energy
14:00	SESSION Q&A		
14:30	CLOSE		
18:00-19:00	MASTERCLASS: Geomodelling - Models for storage vs. models for production – See Page 6 for Abstract	Mark Bentley	TRACS International

Technical Programme

DAY 2	TUESDAY 8TH JUNE	SPEAKER	COMPANY
10:30	INTRODUCTION AND WELCOME		
10:35	KEYNOTE	Scott Robertson	OGA
	FIELD REDEVELOPMENT AND INFRASTRUCTURE REPURPOSING		
10:55	Callanish F5: Geosteering along a Forties Channel System to access bypassed oil	Gavin Eardley	Harbour Energy
11:15	Northern Area Claymore Redevelopment: A modern approach to identify remaining opportunities through integrated modelling practices in a mature field.	Zahid Khan	Repsol Sinopec UK
11:35	The Seagull Field development, 22/29c, UK Central North Sea	Ian Dredge	Neptune Energy
11:55	SESSION Q&A		
12:15	SPONSORS VIDEOS AND BREAK		
12:50	WELCOME BACK		
	TECHBYTES		
12:50	Geological considerations for re-using end of life wells for CO2 storage as an alternative to abandonment	Edward Hoskin	Ikon Science
12:55	The value of integrated downhole passive acoustic monitoring during an extended leak off test to prove formation integrity.	Maxim Volkov	TGT Oilfield services
	NEAR FIELD OPPORTUNITIES		
13:00	Occurrences of petroleum in lava flows West of Shetland and further afield.	Clayton Grove	Siccar Point Energy Limited
13:20	North Sea exploration trends – targeting niche plays in a mature basin	Henk Kombrink	Expronews
13:40	Can we avoid ‘The Domino Effect’ by unlocking near field potential – Greater Laggan Area Case Study	Mike Cooper	1st Subsurface
14:00	SESSION Q&A		
14:30	CLOSE		
18:00-19:00	MASTERCLASS: The Challenge of CCS in a NetZero World – See Page 6 for Abstract	Steve Furnival	HoBoil Limited

Technical Programme

DAY 3	WEDNESDAY 9TH JUNE	SPEAKER	COMPANY
10:30	INTRODUCTION AND WELCOME		
10:35	KEYNOTE	Carla Riddell	Spirit Energy
	BIG DATA AND NEW TECHNOLOGY		
10:55	A digital twin of the Bruce Platform - demonstration, uses and potential	Mike Killeen	Serica
11:15	Spirit Energy - Predictive analytics for operations	Glen Milne	Spirit Energy
11:35	Tesla of the North Sea	Gerlof Visser	ONE-Dyas
11:55	SESSION Q&A		
12:15	SPONSORS VIDEOS AND BREAK		
12:50	WELCOME BACK		
	TECHBYTES		
12:50	APvT: A big data approach to PVT data in the UKCS to provide insight to the petroleum system	Julian Moore	APT UK Ltd
12:55	Geoscience into the future	Mark Brownless	Geoteric
	DECARBONISATION		
13:00	The Scottish Net Zero Roadmap & NECCUS	Mike Smith	NECCUS
13:20	Subsurface contribution to the Northern Lights CO2 storage project sanction: Planning for success in an unexplored license	Nicholas Thompson	Equinor
13:40	Decarbonisation and energy transition in North Sea operations	Innes Auchteronie	Shift Geothermal
14:00	SESSION Q&A		
14:30	CLOSE		
17:00-19:00	YOUNG PROFESSIONAL SESSION		

Masterclasses

The Masterclasses are included in the cost of your delegate pass. Details on how to join will be included in your joining instructions.

Monday 7th June, 1800-1900 BST

Models for Storage vs. Models for Production

Mark Bentley, TRACS International & Heriot-Watt University. Phil Ringrose, Equinor & NTNU

Several decades of effort have gone in to developing reservoir modelling and simulation tools and techniques for quantifying the production of hydrocarbons from the subsurface. In many respects, this is still a work in progress. The future adds a new dimension as we enter the carbon transition on a path to NetZero and our interest turns to forecasting injection, either for permanent disposal (CO₂) or for temporary storage (energy). How do our hard-won skills transfer? Do we need different types of models?

Fundamental reservoir model design principles are common to both injection and production projects: concept-base reservoir characterisation, understanding of static-dynamic interactions and alternative scenarios to explore forecast uncertainty. However, there are significant differences thereafter. If traditional modelling workflows for water or methane gas injection are applied to CO₂ storage, for example, the forecasts will be incorrect.

In this short review, intended for those embarking on what is for many a new line of technical enquiry, the

similarities and differences will be explored. This will include the behaviour of the different fluids themselves, the resulting differences in the interplay of forces in the reservoir, the necessary scale of the modelling exercises, the difference between worlds of forward modelling and inversion and the requirement for aspects (perhaps erroneously) not in common use in the standard modelling toolkit for production such as thermal and geomechanical effects.

We will also explore the role of reservoir heterogeneity, still an issue not fully addressed in the modelling of production, which has a significant although interestingly different effect in the modelling of storage.

Tuesday 8th June, 1800-1900 BST

The Challenge of CCS in a NetZero World

Steve Furnival, HoBoil Limited

Increasingly the media talk is of the Energy Transition and migrating to Net Zero and this is affecting public thinking and therefore the politicians, but this transition is going to be hard, very hard.

We can't talk about energy supply without considering energy demand; the two terms are opposite sides of an equation. Demand needs to be reduced and to some extent it has recently as we replace incandescent light bulbs with LEDs. However, recognition must be given that we need more heat in a northern European winter or less heat in a Middle Eastern summer; demand varies by time of day, day in

the week and week in the year with a regional overprint.

Nuclear power works best producing 'base load' but much of the general public are worried about radiation, and investors are concerned by the escalating costs. Renewables appear the perfect solution except they are unreliable; they produce when the wind blows or the sun shines but not always when the demand is there. The enthusiasts shout about storage, batteries, pumped storage, gravity and more to which the answer is, do the maths – it looks to be impossible to store a country's worth of energy; hydrogen anyone?

Hydrocarbons can 'follow' demand, but at the cost of emitted CO₂, so let's capture the CO₂ and bury it. But hold on, haven't we been talking about CO₂ storage for years? Yes! Lots and lots of talking, but no real progress if progress is measured in terms of injecting molecules, apart from Norway, and North America, and the Middle East, and the Far East; actually, everywhere except the UK.

In this talk, Steve wants to discuss the background to CO₂ storage, why other countries are making headway while the UK has been in the slow lane and see if this has any influence on how we can catch-up.

Young Professionals Event – Wednesday 9th June, 17:00-19:00

Debate - Discuss - Network

This virtual event will feature a panel session with presenters from the main conference in addition to other senior industry professionals who will discuss the theme of “Transitioning to a low carbon industry: Maximising economic recovery, infrastructure value & skills development”. There will be plenty of opportunities for the audience to get involved in this debate and to put their own questions to the panellists during a live Q&A session.

Our Speakers:

Nicholas Thompson, Equinor

Robert Loov, Schlumberger

Mike Cooper, 1st Subsurface

Mike Killeen, Serica Energy

Neil Fowler, Shift Geothermal

Gerlof Visser, OneDyas

17:00-17:10	Welcome & Introductions
17:10-17:30	Moderated panel discussion
17:30-17:45	Live Q&A
17:45-18:50	Breakout room/roundtable
18:50-19:00	Close



**Although this is a YP event, we do not want to discourage other age groups from attending as well!
To book your place at this free event, visit [The SPE Aberdeen Website](#).**

Sponsorship and Exhibition Opportunities

SPE Aberdeen, PESGB and AFES are not for profit organisations. During these challenging times, raising sponsorship is vital, not only to the successful delivery of the conference but to enable these organisations to invest back into the industry. By supporting this event, not only are you providing an important knowledge sharing and training opportunity for the industry, but you are also helping to support our future generation of young engineers and geoscientists.

ADVERTISING IN THE ABSTRACT BOOKS

If you would like to place an advert in our Abstracts Book that all attendees will receive, the costs are:

Quarter page - £250 + VAT

Half page - £400 + VAT

VIDEO SHOWCASE SPONSORSHIP **£500 + VAT**

- Opportunity to provide a short 1-2 minute video for showing during the conference breaks.
- Free delegate pass.

EXHIBITION SPACE **£950 + VAT**

Benefits of being an exhibitor include:

- Company logo and description on the SPE Aberdeen and DEVEX websites
- Mention in social media in the run up to the event and opportunity to provide content
- Opportunity to provide delegates with a handout
- Opportunity to provide short 1-2 minute video for the breaks which could either be a corporate presentation or technology demo.
- Free access to all conference sessions for two delegates
- Access to the attendee list

DEVEX 2021 SPONSORSHIP OPPORTUNITIES

DEVEX 2021 will run virtually during the week of 7 June 2021.

	Platinum Sponsor	Event Sponsor	Registration Sponsor	Programme Sponsor	YP Event Sponsor	Coffee Break Sponsor	Virtual Exhibition Space
VIRTUAL SPONSORSHIP PACKAGES	£4,000	£2,500	£1,000	£1,200	£1,200	£1,200	£950
Prime Branding on all materials inc web, abstracts flyer, programme	X						
Prominent branding on all materials inc web, abstracts flyer, programme		X					
Branding on materials inc web, abstracts flyer, programme			X	X	X	X	X
Corporate branding on conference slides	X	X	X	X	X	X	X
Branding on joining instructions	X	X	X	X	X	X	
Abstract book branding	X	X	X	X	X	X	X
Social media input	X	X	X	X	X	X	X
Recognition by chair	X	X	X	X	X	X	X
Video or presenting opportunity	X	X		X	X	X	X
Access to delegate list	X	X	X	X	X	X	X
Number of passes	5	3	2	2	2	2	2
Single day sponsorship				X			